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Development of application for transporting things

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DEDCATION

This modest work is dedicated:
To our parents for their affection and constant encouragements.

To our brothers and sisters for their love and kindness, i wish them good health and long life.

To all my teachers who have done their best to give us as much information as possible about our study.

To all our colleagues and friends for their unflagging support and constant encouragement.

May Allah bless them all.

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we would like to thank all the people who have helped us directly or indirectly to the realization of this work.

Thank you so much

CONTENTS

LIST OF FIGURES

Part I

GENERAL INTRODUCTION

This part contains the general introduction of our dissertation.

1

GENERAL INTRODUCTION

1.1 OVERVIEW

Transport is a central ingredient in the time and spatial economic utility of products and services. Movements of people, goods, documents and other things have always been fundamental components of human societies.

In order to improve the transport process we need an information system which plays the implementation of transport processes. An information system can be defined as a set of interrelated components that collect, manipulate, store data, distribute information to support decision making and provide a feedback mechanism to monitor performance. It may also help the manager and workers to analyses problems, visualize complex subject, and create new products.

A web application is a computer program that utilizes web browsers and web technology to perform tasks over the Internet.

1.2 MOTIVATION

Due to our desire for giving a service to the people, and the people's need of the transportation of things, we proposed a platform that can allow people to offer transportation of things of other people.

1.3 TRANSPORTATION PROBLEM

The importance of the transportation is to decide how to go or to send goods and other things from various sending locations to various receiving locations with minimal costs and minimal time.

For example, sometimes you need to send something but you don't find a transport. Sometimes you need to send something emergency but you don't find

an available transporter at that moment. we will respond to these problems in our dissertation by proposing a web platform that makes the transportation available, easier, faster and cheaper to give us the best possible results.

1.4 ORGANIZATION OF DISSERTATION

Our dissertation is divided into four parts. The first contains the general introduction of the project and we talk about overview, motivation and problematic issues.

The second part contains the litterateur topics to help the reader to understand the contribution of this project. This part contains two chapters: Theoretical background about logistics, transportation and information system, the second chapter is Transportation applications.

In the third part is the application part and contains one chapter in which the design and development of our proposed platform. The last parts is the general conclusion and future work.

Part II

LITERATEUR PART

This part contains two chapters: the first chapter is Theoretical background about logistics, transportation and information system, the second chapter is Transportation applications. The first chapter consists of three axes which are logistics, transportation and information system. The second chapter contains an overview about charities, the systems that are similar to our, a problematics and the solution of our proposed platform.

2

THEORETICAL BACKGROUND ABOUT LOGISTICS, TRANSPORTATION AND INFORMATION SYSTEM

2.1 INTRODUCTION

This chapter is an overview on the major axes on the related topic. It consists of the logistics, transportation and the information system.

Logistics is a process of planning, implementing, and controlling the efficient flow of products, information, and funds to conform to the client's requirements. Transport is a core component of logistics, moving goods between different points in the supply chain.

The information systems enabled more diverse human activities. These systems quickened the pace of daily activities, enabled people to develop and maintain new and often more-rewarding relationships, affected the structure and mix of organizations, changed the type of products bought, and influenced the nature of work.

2.2 LOGISTICS

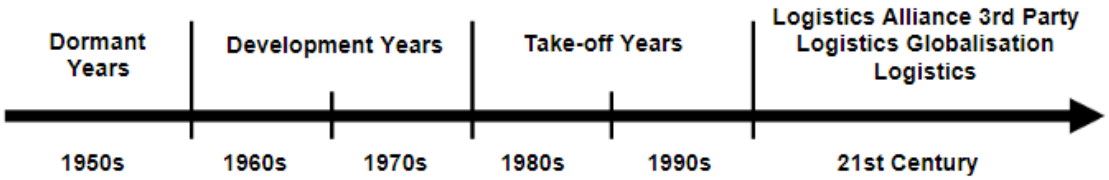
Logistics is used more broadly to refer to the process of coordinating and moving resources (people, materials, inventory, and equipment) from one location to storage at the desired destination.

2.2.1 *History and advancement*

Logistics was initially a military activity concerned with getting soldiers and munitions to the battlefront in time for flight, but it is now seen as an integral part of the modern production process. The main background of its development is that the recession of America in the 1950s caused the industrial to place importance

on goods circulations. The term, logistics, was initially developed in the context of military activities in the late 18th and early 19th centuries and it launched from the military logistics of World War II. The probable origin of the term is the Greek logistikos, meaning 'skilled in calculating'. (BTRE, 2001) Military definitions typically incorporate the supply, movement and quartering of troops in a set. And now, a number of researches were taken and made logistics applications from military activities to business activities. Business logistics was not an academic subject until the 1960s. A key element of logistics, the trade-off between transport and inventory costs, was formally recognized in economics at least as early as the mid-1880s. (BTRE, 2001) Based on the American experience, the development of logistics could be divided into four periods (Chang, 1998)[48],which are represented as next figure.

Figure 1: Logistics historical development



Before the 1950s, logistics was under the dormant condition. Production was the main part of the managers concerned, and industry logistics was once regarded as necessary evil in this period. During the 1950s to and 1960s, applying new ideas of administration on business was a tendency. Drucker (2001), who thought Logistics was The Economy's Dark Continent, regarded the procedure of physical distribution after producing products as the most possible development area in American businesses but also the most neglected area. Lewis's study (cited in Chang, 1998) in 1956 on the role of air transportation in physical distribution was the application of 'total cost concept' and it pointed out the notions of trade-off between inventory and transportation. From the 1970s onwards, more and more applications and researches of logistics appeared. Due to petroleum price rise in 1973, the effects of logistics activities on enterprises grew. Slow growth of market, pressure of high stagflation, release of transportation control, and competitions of the third world on products and materials all increased the significance of logistics system on planning and business at that time. The

further tendency of logistics in the early 21st century is logistics alliance, Third Party Logistics (TPL) and globalized logistics. Logistics circulation is an essential of business activities and sustaining competitiveness, however, to conduct and manage a large company is cost consuming and not economic. Therefore, alliance of international industries could save working costs and cooperation with TPL could specialize in logistics area [48].

2.2.2 *Definition*

In 1991, the Council of Supply Chain Management Professionals (previously the Council of Logistics Management) defined logistics as the process of planning, implementing, and controlling the efficient, effective flow and storage of goods, services, and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirements[46].

It encouraged the control of material flow towards organisation called inbound logistics as the separate branch of logistics. The term inbound logistics covered the movement of material, components and products received from the suppliers[46].

The term logistics originated in the military, referring to the movement of equipment and supplies to troops in the field.

The Oxford English Dictionary defines logistics as the branch of military science relating to procuring, maintaining and transporting material, personnel and facilities. However, the New Oxford American Dictionary defines logistics as the detailed coordination of a complex operation involving many people, facilities, or supplies, and the Oxford Dictionary on-line defines it as the detailed organization and implementation of a complex operation[19].

Baron de Jomini defined logistics as: the art of well ordering the function of an army, of well combining the order of troops in columns, the times of their departure, their itinerary, the means of communication necessary to assure their arrival at a named point[40].

2.2.3 *Scope and applications*

Logistics includes all the functions that are essential to provide place and time value to a product. This includes all functions that are necessary to move a product from point of production to point of consumption safely and efficiently.

Each of these functions may have certain activities associated with it. For instance, purchasing includes vendor selection, order processing and order follow-up.

2.2.3.1 *Purchasing*

Purchasing includes all the activities that have to be performed in order to ensure the availability of materials on time. One of the major challenges for today's purchasing managers is selecting the right vendor(s) for a raw material, component, part or product and determining the amount of order to be placed on each vendor[42].

2.2.3.2 *Inventory control*

Inventory planning and control decisions typically follow vendor selection. In some cases they may be made simultaneously with vendor selection. Inventory control decisions focus on the order quantity and the timing between orders. This is done based on lead time, ordering cost, inventory carrying cost, transportation cost, shortage cost, intransit inventory carrying cost and the level of service in terms of allowable inventory or shortage[42].

2.2.3.3 *Facilities planning*

Facilities planning addresses two major logistics decisions that are generally made at the initial stages of planning and designing a logistics system: facilities location and facilities layout Layout and location of facilities play a vital role in minimizing the total cost of logistics. The location of facilities has a huge impact on land and construction costs, local taxes and insurance, labor availability and costs and on the costs of transportation to and from other facilities. The number, size and location of the facilities have a significant impact on inventory-related costs and customer service levels[42].

2.2.3.4 *Intra-facility logistics*

This is concerned with the material handling within a large facility such as a plant or a warehouse. Intra-facility logistics is influenced by layout, material handling equipment, stock locations in the warehouse, operating rules for material handling equipment movement and order picking strategies. Typically, a part spends almost 50% of its manufacturing time in moving between machines and storage[42].

2.2.3.5 *Transportation*

Transportation includes both inbound movement from the sources of raw materials or parts direct to plants or through warehouses and outbound movement of finished products or components from plants to customers directly or through distribution centers[42].

Transportation encompasses a wide spectrum of planning and operational problems. Some of the important planning problems include fleet sizing, vehicle routing, crew planning, network design and hub and terminal location. Crew and vehicle scheduling, dispatching and reservation control are some of the operational problems. Sizing of transportation resources such as trucks, locomotives, cars, aircraft and boats and vessels come under the umbrella of fleet sizing. Vehicle routing focuses on the determination of optimal routings for the various origin-destination traffic, considering route structure, distances and route capacity. Selection of transportation mode and carrier is part of the routing plan but is most often done separately to manage problem size and complexity. Crew planning involves the determination of the staffing requirements to meet the overall fleet operating plan[42].

2.2.4 *type of Logistics*

Logistics can be split into five types by field: procurement logistics, production logistics, sales logistics, recovery logistics, and recycling logistics.

2.2.4.1 *Procurement Logistics: Procuring Raw Materials and Parts*

Procurement logistics is the flow of goods when the raw materials and parts necessary for manufacturing are procured from suppliers. This field did not attract much attention before, but now that small-lot production of a variety of models is the main type of production, many firms are actively pursuing production by procuring the necessary materials in only the necessary amounts at the necessary times (the shift to just-in-time production) because it is directly connected to reducing inventory costs[17].

2.2.4.2 *Production Logistics: Materials Management, Distribution in Factories, Product Management, Shipping*

Production logistics is the flow of goods that includes the management of procured parts and materials, distribution inside a factory, product management, packaging, and shipping to warehouse. Delivery management, warehouse dispatch management, and shipping management can be optimized and the state of delivery vehicles can be managed by smoothly linking procurement logistics and sales logistics described later[17].

2.2.4.3 *Sales Logistics: Delivery from Warehouse to Wholesalers, Retailers, and Consumers*

Logistics typically refers to sales logistics. In the past this was mainly delivery from delivery centers and logistics warehouses to distribution points such as wholesalers and retailers. But now direct delivery also makes up a large amount of this volume due to online shopping and e-commerce. Whether delivery through delivery centers and logistics warehouses or direct delivery from production sites, higher efficiency in transportation and delivery and shrinking inventory are indispensable for delivering the necessary goods to the necessary people in the necessary quantities at the necessary time. This also contributes to improving customer satisfaction[17].

2.2.4.4 *Recovery Logistics: Recovering and Recycling Products, Containers, and Packaging*

If the flow of goods from production to consumption by procurement logistics, production logistics, and sales logistics is described using the circulatory system of the body, it would be said to be forward logistics. On the other hand, recovery logistics or reverse logistics is the flow that recovers and recycles products, containers, and packaging that have fulfilled their role. Similar to recycling logistics described later, emphasis is being placed on this flow in recycling-oriented societies[17].

2.2.4.5 *Recycling Logistics: Recovering and Recycling Recyclable Products and Containers*

Typical examples of recycling logistics are recovering and recycling empty cans, plastic bottles, and old paper. Containers, packaging, old computers, and inkjet cartridges can also be recovered and recycled in the same manner. The importance of recycling logistics has been increasing in recent years as measures for the environment and to effectively utilize materials such as minor metals[17].

2.3 TRANSPORTATION

Transport or transportation is the movement of humans, animals and goods from one location to another. In other words, the action of transport is defined as a particular movement of an organism or thing from a point A (a place in space) to a point B.

2.3.1 *History of transportation*

- The first means of transport in human history were people's feet, they used their feets to walk and run from one place to another on the roads and jungles, then people learned swimming and used it to move to other places on the rivers and the valleys.

- The second means of transport was the animals, people domesticated the animals to introduce a new way to lay the burden of transport on more powerful creatures, allowing the hauling of heavier loads, or humans riding animals for greater speed and duration, animals like Donkeys, horses and camels.
- Inventions such as the wheel and the sled helped make animal transport more efficient through the introduction of vehicles.
- the invented of the sailings boats and was the only efficient way to transport large quantities or over large distances. However the sail could only be used when sailing in one direction. When traveling against the wind the boat had to be rowed.
- The invention of the steam engine, closely followed by its application in rail transport, made land transport independent of human or animal muscles. Both speed and capacity increased, allowing specialization through manufacturing being located independently of natural resources.
- The first cars appeared at the end of the 19th century, however only few rich families owned a car because it was more expensive, after the first world war they became cheaper and more common.
- In the start of the 20th century, Wright brothers demonstrated the first successful controllable airplane, and after World War I (1914-1918) aircraft became a fast way to transport people and express goods over long distances.

2.3.2 *Definition*

The Cambridge Dictionary defines Transportation as the movement of people or goods from one place to another.[5] However The Collins Dictionary defines Transportation as a system for taking people or goods from one place to another, for example using buses or trains[7].

2.3.3 *Modes of transportation*

Transportation modes are the means by which people and freight achieve mobility. They fall into one of three basic types, depending on over what surface they travel land (road, rail and pipelines), water (shipping) and air. Each mode is characterized by a set of technical, operational and commercial characteristics[41].

2.3.3.1 *Land*

Land transport is the transport or movement of people, animals or goods from one location to another location on land. The two main forms of land transport are rail transport and road transport.

1. Road transport: A road is an identifiable route, way or path between two or more places. Roads are typically smoothed, paved, or otherwise prepared to allow easy travel; though they need not be, and historically many roads were simply recognizable routes without any formal construction or maintenance. In urban areas, roads may pass through a city or village and be named as streets, serving a dual function as urban space easement and route[35].

   Roads represent the primary infrastructure by which individuals reach markets and services, and provide the network for the distribution of goods. Roads make up a significant proportion of a country's infrastructure assets, demonstrating that a good quality road network is essential for the development of well-functioning modern economies by reducing transport times and costs, improving safety and accessibility to rural regions[36].

2. Rail transport: Rail transport or train transport is a means of transferring passengers and goods on wheeled vehicles running on rails, which are located on tracks and we called a train.

   A train consists of one or more connected vehicles that operate on the rails. Propulsion is commonly provided by a locomotive, that can carry passengers or freight. The locomotive can be powered by steam, diesel or by electricity supplied by trackside systems.

Railways played a central role in the region's economies, with special importance in the former Soviet Union for geographic and demographic reasons. In the last two decades, railways have made the transition from the roles mandated by a centrally planned economy to new roles which depend on market demands and management competence. However, underinvestment over the transition period has caused passenger and freight demand to decline and created the need for substantial capital investment to replace and modernise infrastructure assets[36].

Railways, alongside inland waterways, are the most energy efficient and least polluting land transport mode, both for passenger and freight. However, there are still significant energy efficiency opportunities in existing railway systems to ensure their long term competitiveness[36].

2.3.3.2 *Air transport*

Air transport is the movement of passengers and freight by any conveyance that can sustain controlled flight[41].

Aviation is able to quickly transport people and limited amounts of cargo over longer distances, but incurs high costs and energy use; for short distances or in inaccessible places, helicopters can be used[36].

The aviation sector, which encompasses a number of sub-sectors (spanning airlines, airports and air navigation services), is increasingly important to development in all regions, as many of the economic benefits generated by air travel such as development of tourism industry, mobilization of foreign direct investment and so on are not substitutable by other modes[36].

2.3.3.3 *Water transport*

Water transport is movement by means of a watercraft such as a barge, boat, ship or sailboat over a body of water, such as a sea, ocean, lake, canal or river.

Transport by water is significantly less costly than air transport for people and goods.

Maritime transport and ports are essential components of international trade and goods movement. Maritime traffic has grown sharply in the region over the past decade, particularly containerised cargo, reflecting wider economic growth[36].

2.3.3.4 *Intermodal transportation*

Many transportation systems are multimodal, that is, the infrastructure supports various transportation modes, such as rail, air, and ocean/river navigation, carriers operating and offering transportation services on these modes[39].

Then, broadly defined, intermodal transportation refers to the transportation of people or freight from their origin to their destination by a sequence of at least two transportation modes. Transfers from one mode to the other are performed at intermodal terminals, which may be a sea port or an in-land terminal, e.g., rail yards, river ports, airports, etc. Although both people and freight can be transported using an intermodal chain[39].

2.4 INFORMATION SYSTEM

An information system is software that helps you organize and analyze data. This makes it possible to answer questions and solve problems relevant to the mission of an organization.

2.4.1 *Definition*

Information system is formal, sociotechnical, organizational system designed to collect, process, store, and distribute information[44].

We can defines IS as Managing the flow of data in an organization in a systematic, structured way to assist in planning, implementing, and controlling[23].

Information system an integrated set of components for collecting, storing, and processing data and for providing information, knowledge, and digital products[49].

2.4.2 *Components of Information Systems*

Components of the information system are as follows:

2.4.2.1 *Computer Hardware*

Physical equipment used for input, output and processing. What hardware to use it depends upon the type and size of the organisation. It consists of input, an output device, operating system, processor, and media devices. This also includes computer peripheral devices[8].

2.4.2.2 *Computer Software*

The programs/application program used to control and coordinate the hardware components. It is used for analysing and processing of the data. These programs include a set of instruction used for processing information[8]. Software is further classified into 3 types:

1. System Software: System software refers to the files and programs that make up your computer's operating system. System files include libraries of functions, system services, drivers for printers and other hardware, system preferences, and other configuration files. The programs that are part of the system software include assemblers, compilers, file management tools, system utilites, and debuggers[24].

2. Application Software: Application software (app for short) or application is a program or group of programs designed for end users. Examples of an application include a word processor, a spreadsheet, an accounting application, a web browser, an email client, a media player, a file viewer, an aeronautical flight simulator, a console game or a photo editor. The collective noun application software refers to all applications collectively[1].

3. Procedures: Procedures are the policies that govern the operation of a computer system. Procedures are to people what software is to hardware is a common analogy that is used to illustrate the role of procedures in a system[14].

2.4.2.3 *Databases*

Data are the raw facts and figures that are unorganised that are and later processed to generate information. Softwares are used for organising and serving

data to the user, managing physical storage of media and virtual resources. As the hardware can't work without software the same as software needs data for processing. Data are managed using Database management system. Database software is used for efficient access for required data, and to manage knowledge bases[8].

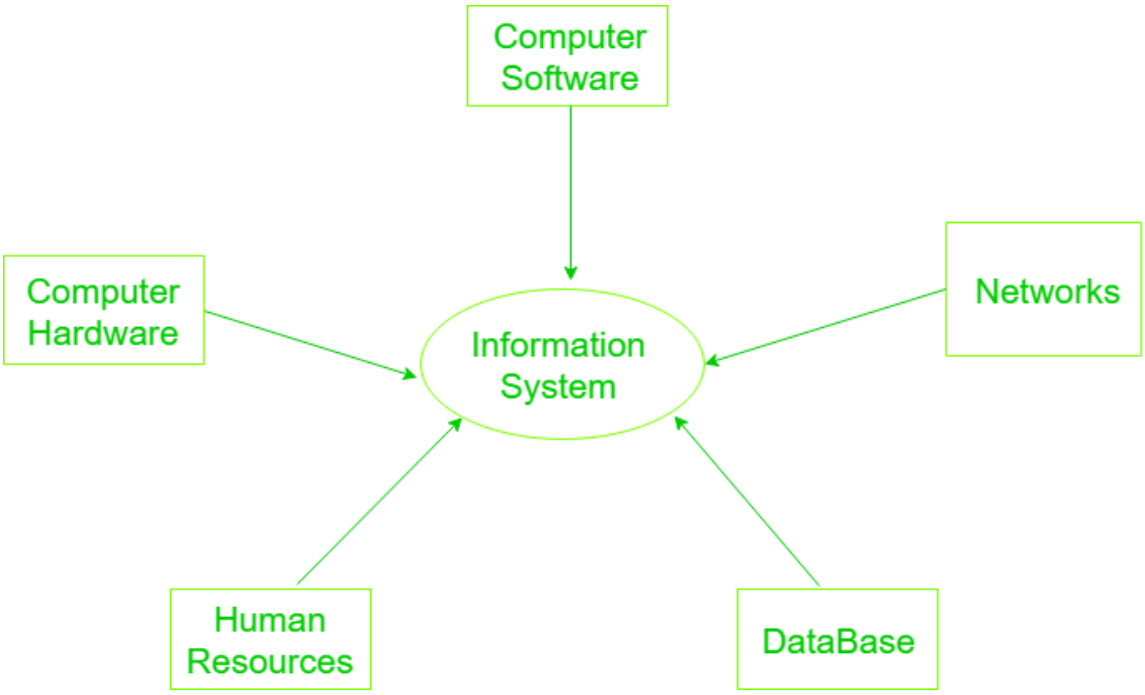
2.4.2.4 *Network*

- Networks resources refer to the telecommunication networks like the intranet, extranet and the internet[8].
- These resources facilitate the flow of information in the organization[8].
- Networks consists of both the physicals devises such as networks cards, routers, hubs and cables and software such as operating systems, web servers, data servers and application servers[8].
- Telecommunications networks consist of computers, communications processors, and other devices interconnected by communications media and controlled by software[8].
- Networks include communication media, and Network Support[8].

2.4.2.5 *Human Resources*

It is associated with the manpower required to run and manage the system. People are the end user of the information system, end-user use information produced for their own purpose, the main purpose of the information system is to benefit the end user. The end user can be accountants, engineers, salespersons, customers, clerks, or managers etc. People are also responsible to develop and operate information systems. They include systems analysts, computer operators, programmers, and other clerical IS personnel, and managerial techniques[8].

Figure 2: Components of an information system



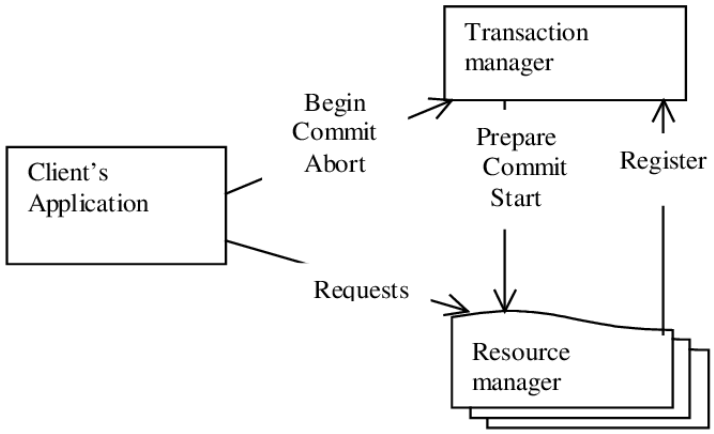
2.4.3 *Types of information systems*

There are various types of information systems, few of them are listed below:

2.4.3.1 *Transaction Processing Systems (TPS)*

A Transaction Processing Systems (TPS) is used primarily for record keeping which is required in any organization to conduct the business. Examples of TPS are sales order entry, payroll, and shipping records etc. TPS is used for periodic report generation in a scheduled manner. TPS is also used for producing reports on demand as well as exception reports[45].

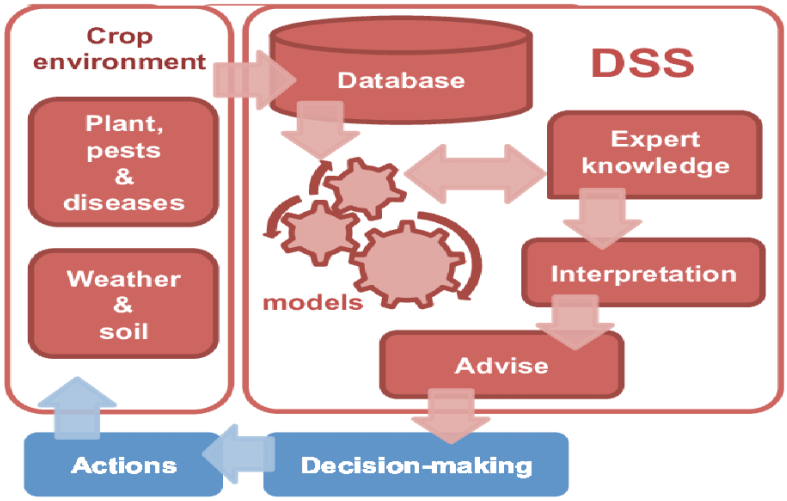
Figure 3: Basic Model of Transaction Processing System



2.4.3.2 *Decision Support System (DSS)*

Decision Support System (DSS) serves the management of an organization. A decision support system has sophisticated data analysis tools, which support and assist all aspects of problem-specific decision-making. DSS may use data from external sources such as current stock prices to enhance decision-making. DSS is used when the problem is complex and the information needed to make the best decision is difficult to obtain and use. DSS is developed with the help of decision-makers in an organization. DSS helps in the appropriate decision-making process and does not make any decision[45].

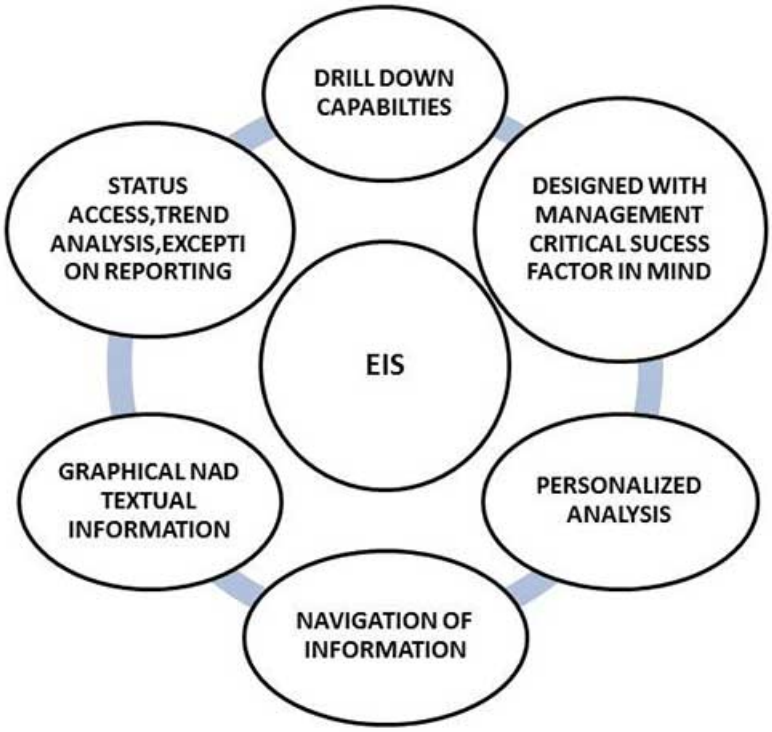
Figure 4: Scheme of an innovative Decision Support System (DSS) for plant disease management



2.4.3.3 *Executive Information System (EIS)*

An Executive Information System (EIS) is also called the Executive Support System. Senior managers of an organization use the EIS. Therefore, it must be easy to use so that executives can use it without any assistance. EIS can do trend analysis, exception reporting and have drill-down capabilities. The results are usually presented in a graphical form tailored to the executive's information needs. EIS has on-line analysis tools and they access a broad range of internal and external data[45].

Figure 5: Features of an executive information system



2.4.3.4 *Management Information Systems (MIS)*

Management Information System (MIS) provides the management routine summary of basic operations of the organization. The essential services are recorded by the TPS of the organization and MIS consolidates the data on sales, production etc. MIS provides routine information to managers and decision makers. The primary objective behind installing an MIS in the organization is to increase operational efficiency. MIS may support marketing, production, finance, etc[45].

Figure 6: Management Information System

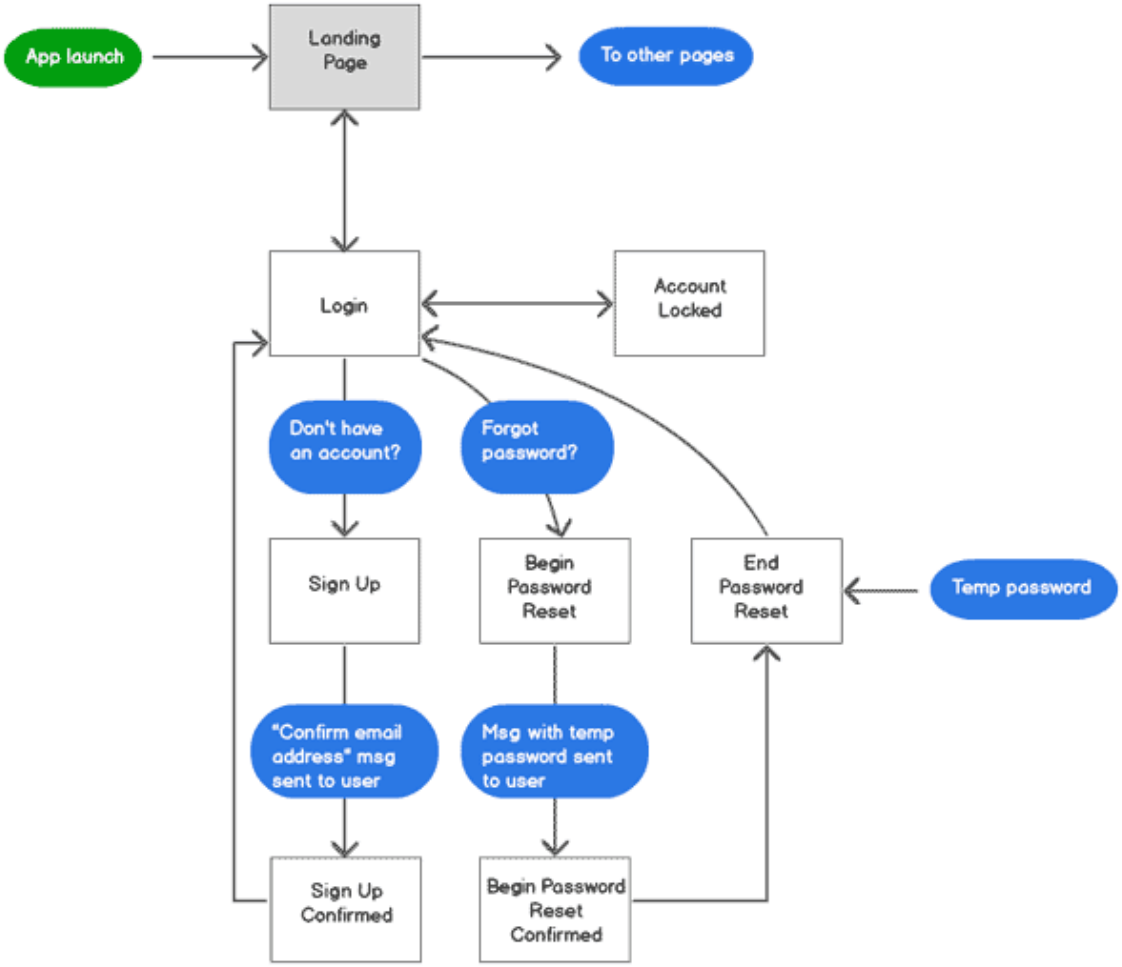
2.4.3.5 *Workflow System*

A workflow system is a rule-based management system that directs, coordinates and monitors the execution of an interrelated set of tasks arranged to form a business process. There are three types of workflow software.[45] They are:

- Administrative workflow systems focus on the tracking of expense reports, travel requests, messages[45].
- An Ad-hoc workflow system deals with the shaping of product, sales proposals and strategic plans[45].
- Production workflow systems are concerned with mortgage loans and insurance claims[45].

A workflow system may be Internet-based and may be combined with e-mail. A workflow system may be based on server architecture that may use a database or file server[45].

Figure 7: A Workflow for User Registration, Login and Logout in App Mobile



2.4.3.6 *Enterprise Resource Planning (ERP)*

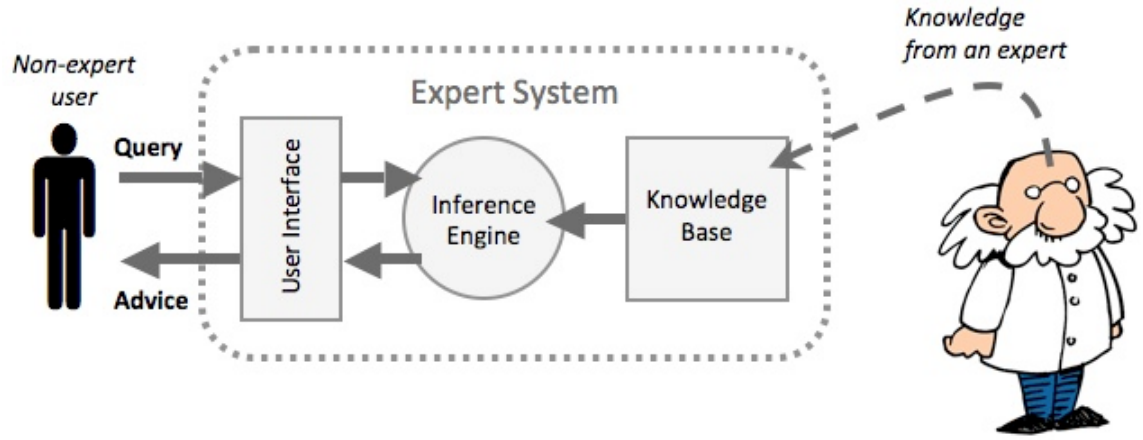
Enterprise Resource Planning (ERP) system is a business process management software that allows an organization to use a system of integrated programs capable of managing a company's vital business operations for an entire multi-site, global organization[45].

Figure 8: Enterprise Resource Planning

2.4.3.7 *Expert Systems*

The expert systems have the ability to make suggestions and act like an expert in a particular field of an organization. An expert system has an extensive knowledge base[45].

Figure 9: An architecture of Expert System



2.5 CONCLUSION

The objective of this chapters is to give a very good ideas about all axes that are related to our work,

As result of that, we studies in this chapter the notion of logistics, transportation and the information system. And we've try to be very precise for choosing the right references of each axes in order to have a good and powerful notions.

3

TRANSPORTATION APPLICATIONS

3.1 INTRODUCTION

The goal of this chapter is to take an overview about the charities, its organizations and its different applications. We also going to talk about different systems that are similar to our, finally we will talk about the problematic and the solution of our proposed platform.

3.2 CHARITIES

Charity is to give to others that which belongs to you. When you give to charity, you experience happiness because when you let go of something that you love, you give happiness to others[31].

3.2.1 *Definition*

The Cambridge Dictionary defines charities as A system of giving money, food, or help free to those who are in need because they are ill, poor, or have no home, or any organization that has the purpose of providing money or helping in this way[5].

3.2.2 *Type of charities*

There Are a lot of types but we'll mention three major types which are:

- Money : One type of charity is giving money. You can donate a sum of money for children or for old people. All the payments made to sponsor the children or the old person should be tax deductible amount that is

helping the person to grow as an individual whether it is in the form of intelligence or the living[38].

- Gifts: you can also choose from the charity gift catalog offered by the many charity accepting firms or the NGOs. Sponsoring is one way like gifting the things to the children they require most at a certain point of time. These gifts can vary from clothes to the books or so on depending upon the gift the NGO or the adoption center accepts[38].
- Offering Service: Many NGO and adoption center accept an in-kind donation. These donations can be in the form of a good or a service that you have given them for free. You can donate by offering a service like teaching children a new language, taking them on a trip and so on[38].

3.2.3 *Charity organization*

The legal definition of a charity organization (and of charity) varies between countries and in some instances regions of the country. The regulation, the tax treatment, and the way in which charity law affects charitable organizations also vary. Charitable organizations may not use any of its funds to profit individual persons or entities[6].

3.2.4 *Types of charity organizations:*

Charities are organizations that raise funds for non-profit purposes. Their aim is to help the less fortunate in the society and improve the community's well-being. There are so many charities that sometimes it can be difficult to classify them. To group them, you need to look at the different functions they perform and the sectors they support. In line with this, charitable organizations can be placed into six broad categories, all explained below[2].

3.2.4.1 *Education Charities*

These non-profit organizations help needy students from every age class and school. Some charities donate funds to different schools while others have set up

their schools where they educate and support all the students. The help comes in the form of scholarships, provision of learning materials and financial aid. Support can be given to students, their guardians or teachers[2].

3.2.4.2 *Health Charities*

These charity groups aim to aid the sick and those with physical disabilities. This can range from providing funds for medical research, promoting health awareness to paying accumulated hospital bills to those having difficulties in raising funds[2].

3.2.4.3 *Environment Charities*

Environmental preservation, sustenance, and development are the goals of these charities. They champion the use of greener energy sources, environmental conservation and protections of nature centers[2].

3.2.4.4 *Animal Charities*

Anyone willing to contribute to animal welfare does so through animal charities. They raise funds for use in wildlife conservation and the protection of pet and animals wellbeing[2].

3.2.4.5 *Art and Culture Charities*

These types seek to protect and preserve cultural heritage and art. They can be further classified into Museum and Art Galleries and Historical Societies[2].

3.2.4.6 *International NGOs*

They are charities with headquarters in one country but with branches in various other countries. New charities emerge every day and some of them can fall into or out of these categories based on their agenda. Their classification is therefore dynamic and ever-changing each day[2].

3.2.5 *UNICEF*

The United Nations Children's Fund is a United Nations agency responsible for providing humanitarian and developmental aid to children worldwide[26].

Operating out of U.N. headquarters in New York City, it is among the most widespread and recognizable social welfare organizations in the world, with a presence in 192 countries and territories[33].

UNICEF's activities include immunizations and disease prevention, administering treatment for children and mothers with HIV, enhancing childhood and maternal nutrition, improving sanitation, promoting education, and providing emergency relief in response to disasters[26].

UNICEF has its origins in the International Children's Emergency Fund (ICEF), created in 1946 by the U.N. Relief Rehabilitation Administration to provide immediate relief and healthcare to children and mothers affected by World War II. The same year, at the urging of Polish physician Ludwik Rajchman, the U.N. General Assembly established the United Nations International Children's Emergency Fund (UNICEF) to further institutionalize its post-war relief work[16].

In 1950, UNICEF's mandate was extended to address the long-term needs of children and women, particularly in developing countries, and in 1953 it became a permanent part of the United Nations System. The agency's name was subsequently changed to its current form, though it retains the original acronym[26].

Figure 10: UNICEF's logo

3.2.6 *Doctors without borders*

Doctors Without Borders was formed in 1971 by a group of French physicians, most of whom had worked for the International Red Cross in Biafra in 1968 and 1970. According to the group, they aimed to overcome two shortcomings of international aid, that it offers too little medical assistance and that aid agencies

are overly reticent in the face of the many legal and administrative obstacles to the provision of effective humanitarian relief[47].

Doctors Without Borders works in almost 80 countries, and the organization has offices in multiple countries. In addition to providing medical assistance, Doctors Without Borders has a reputation as a highly politicized group, particularly skillful in achieving publicity for its efforts. Its vocal opposition to perceived injustice has led to its expulsion from several countries[11].

Figure 11: Doctors without borders's logo

3.2.7 *Applications for Charities*

There is a lot of applications for charities, we took some of it below:

3.2.7.1 *ShareTheMeal*

ShareTheMeal fights global hunger through the United Nations World Food Programm (WFP). The concept is simple. Tap the app on your phone and give 50 cents. That will feed one child for one day.

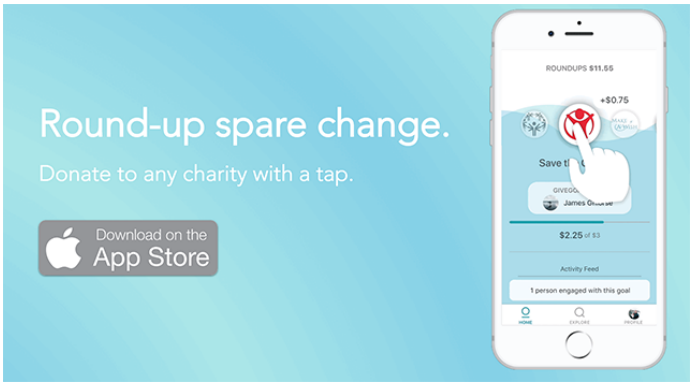
Figure 12: ShareTheMeal application

3.2.7.2 *GiveTide*

Giving to charity can be as easy as rounding up a purchase and donating that amount to a charity of your choice.

That is what this clever app does for you. Just download the app, connect a credit or debit card, and start shopping. Each purchase will be rounded up to the nearest dollar, and the change donated.

Figure 13: GiveTide application



3.2.7.3 *Ikhair*

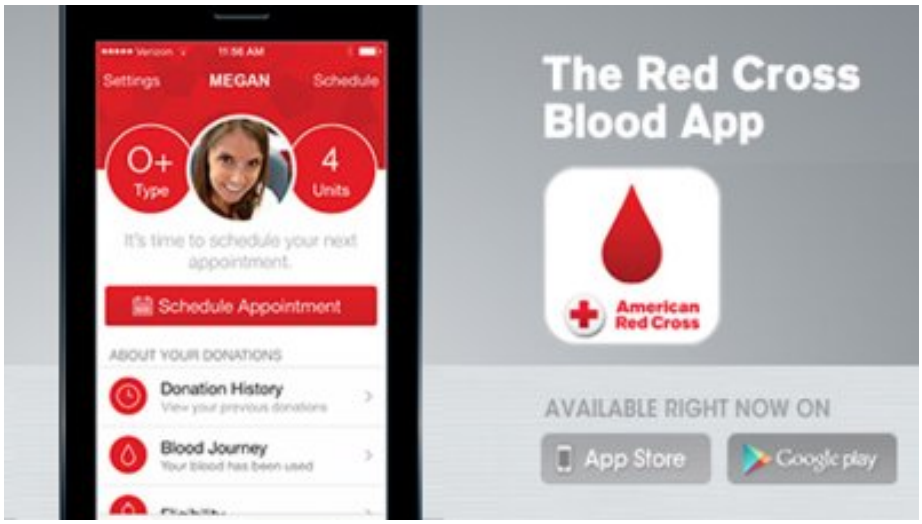
ikhair is the first Payment Arabic platform and application to pay charities Via SMS, Bank account and credit card

Figure 14: Ikhair application

3.2.7.4 *The American Red Cross Blood Donor*

The American Red Cross Blood Donor App puts the power to save lives in the palm of your hand. Donating blood, platelets and AB Plasma is easier than ever. Find nearby Red Cross blood drives, schedule appointments, follow your blood's journey from donation through delivery (when possible), and create or join a lifesaving team and track its impact on a national leaderboard.

Figure 15: The Red Cross Blood Donor application

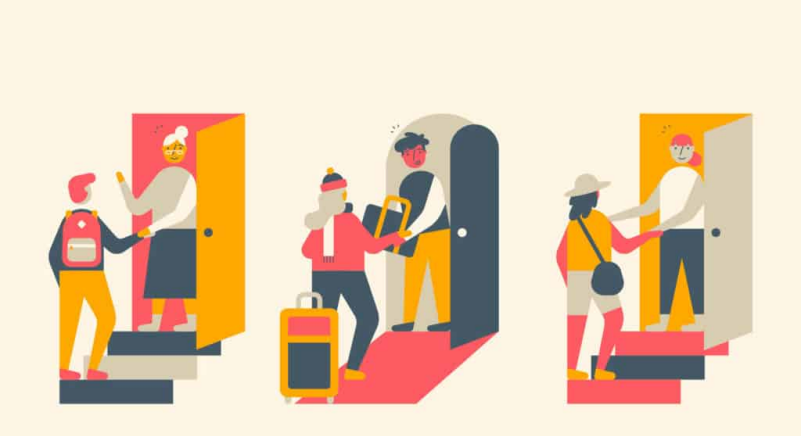


3.2.7.5 *CouchSurfing*

CouchSurfing is a homestay and social networking service accessible via a website and mobile application.

Couchsurfing began in 2004 as a small passion project by founders Casey Fenton, Daniel Hoffer, Sebastian Le Tuan and Leonardo Bassani da Silveira. An email to a group of students in Iceland gave birth to the idea that people anywhere would want to share their homes with strangers (or, as we like to call them, friends you haven't met yet).

Figure 16: CouchSurfing picture



3.3 SIMILAR SYSTEMS

In this section we will talk about the systems that are similar to our system.

3.3.1 *Uber*

Uber is an application that connects passengers with drivers who have a contract with Uber. To order a vehicle it is necessary to own a smartphone and to register within the mobile application by entering your name, e-mail address, a cell phone number and a credit card number that is to be billed automatically at the end of the ride. Global positioning system in the smartphone is used to determine the location so the passenger does not have to know the exact pickup address.

The ride order appears on the nearest driver's smartphone application and he/she can accept or reject the ride[43].

Uber was founded in 2009 as Ubercab by Garrett Camp, a computer programmer and the co-founder of StumbleUpon, and Travis Kalanick, who had sold his Red Swoosh startup for $19 million in 2007[25].

The company is based in San Francisco and has operations in over 785 metropolitan areas worldwide[25].

Figure 17: UBER apllication

3.3.1.1 *Uber services*

Uber was started with an idea of a luxury transport which can be hailed via mobile phone, but has developed into something much more over the years. New services were offered and they can be chosen in the application while detailing a pick-up location.[43] Those services are:

1. UberT: Potential passengers can hail the official taxi service in that particular town. In New York City, for example, those are yellow taxi cabs with a medallion and Boro taxi cabs. Uber charges the application usage and the passenger pays the driver himself.

2. UberX: The most famous Uber service. Usually cheaper than the official taxi cabs for 15-20

3. UberPop: A service that connects potential passengers with unlicensed drivers that have a contract with Uber and have passed their background check.

4. UberPOOL: Launched in 2014, this is Uber's most affordable service. It allows ride sharing with strangers who intend to go the same route. Fare

savings can reach up to 40% and if the application cannot find another passenger the sole passenger gets a 10% discount.

5. UberMOTO: A low-cost motorcycle transport service launched in February 2016 in Bangkok. Passengers can pay the cab fare in cash or with a credit card.

6. UberBlack: The original Uber service which includes luxury vehicles.

7. UberSUV: Passenger transport with spacy vehicles.

8. UberXL: Passenger transport for large groups[43].

3.3.1.2 *How Uber works*

1. Request: To order a ride it is necessary to own a smartphone and to register within the mobile application by entering a name, an e-mail address, a cell phone number and a credit card number that is to be billed automatically at the end of the ride.

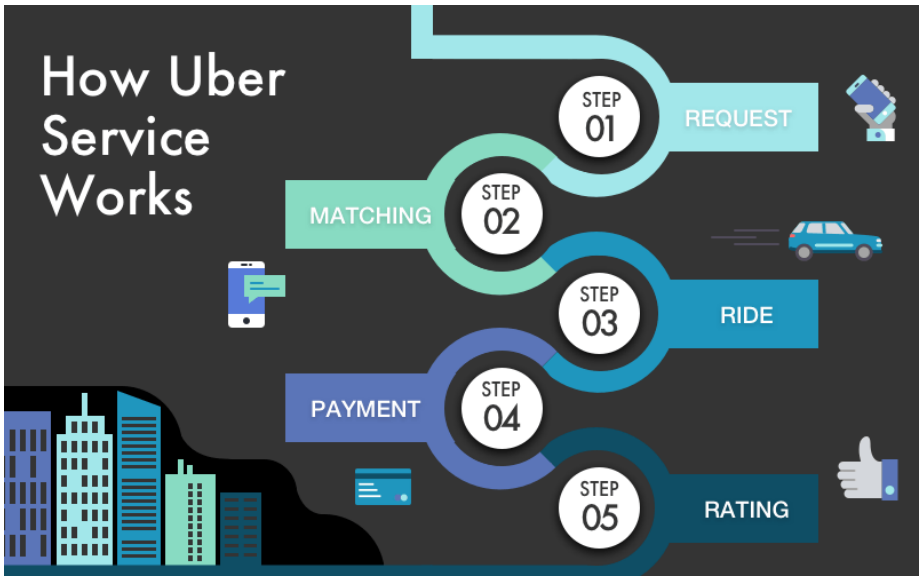
2. Matching: Global positioning system in the smartphone is used to determine the location of the passenger. Once completed, the ride order appears on the nearest driver's smartphone where he or she can accept or reject it.

3. Ride: An automated message is sent by the application upon the car's arrival. The driver starts the ride on the application and the passenger is shown the route and the estimated time of arrival.

4. Payment: After the ride, the credit card specified in the app is automatically charged and the bill is sent via e-mail.

5. Rating: Immediately after a trip ends, your app will ask you to rate your driver from 1 to 5 Stars. Driver-partners are also asked to rate riders. Uber's feedback system is designed to foster a community of respect and accountability for everyone.

Figure 18: How does Uber service work



3.3.2 *DHL*

DHL is an international courier, shipping and packaging service. The name DHL is derived from the names of its founders. It was established in 1969. And the founders are Adrian Dalsey, Larry Hillblom and Robert Lynn. DHL is derived from first initial of last name of each founder's. DHL stands for Dalsey Hillblom Lynn. It is a German logistic company providing international shipping and courier services.

DHL has numerous cargo transport systems including planes, trains, and boats.

DHL serves more than 120,000 designations and 220 countries. As of 2002, Deutsche Post World Net owns the majority of shares.

DHL offers worldwide services, including deliveries to countries such as Iraq, Afghanistan and Myanmar (formerly Burma). As it is German-owned, DHL is not affected by U.S. embargoes or sanctions and will ship to Cuba and North Korea[10].

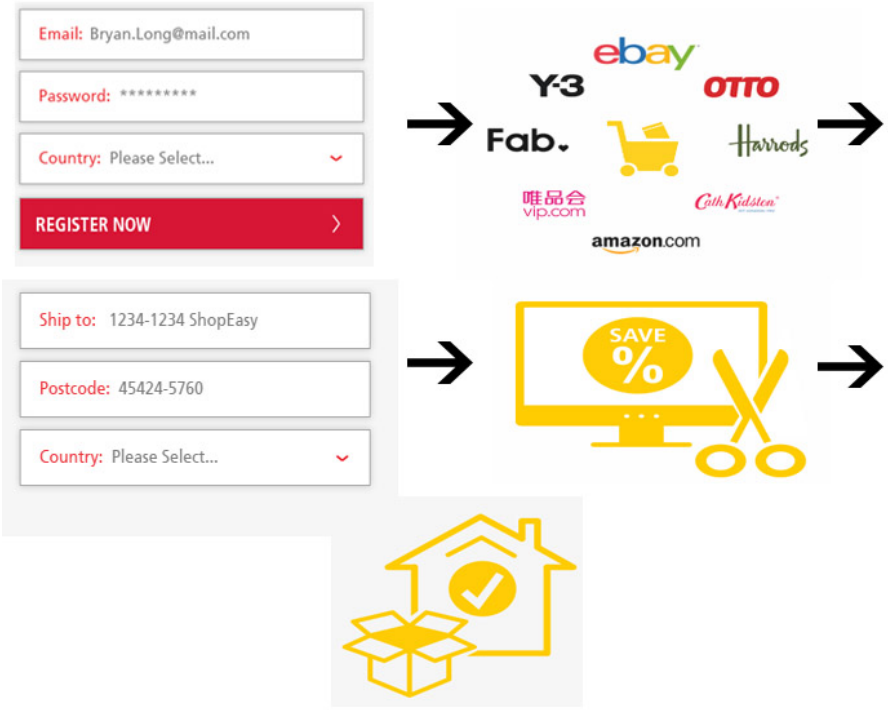
Figure 19: DHL's logo

3.3.2.1 *DHL easyshop*

DHL EasyShop is a package forwarding and international shipping services. you have the freedom to shop your favorite US and European brands and ship to anywhere. To do that follow those steps:

1. SIGN UP WITH DHL EASYSHOP: Signing up with DHL EASYSHOP is free. When you open an account, you can use them immediately and start shopping straight away.
2. SHOP ANYWHERE: Whether you're looking for the latest product release, hunting for a bargain or searching for something unique, use DHL EasyShop to shop your favorite stores and discover new ones.
3. SHIP TO DHL EASYSHOP: At checkout, enter your corresponding DHL EasyShop address as your delivery address. For example, if buying in the USA, you would use your DHL EasyShop USA address, When your packages arrive to the export facility, They we'll send you an email notification.
4. SAVE ON SHIPPING: When your packages arrived to their warehouse. you can log in to your DHL EasyShop account and manage your order. With services from DHL EasyShop, you can select money-saving options and release your shipment when you're ready.
5. HOME DELIVERY: Depending on the method of shipping, receive your packages in as little as 4 days after shipment release[13].

Figure 20: How does DHL easyshop work



3.3.3 *UPS*

Founded in 1907 as a messenger company in the United States, UPS has grown into a multi-billion-dollar corporation by clearly focusing on the goal of enabling commerce around the globe. Today, UPS is a global company with one of the most recognized and admired brands in the world. We have become the world's largest package delivery company and a leading global provider of specialized transportation and logistics services. Every day, we manage the flow of goods, funds, and information in more than 200 countries and territories worldwide[3].

Figure 21: UPS's logo

3.3.4 *FedEx*

FedEx Corporation is an American multinational delivery services company headquartered in Memphis, Tennessee. The name FedEx is a syllabic abbreviation of the name of the company's original air division, Federal Express (now FedEx Express), which was used from 1973 until 2000. The company is known for its overnight shipping service and pioneering a system that could track packages and provide real-time updates on package location, a feature that has now been implemented by most other carrier services. FedEx is also one of the top contractors of the US government[12].

Figure 22: FedEx's logo

3.3.5 *YASSIR*

A system developed by three Algerian engineers connects drivers and passengers in the capital. Before reaching Oran and the east and the west of the country[37].

YASSIR is an innovative transport service that you can use with your smartphone anywhere and anytime. It allows everyone to book a driver and move around safely[34].

Figure 23: YASSIR application

3.4 PROBLEMATIC

On many centuries transportation had developed on different and varied phases, by a lot of ways, each day it covers a new places until it covers all places in the world. All of this changes in the transportation services can't be without problems specially in our country Algeria.

The transportation in Algeria faces a lot of problems which are as follow:

- The exist applications doesn't cover all the places.
- Some applications offer just the transportation of peoples.
- If you want to send something you have to send it by a bus driver or collective taxi driver.
- If you send something with the bus driver or the collective taxi driver, the sent thing won't reach the exact reception address.

- The recipient needs to go to the passenger station to receipt the sent thing that you send it. This take a lot of time on waiting especially if you are emergency.
- The scarcity of transport in some days such as: Friday days, occasions days and Eid's days (Eid Al-Fitr and Eid Al-Adha).
- The charity work in transportation is very little, especially with the hitch-hiking (auto stop).

3.5 PROPOSED SOLUTION

Any problem has a solution but before you can solve a problem you need to understand what the true issue is. The transportation in Algeria has many problems which we will solve them by a web application that will make the transportation easy and fast.

- Our platform will cover all of the country not just the grand wilayas.
- Our application will offer all the type of transportation (persons, goods, documents and other thing).
- You don't need to send something with the bus driver or collective taxi driver.
- Your sent thing will reach the exact place.
- Our application will reduce the scarcity of transport in the special days (Friday days, occasions days and Eid's days).
- Our application will encourage the charity work with the people.
- Your use of our application will create a new relationship with a different people from our country.
- Our application will organize and eliminate the fear of people from the hitchhiking (auto stop).

3.6 WEB APPLICATION

3.6.1 *Definition*

A web application refers to an application software hosted on a server and accessible via a web browser. Unlike other application, the user of a web application does not need to install it on their computer. All you need to do is connect to the application using your browser[30].

3.6.2 *Benefits*

1. Web applications run inside a browser; no complex installation is needed.
2. Web applications require very little disk space (or computing power) on the client. All the client does is display the data.
3. Web applications solve some of the compatibility issues (Windows, Mac, Linux); all that is needed is a browser.
4. In many cases, the data is stored remotely too. As with other cloud computing, this can allow easy communication and cooperation.
5. Help for communication and mail[30].

3.6.3 *Drawbacks*

1. Because they run inside a web browser, most web applications look very different to regular programs. The user experience or ease of use is different and some may dislike it.
2. Web applications need to be coded so they follow standards. Any browser that also follows the standard can be used. Small changes in a given browser's implementation of a standard may prevent that browser from using the web application.

3. Web applications need a connection to the server where the application runs, all the time. The connection may need a certain bandwidth. Without an adequate connection, the application may not become usable; in the worst case, data may be lost.

4. Many applications are dependent on the server that hosts them. When the server is switched off, or the company goes bust, the application is no longer usable. Traditional applications continue to work.

5. The company offering the web application has complete control over it. This also means that they may launch a new version when they want to; the option to skip a less popular version does not exist.

6. In many cases, the data is stored remotely too. It may not be possible to export the data so that it can be used with another application.

7. The company can theoretically track anything the users do. This can cause privacy problems[30].

3.7 CONCLUSION

In this chapter we defined the problematic and the solution of our work by a web application that make the transportation easier, faster, from any place to another place.

Part III

THE APPLICATION PART

This part contains one chapter which are the design and development of our application.

4

DESIGN AND IMPLEMENTATION

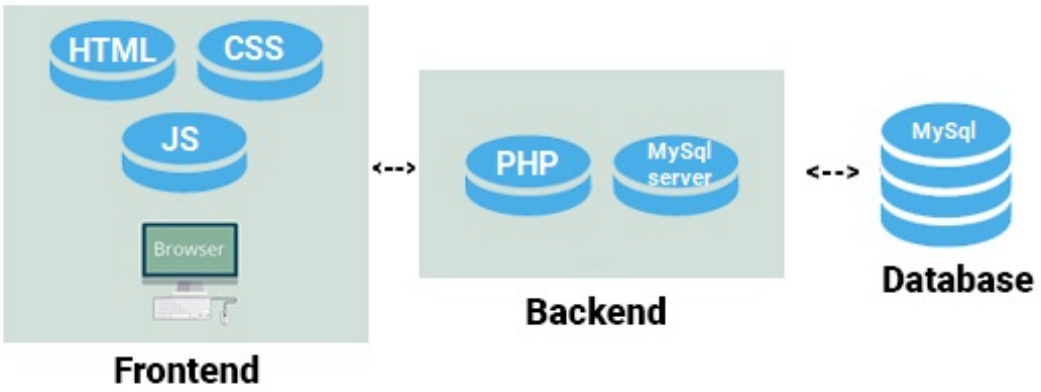
4.1 INTRODUCTION

In this Chapter we will expose a modeling of the projected architecture based on the UML language in order to define the architecture to be implemented. In the end we will explain the website some basic snapshots of the system.

4.2 GENERAL STRUCTURE OF THE ENVIRONMENT

This general architecture represent the tools that we use for the implementation of our application, we used Web technologies like HTML, CSS, JavaScript, PHP and MySQL in design and to connect the application with the server. We used other techniques such as: AJAX to take advantage of updating the information on the web page at the real time, without reloading the page.

Figure 24: The General architecture of the application



4.2.1 *Programming language*

We will talk about the programming languages that we used to develop our application.

4.2.1.1 *HTML*

HTML stands for Hypertext Markup Language. It allows the user to create and structure sections, paragraphs, headings, links, and blockquotes for web pages and applications. HTML is a programming language, meaning it doesn't have the ability to create dynamic functionality. Instead, it makes it possible to organize and format documents, similarly to Microsoft Word[32].

Figure 25: HTML logo

4.2.1.2 *CSS*

CSS stands for Cascading Style Sheets with an emphasis placed on Style. While HTML is used to structure a web document (defining things like headlines and paragraphs, and allowing you to embed images, video, and other media), CSS comes through and specifies your document's style-page layouts, colors, and fonts are all determined with CSS. Think of HTML as the foundation (every house has one), and CSS as the aesthetic choices (there's a big difference between a Victorian mansion and a mid-century modern home)[9].

- Bootstrap: Bootstrap is a free and open-source CSS framework directed at responsive, mobilefirst front-end web development. It contains CSS- and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation and other interface components.

Figure 26: CSS logo

4.2.1.3 *JavaScript*

JavaScript often abbreviated as JS, is a high-level, interpreted programming language that conforms to the ECMAScript specification. JavaScript has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and first-class functions. Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web. JavaScript enables interactive web pages and is an essential part of web applications. The vast majority of websites use it, and major web browsers have a dedicated JavaScript engine to execute it[15].

Figure 27: JavaScript logo

4.2.1.4 *Ajax*

Ajax (short for asynchronous JavaScript and XML) is a set of web development techniques using many web technologies on the client side to create asynchronous web applications. With Ajax, web applications can send and retrieve data from a server asynchronously (in the background) without interfering with the display and behavior of the existing page. By decoupling the data interchange layer from

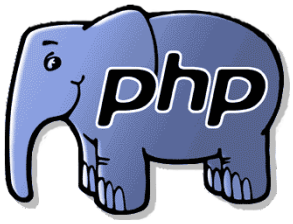
the presentation layer, Ajax allows web pages and to change content dynamically without the need to reload the entire page[4].

Figure 28: Ajax logo

4.2.1.5 *PHP*

PHP is an HTML-embedded Web scripting language. This means PHP code can be inserted into the HTML of a Web page. When a PHP page is accessed, the PHP code is read or "parsed" by the server the page resides on. The output from the PHP functions on the page are typically returned as HTML code, which can be read by the browser. Because the PHP code is transformed into HTML before the page is loaded, users cannot view the PHP code on a page. This make PHP pages secure enough to access databases and other secure information[20].

Figure 29: PHP logo



4.2.1.6 *SQL*

SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data stored in a relational database. SQL is the standard language for Relational Database System. All the Relational Database Management Systems (RDMS) like MySQL, MS Access, Oracle, Sybase, Informix, Postgres and SQL Server use SQL as their standard database language[21].

4.2.2 *Development environment*

We will talk about the environment that we used to develop our application.

4.2.2.1 *StarUML*

StarUML is a software modeling platform that supports UML (Unified Modeling Language). It is based on UML version 1.4 and provides eleven different types of diagram, and it accepts UML 2.0 notation. It actively supports the MDA (Model Driven Architecture) approach by supporting the UML profile concept. StarUML excels in customizability to the user's environment and has a high extensibility in its functionality. Using StarUML, one of the top leading software modeling tools, will guarantee to maximize the productivity and quality of your software projects[22].

Figure 30: StarUML logo

4.2.2.2 *WampServer*

WampServer is a Windows web development environment. It allows you to create web applications with Apache2, PHP and a MySQL database. Alongside, PhpMyAdmin allows you to manage easily your databases[29].

Figure 31: WampServer logo

4.2.2.3 *Visual Studio Code*

Visual Studio Code is a lightweight but powerful source code editor which runs on your desktop and is available for Windows, macOS and Linux. It comes with built-in support for JavaScript, TypeScript and Node.js and has a rich ecosystem of extensions for other languages (such as C++, C#, Java, Python, PHP, Go) and runtimes (such as .NET and Unity)[28].

Figure 32: Visual Studio Code logo

4.3 DESIGN

In this section we will present the conceptual aspect of our work using the Unified Modeling Language (UML) modeling language.

4.3.1 *UML (Unified Modeling Language)*

The OMG specification states: The Unified Modeling Language (UML) is a graphical language for visualizing, specifying, constructing, and documenting the artifacts of a software-intensive system. The UML offers a standard way to write a system's blueprints, including conceptual things such as business processes and system functions as well as concrete things such as programming language statements, database schemas, and reusable software components[18].

4.3.1.1 *UML diagrams*

UML has many types of diagrams, to model our project, we will use three diagrams, which are:

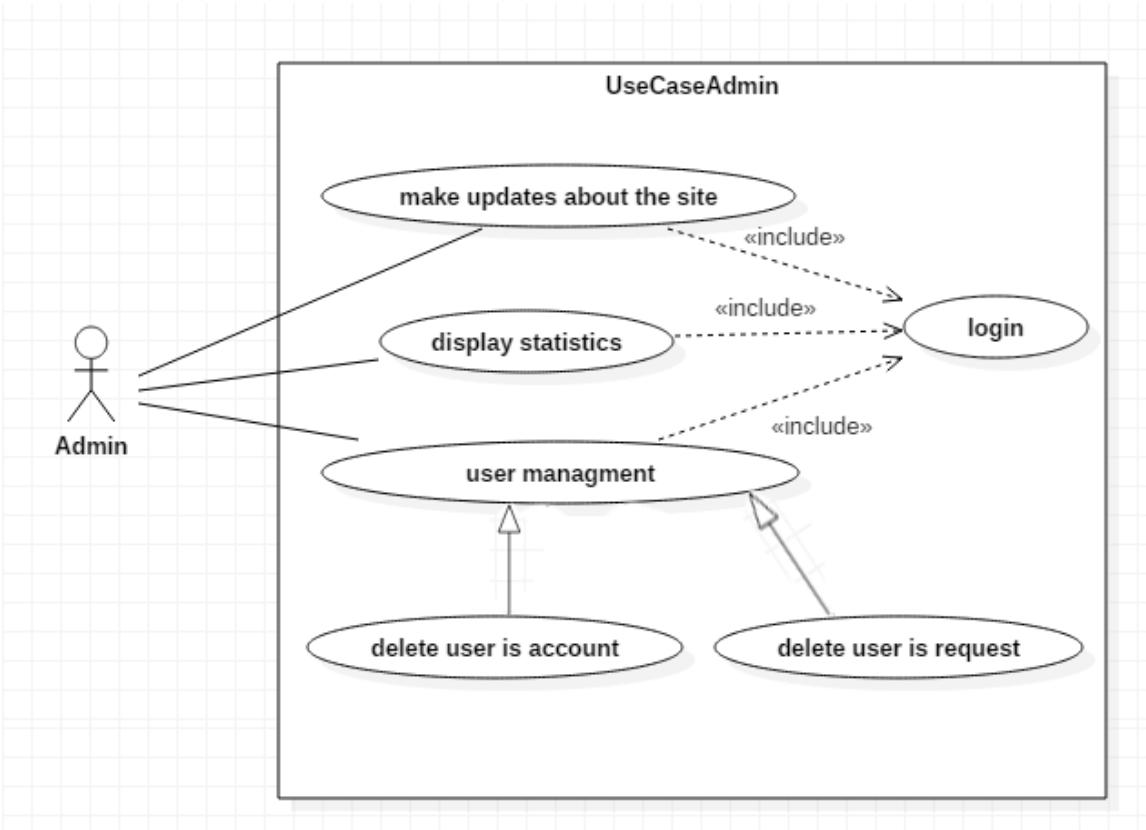
- Use Case Diagram
- Class diagram
- Sequence diagram

4.3.1.2 *Use case diagram*

A use case diagram is a dynamic or behavior diagram in UML. Use case diagrams model the functionality of a system using actors and use cases. Use cases are a set of actions, services, and functions that the system needs to perform. The "actors" are people or entities operating under defined roles within the system[27].

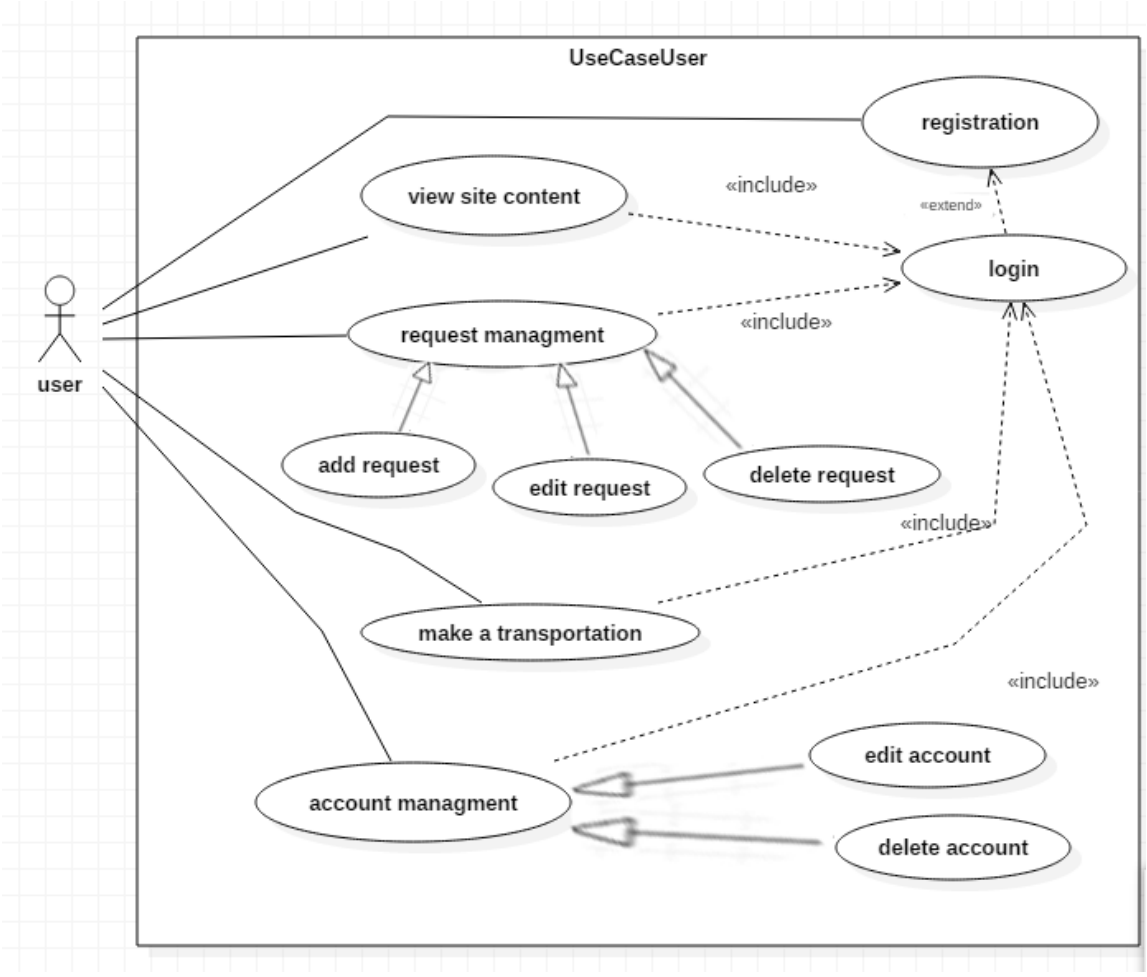
- Admin: Admin can do after Login process the following function:
  - Makes updates about the site
  - Display statistics
  - Users management (delete requests, delete users)

Figure 33: Administrator use case diagram



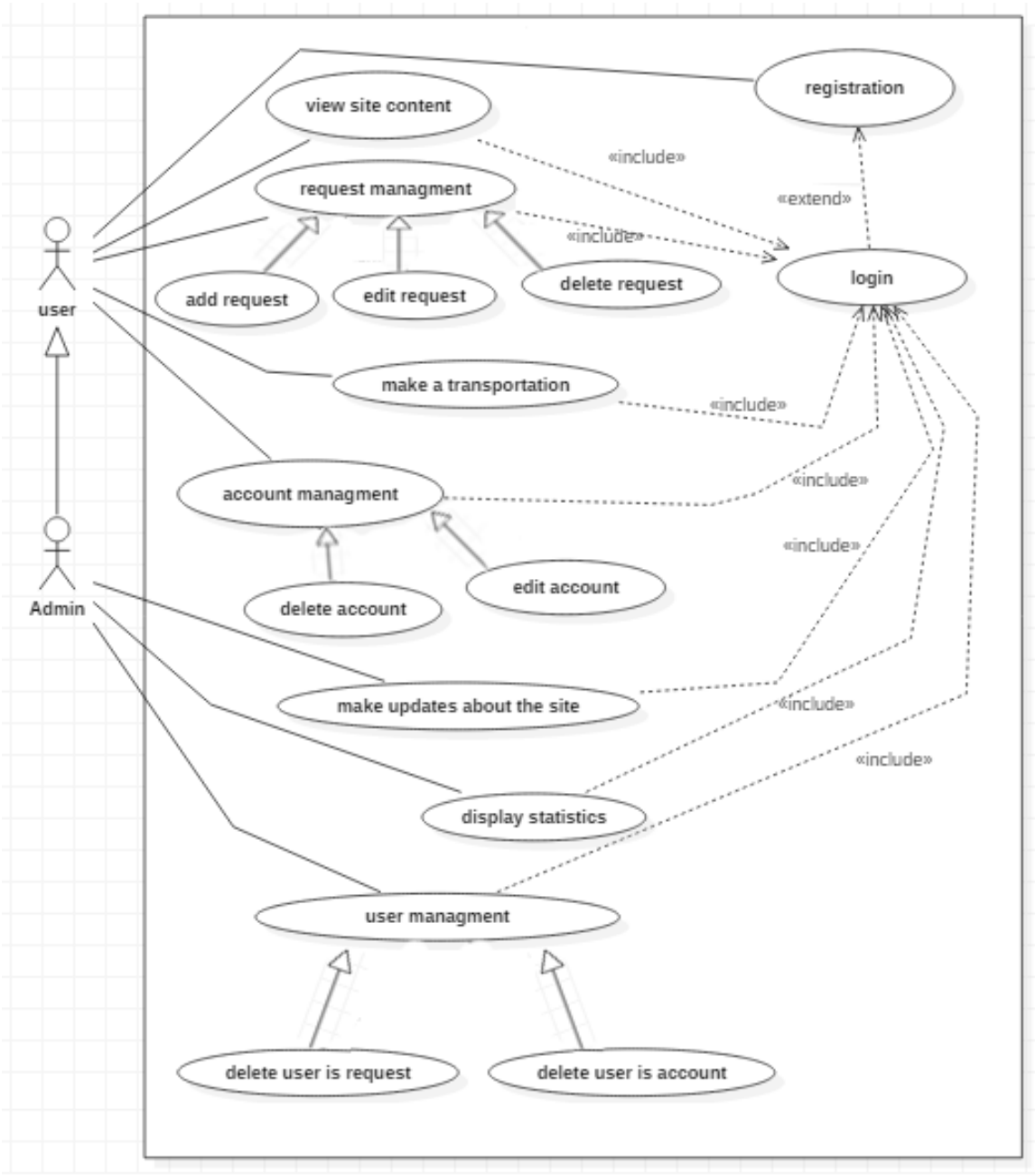
- User: The user can do after sign up and login process the following function:
  - View site content
  - Request management (add, edit, delete request)
  - Account management (edit and delete his account)
  - Make a transportation

Figure 34: User use case diagram



- Global use case diagram: The global use case diagram represents the different functions of our application around which the needs and requirements of the various actors who will interact within the system are set up.

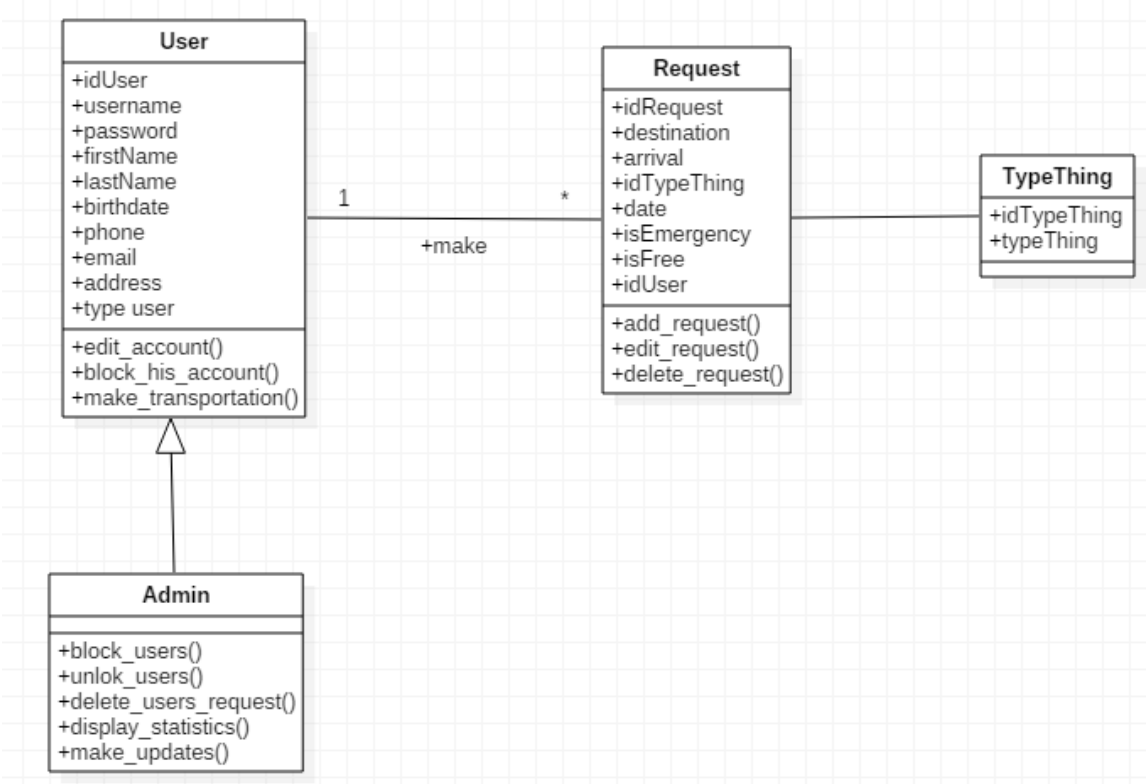
Figure 35: Global use case diagram



4.3.1.3 *Class diagram*

Class diagram is a static diagram. It gives an overview of a software system by displaying classes, attributes, operations, and their relationships. This Diagram includes the class name, attributes, and operation in separate designated compartments.

Figure 36: Class diagram

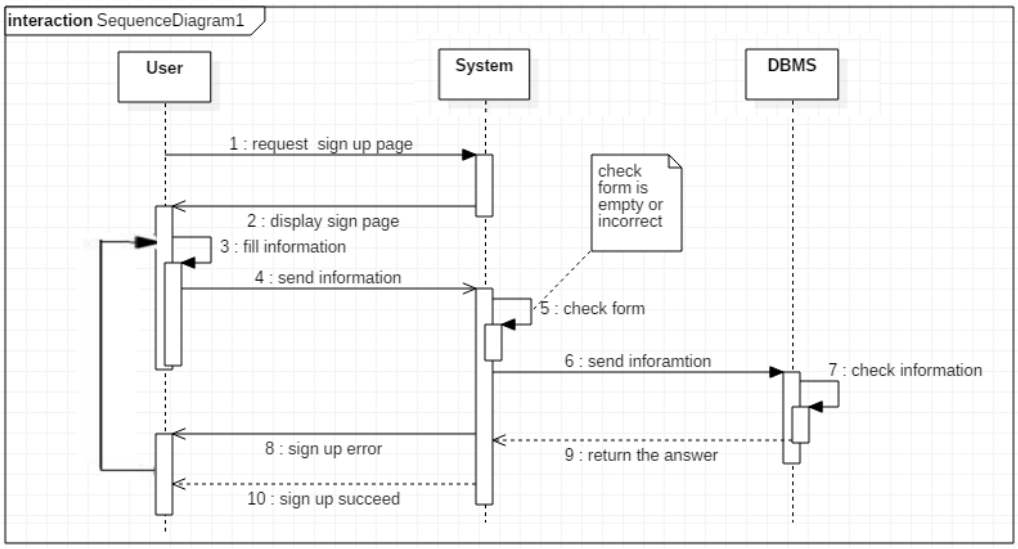


4.3.1.4 *Sequence diagrams*

Sequence diagrams show a detailed flow for a specific use case or even just part of a specific use case. They are almost self-explanatory; they show the calls between the different objects in their sequence and can show, at a detailed level, different calls to different objects.

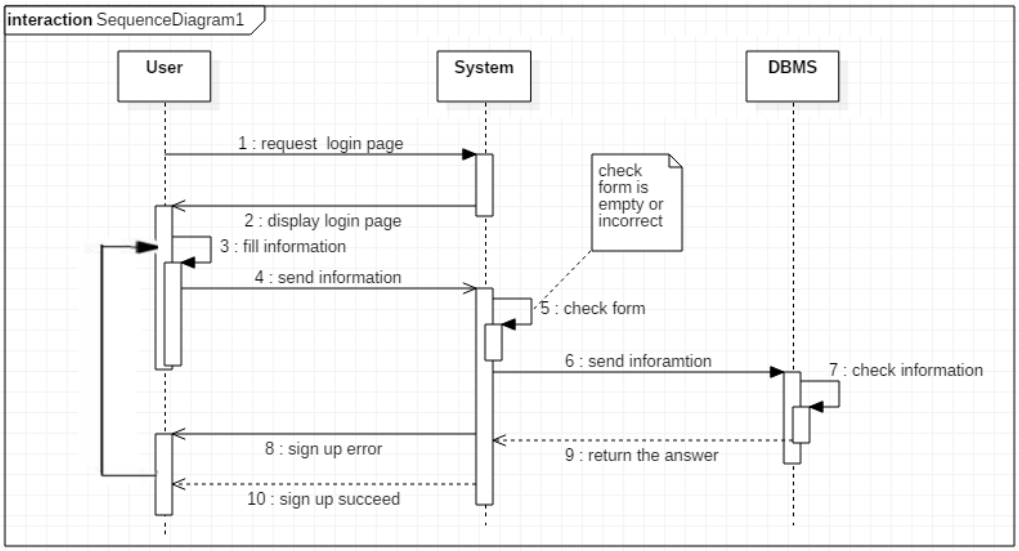
- Sign up sequence diagram: When the user want to access our web application, he will be forced to sign up before accessing it by entering his username, email and password, after entering the system sends a request to the server to process the sent information, if the information is correct the user will sign up successfully otherwise an error message will be displayed and will return the user to the sign up page.

Figure 37: Sign up sequence diagram



- Login sequence diagram: When the admin or the user want to access our web application, he will be forced to login before accessing it by entering his username and password, after entering the system sends a request to the server to process the sent information, if the information is correct the user will access his dashboard otherwise an error message will be displayed and will return the user to the login page.

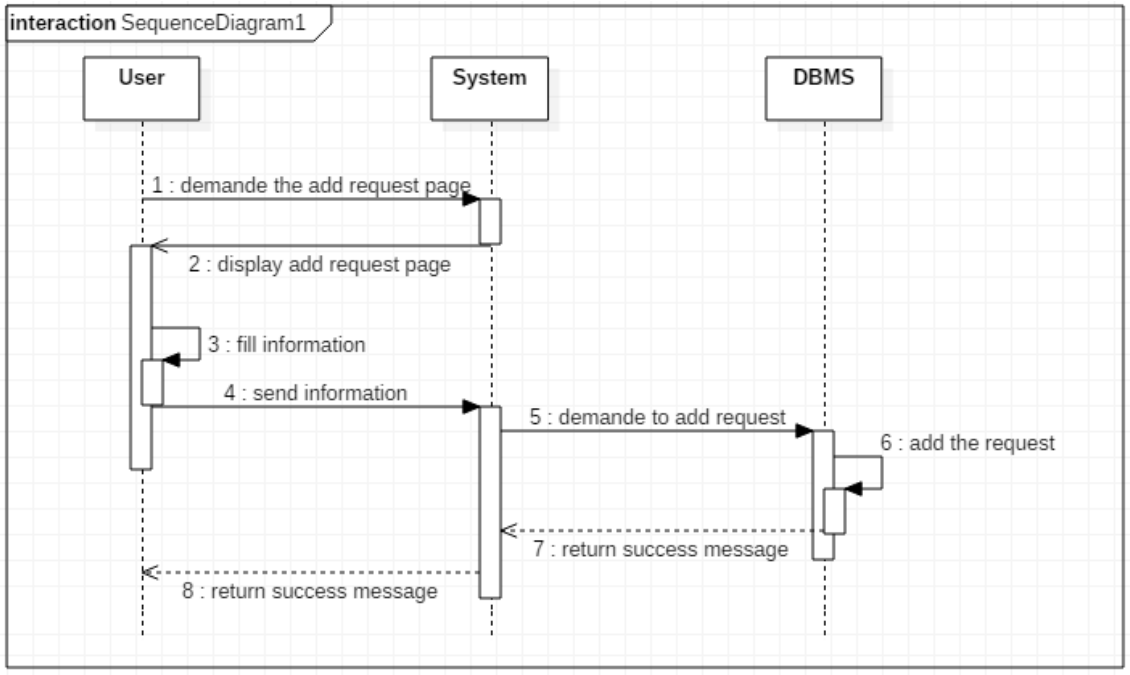
Figure 38: Login sequence diagram



- Request managment

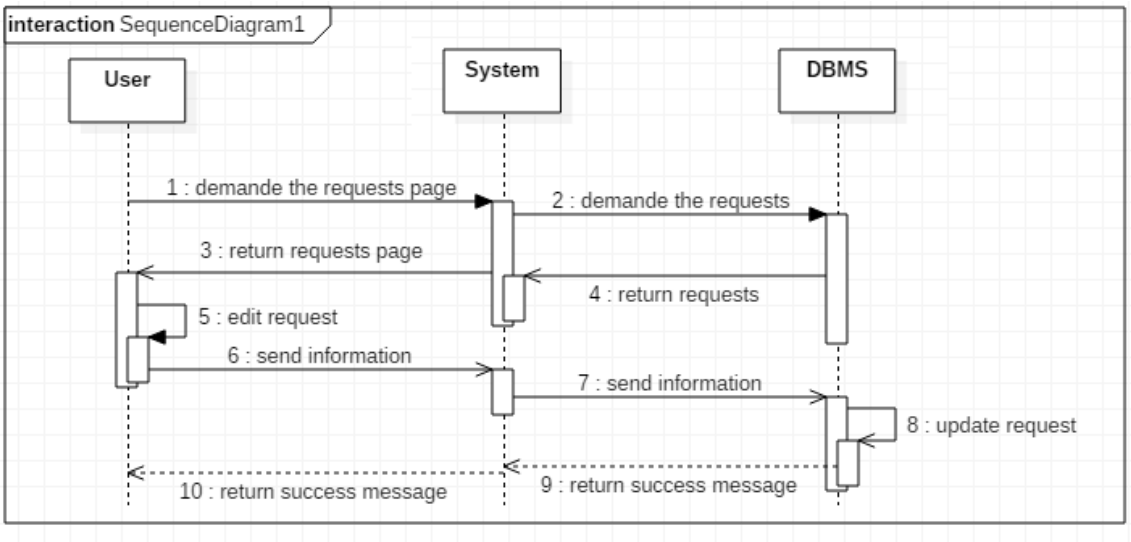
– After login from user he can add request:

Figure 39: Add request sequence diagram



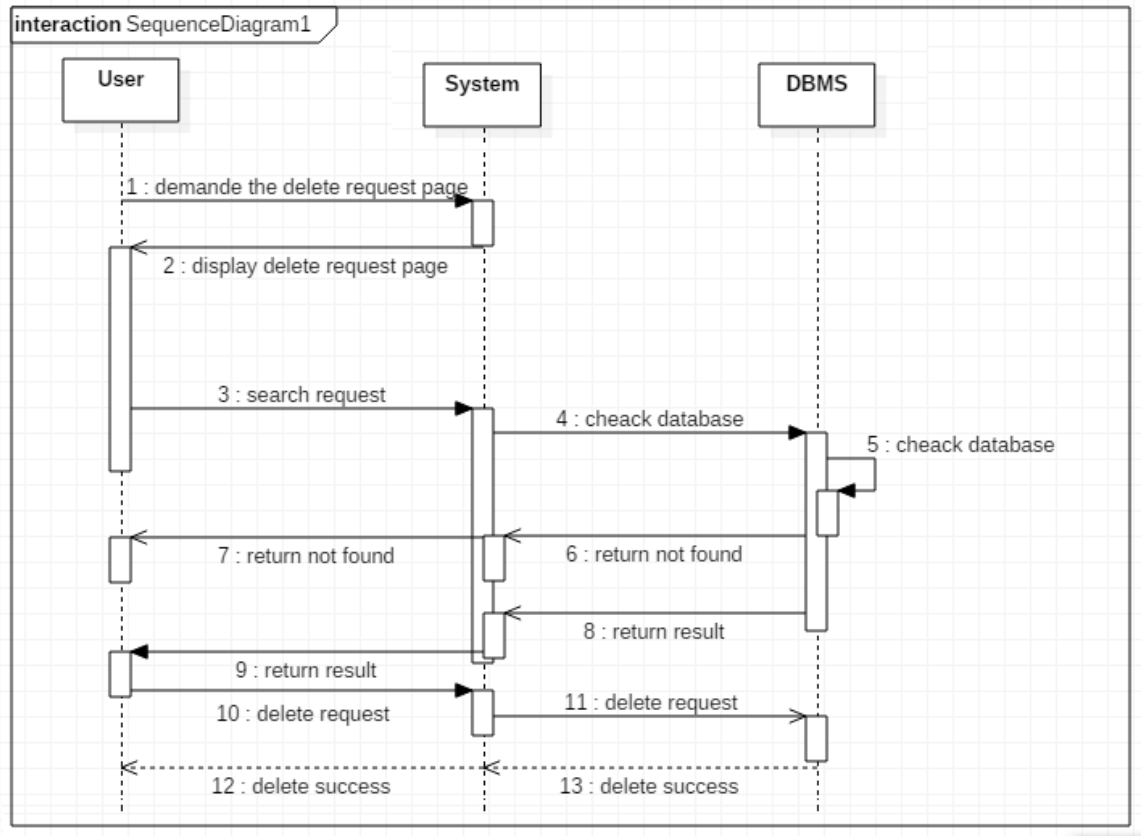
– After login from user he can edit request:

Figure 40: edit request sequence diagram



– After login from user he can delete request:

Figure 41: Delete request sequence diagram



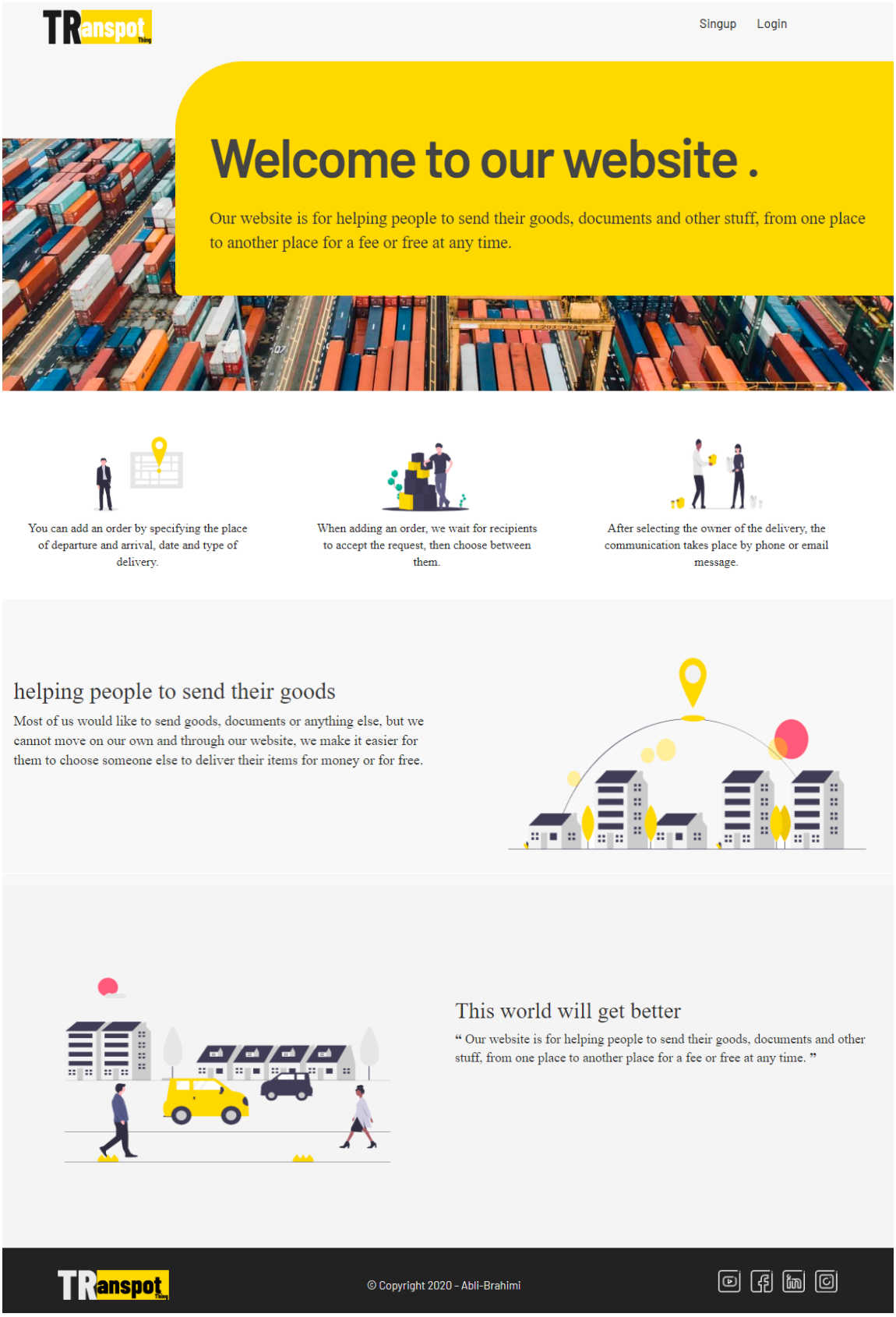
4.4 IMPLEMENTATION

In the following section, we will present snapshots of the most important pages of our web application.

4.4.1 *Home page*

This page represent the general interface of our website, with this page the user can consultes the services of our website such: us sign up and login.

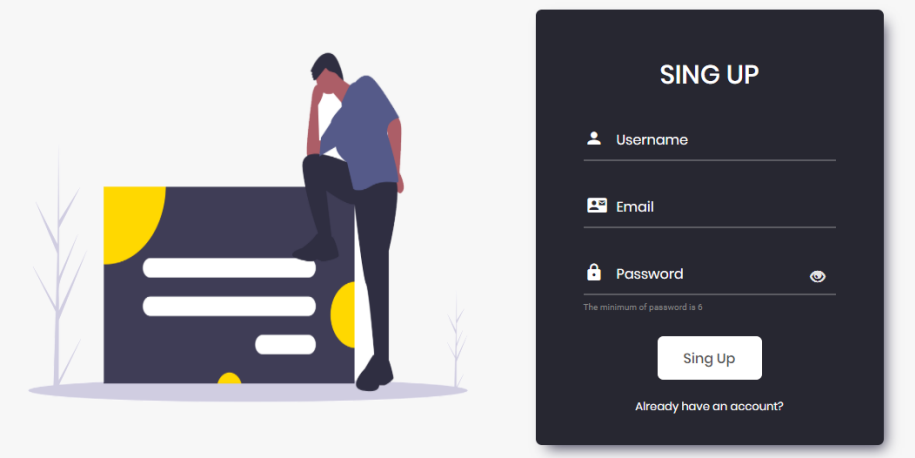
Figure 42: Home page



4.4.2 *Sign up page*

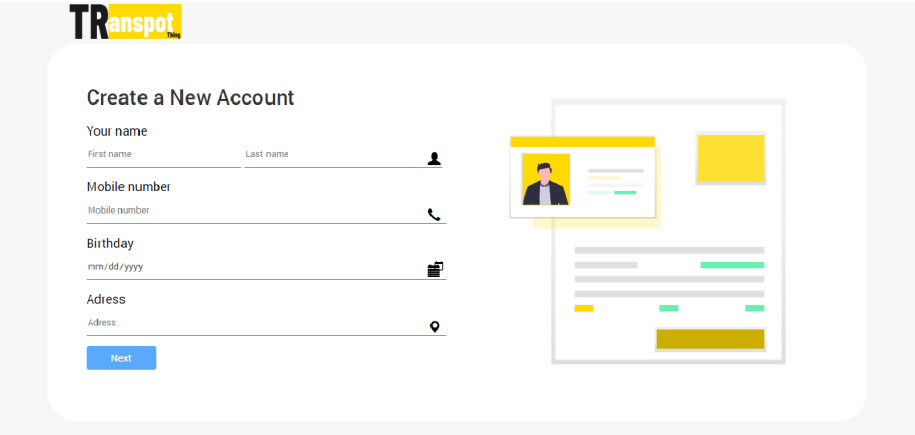
- Our application is dynamic where any one can sign in by his email, username and password.

Figure 43: Sign up page



- After that he can enter his personal information such us: fullname, birthdate, address and phone number.

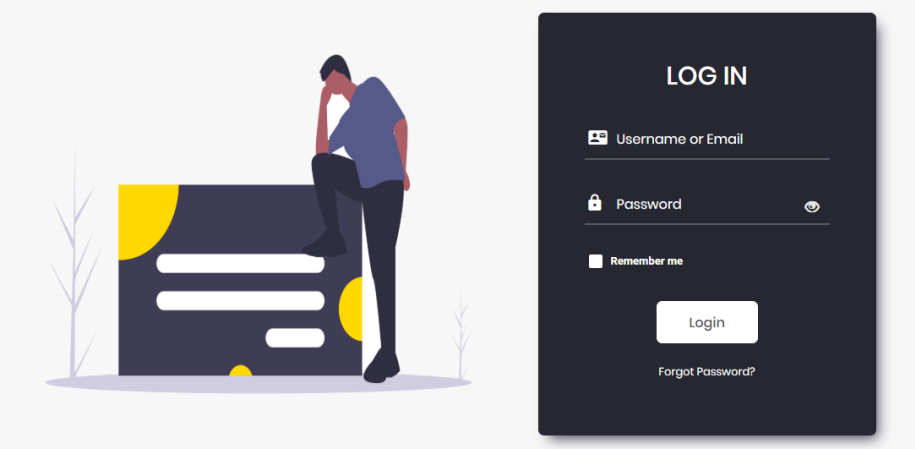
Figure 44: Sign up page



4.4.3 *Login page*

In our application any one can login if he is already sign up from the username or email and the password, we can detect him if he is a user or admin.

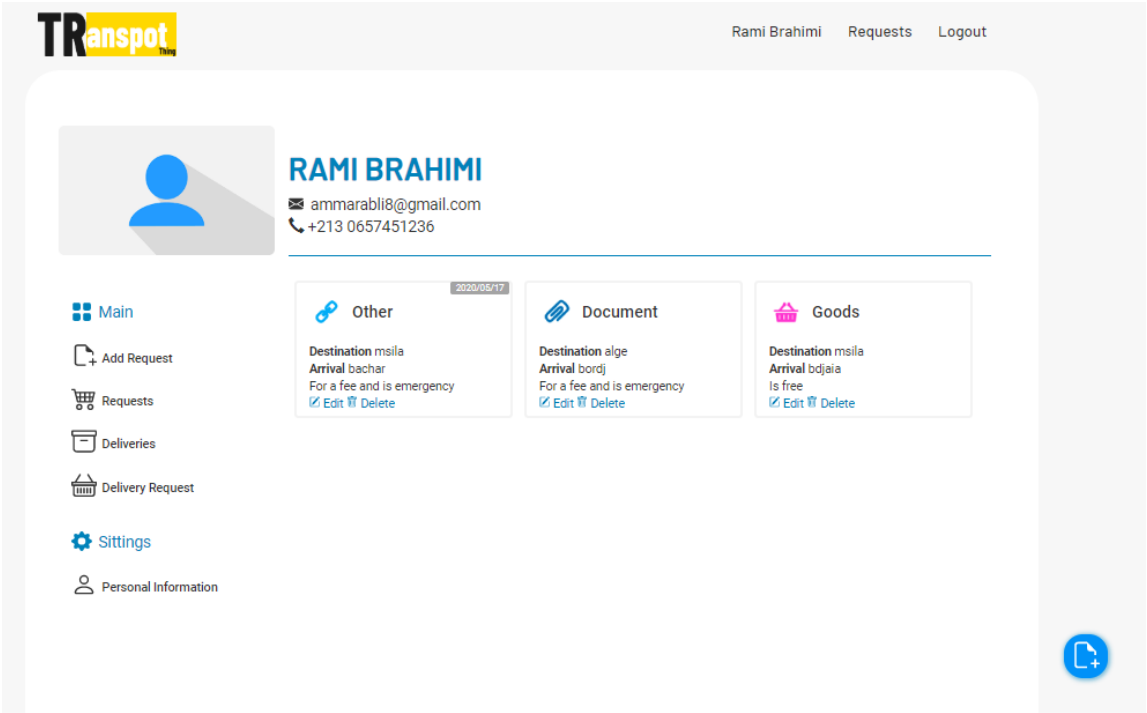
Figure 45: Login page



4.4.4 *Profile page*

After logging in the site pages turn to profile page by clicking on myprofile in the header. From the profile page you can add, edit and delete requests.

Figure 46: Profile page



- If you want add a request for transportation just click on Add request on the left side in your profile page.

  the Add request page will display to you, enter the information of your request.

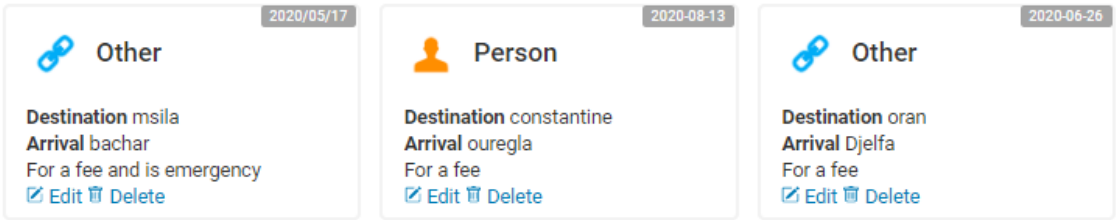
Figure 47: Add request section

- If you want display your requests, just click requests on the left side in your profile page.

  You can Edit your requests by clicking on Edit button in the request.

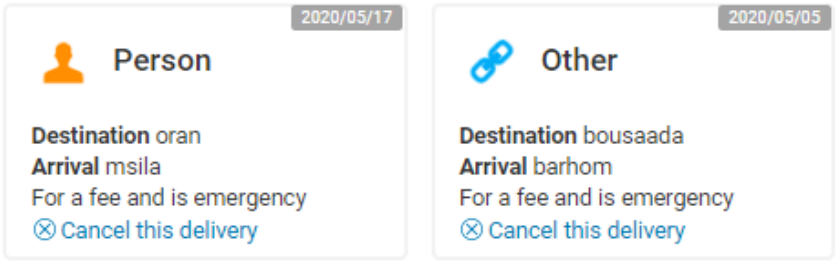
  you can delete any request by clicking on Delete button in the request that you want to delete it.

Figure 48: User's request section



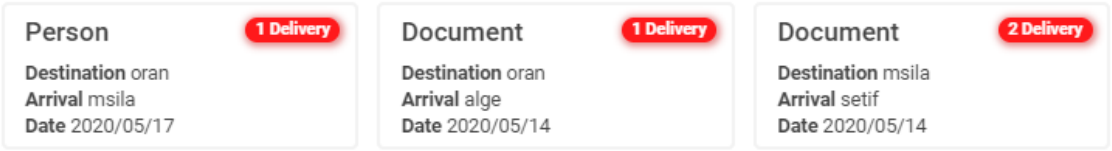
- If you want display your deliveries just click on Deliveries, you can cancel the delivery.

Figure 49: User's delivries section



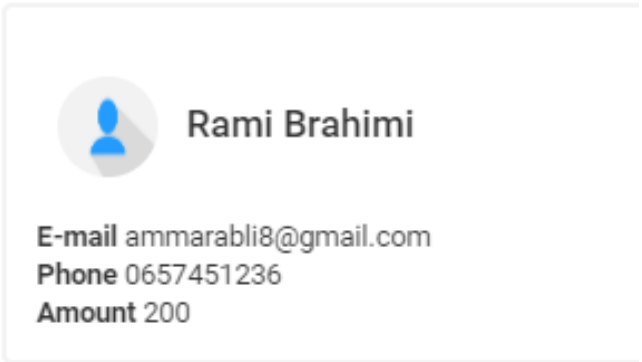
- If someone in the website accept your request and he will give a transportation you will find it by clicking on Delivery Request on the left side in your profile page.

Figure 50: Delivry requests section



If you click on the delivery request the information of the person that he will give you a transportation will show and you can contact him by the phone number or by the email.

Figure 51: Delivry request informations



- If you want to edit your personal information or block your account click on Personal information on the left side in your profile page.

Figure 52: Personal information section

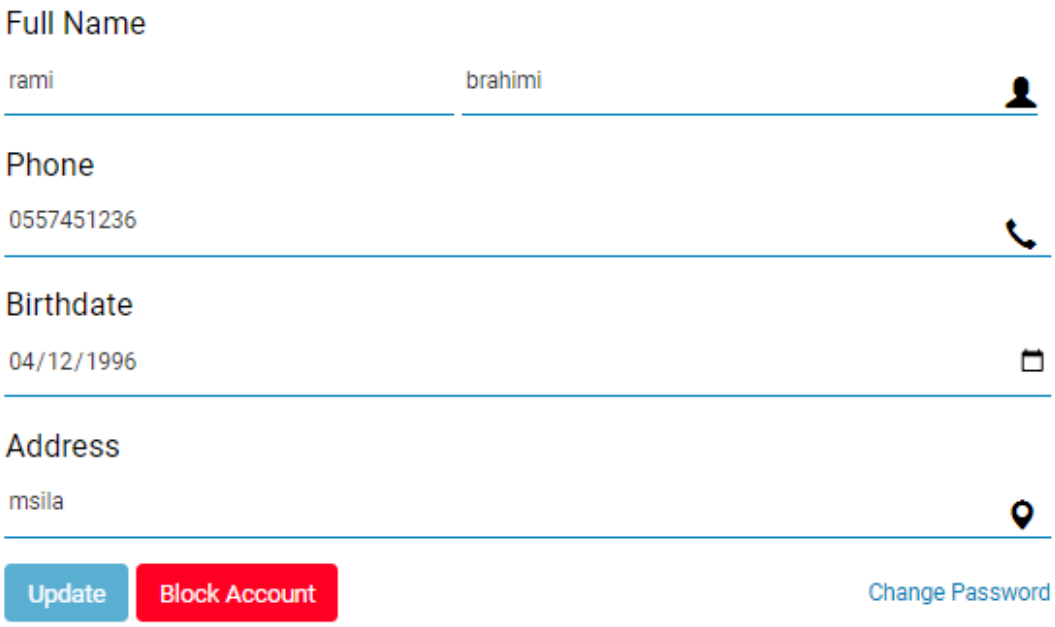
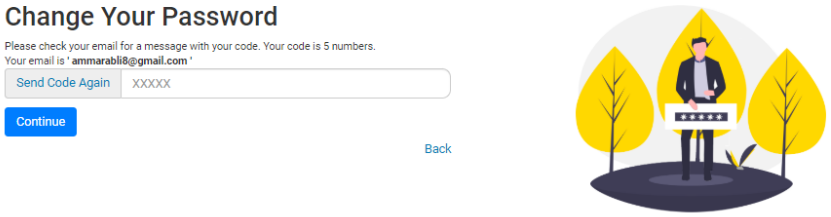


Figure 53: change password section

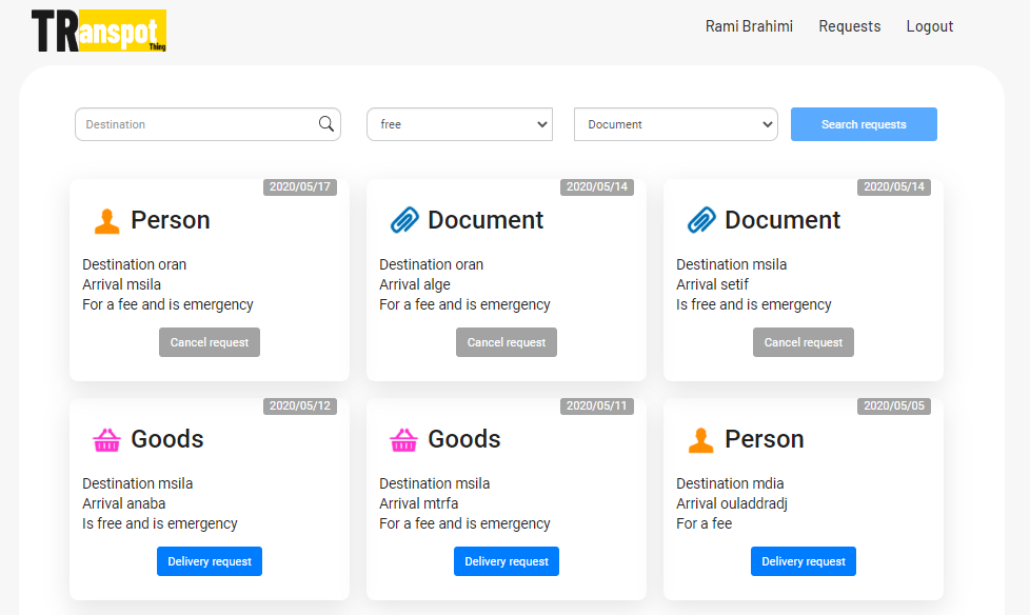


4.4.5 *Requests page*

If you want to see the requests of the members just click on Requests.

If you want to give a delivry to a member just click on Delivry request, you can also cancel it.

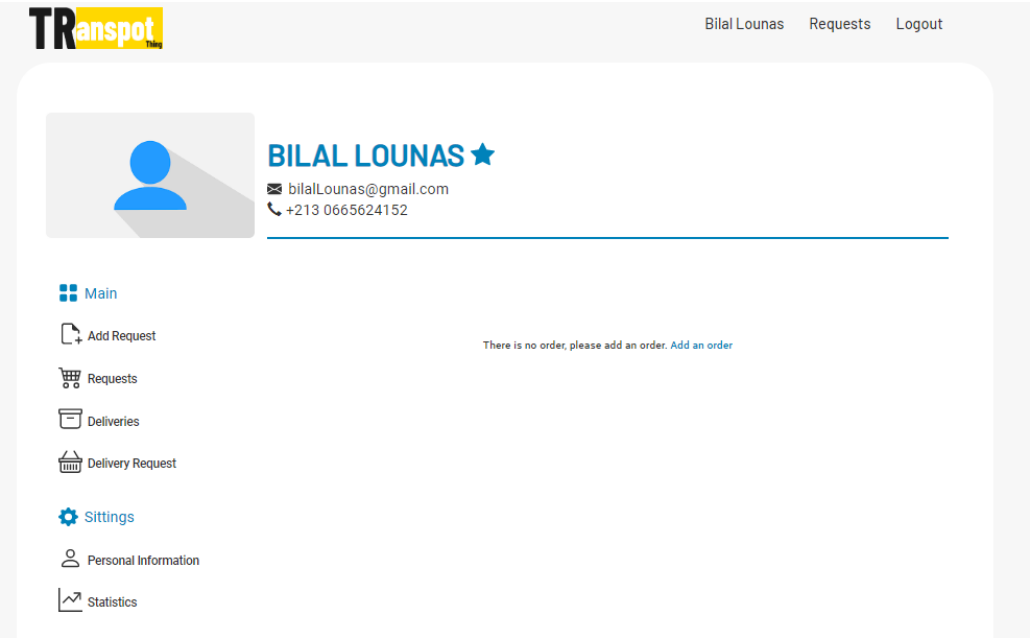
Figure 54: Members Requests page



4.4.6 *Admin dashboard*

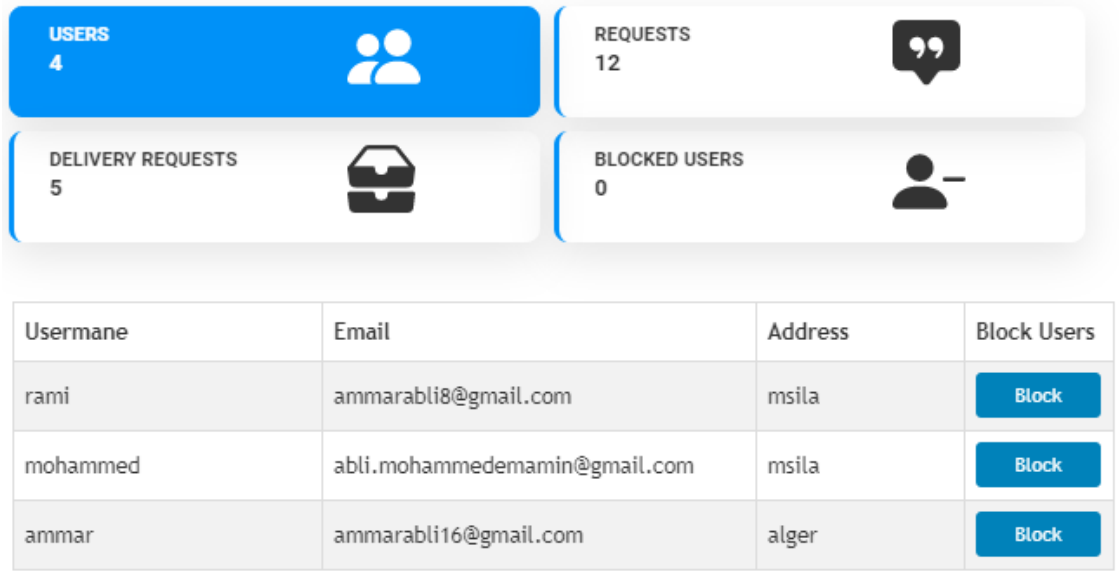
The admin dashboard has the same functions of the users but there is a functions special for him.

Figure 55: Admin dashboard



The admin can display the satatics of the website. He can block a user, deblock a user, delete a request and display the delivries requests.

Figure 56: statistics section



4.5 CONCLUSION

In this chapter, we followed a modeling process to develop our application, based on the UML language. We have presented the essential of our work by starting with introducing UML modeling and the principal diagrams for the website. Finally we presented a snapshots of the most important pages and sections of our website.

Part IV

GENERAL CONCLUSION

The last parts is the general conclusion and future work.

5

GENERAL CONCLUSION

5.1 GENERAL CONCLUSION

The work on the web application has increase, especially on the transportation applications because is one of the motivational and important areas. In our dissertation. we have introduced the application of transporting persons, goods, documents and other things.

In our dissertation. we have tried to develop a web application directed to every person who likes to give a service to others by give a transportation. in this application we tried to make the transporting for free between the users and to encourage the charity work and the collaborate between the society's people.

Improving performance to expand the features of transportation application is one of the things that we will be working on in the future which is considered a perspective, to attaint the maximum assistance for people. We hope in the future that the application can be expanded and made available to the developers for improve and add new features this application.

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ملخص

الهدف من هذا العمل هو تصميم وانجاز نظام يسهل عمليات نقل الأشياء من مكان إلى مكان آخر. قدمنا حلا متمثلا في تطوير تطبيق ويب لنقل الأشخاص ، البضائع وأشياء أخرى. من أجل تصميم هذا التطبيق اخترنا لغة النمذجة الموحدة UML وللتطوير والانجاز قمنا باختيار محيط البرمجة WampServer و Visual Studio Code، كلغة برمجة اخترنا HTML،CSS،PHP،AJAX.
الكلمات المفتاحية: نقل الاشخاص، نقل السلع ، تطبيق ويب، UML، عمل خيري.

Abstract

The objective of this work is to design and build a system that facilitates the transport of objects from one location to another. We proposed a solution that consists of developing an application for the transportation of people, goods and other objects.

To design this application, we chose the UML language and for the development and realization, we opted for the Visual Studio Code and WampServer, and as language HTML,CSS,PHP,AJAX.

Keywords: transport of people, transport of goods, web application, UML, charity.

Résumé

L’objectif de ce travail est de concevoir et de réaliser un système qui facilite le transport des objets d’un emplacement à un autre. Nous avons proposé une solution qui consiste à développer une application pour le transport des personnes, des marchandises et d’autres objets.

Pour concevoir cette application, nous avons choisit le langage UML et pour le développement et la réalisation, nous avons opté pour l’environnement Visual Studio Code et WampServer, et comme langage HTML, CSS, PHP, AJAX.

Mots clés: transport de personnes, transport des marchandises, application web, UML, charité.