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Project Report

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Emergency Ambulance Booking Website

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1 Introduction

Today's "Emergency Ambulance Booking System" is an important project. Today, ambulances play an important role when there is an accident on the road, when an emergency is needed, or when people feel the need to consult a licensed doctor to save their life. In an emergency, manually ordering an ambulance can waste valuable patient time because manually ordering an ambulance is a time-consuming process. In addition, due to severe traffic congestion between the place of care and the hospital, the risk of death for the victim can be increased. So we came up with a web System called "Emergency Ambulance Booking System".

1.1 Statement of the Project:

Our project is "Emergency Ambulance System". It is a Web-based system. We all know that; Software products can be generic or specific (personalized). Generic software developed to sell to various customers such as Microsoft Word, and Microsoft Excel. On the other hand, software developed for a client according to their specifications is called native software. Since we have launched it for some spec users like ambulance drivers and emergency ambulance users, so we can put our project as software custom.

1.2 Scope of the Work:

This "Emergency ambulance booking System" project has just been started. Today, this is a rigorous project and also a project without errors. In this system, we just create options like users can register, log in, and check which driver is available and can check hospital info on Wikipedia, and also get translation service from Google Maps. On the driver's side, he can view user requests, hospital lists and Google Maps. But many future updates are waiting for this project. Here we will add user ratings and digital payment options to make the transaction process even better.

1.3 Design Goals:

We discussed in this chapter (Chapter 1, Part 2: [1.1](#) - Project Summary and Part 3: Scope of Work) that this project is a preset and it is a bug-free project. It is also a demanding project. It helps to deliver the emergency ambulance and also makes it easy for the ambulance driver to receive the patient. But this is not the end. We've got a lot of updated ideas. Since this is a very popular System, we will engage our users by providing a wide range of services. If we add a payment option, rating option, and user distance calculator, it will be more popular.

1.4 Outline:

The title of our project is "Emergency Ambulance Booking System". In this System we have created features like user registration, user login, check ambulance driver list, view medical information, view google Maps, connect driver, display patient information display, etc. We all know that when a patient feels sick, we need an emergency ambulance service for better

treatment. That's why we launched this initiative. By using this System users will be able to get emergency ambulances and also get medical information quickly. The driver will also benefit as he will become patient with the digital system. We have many plans to update our Systems like digital payment options using mobile banking and debit or credit card payment. We also planned to set a rating option as users can choose their driver by rating first, then the user will benefit more.

2 Design

(a) Home Page

(b) Booking Page

Figure 1: Booking

In figure-1a and figure-1b we can see the prototype of our home page and booking system. On the home page, the user can book an ambulance but the user should log in. Users can also go to our booking page for booking. Here we add some blogs about hospitals. Here we will discuss details about our booking service and which type of hospital the user should choose. The header contains login and sign-up buttons. Users can click on the book now button for booking. There is a contact button in the footer if there is a problem.

The figure displays three registration pages for a system:

- (a) Registration page for user:** This page is for general users. It includes fields for First Name, Last Name, Phone Number, Address, and Password. It also features a checkbox for accepting terms and conditions and a "Sign Up" button.
- (b) Registration page for hospital authority:** This page is for hospital authorities. It includes fields for First Name, Last Name, Phone Number, Address, and Password. It also features a checkbox for accepting terms and conditions and a "Sign Up" button.
- (c) Registration page for driver:** This page is for drivers. It includes fields for First Name, Last Name, Phone Number, Address, Driving License, Ambulance Number, and Password. It also features a checkbox for accepting terms and conditions and a "Sign Up" button.

Figure 2: Registration Pages

In figure-2 We can see that there are three registration pages. Users or Drivers or hospitals can choose an option there. The system will take the first name, last name, phone number, address, and password of the user. Additional information for the driver system will require a driving license and ambulance number. For hospital system will take the hospital name. After clicking the sign-up button it will take the log-in page for log-in.

The figure displays three login pages for a system:

- (a) Login page for user:** This page is for general users. It includes fields for Phone/Email and Password. It also features a checkbox for accepting terms and conditions, a "Login" button, and a "Create Your Account" link.
- (b) Login page for hospital authority:** This page is for hospital authorities. It includes fields for Phone/Email and Password. It also features a checkbox for accepting terms and conditions, a "Login" button, and a "Create Your Account" link.
- (c) Login page for driver:** This page is for drivers. It includes fields for Phone/Email and Password. It also features a checkbox for accepting terms and conditions, a "Login" button, and a "Create Your Account" link.

Figure 3: Log In Pages

In figure-3 we can see that there are three login pages, the system will take the phone/email and password. After clicking the log-in page system will take the user or driver or hospital to their individual profile page.

(a) Profile page for user

(b) Profile page for hospital authority

(c) Profile page for driver

Figure 4: Profile Pages

In figure-4 we can see the individual prototype of the profile of users or hospitals or drivers. On their individual profile page, users or hospitals, or drivers can manage our many services among users can ‘Call Ambulance’, see their ‘Ride History’, manage their present ‘Address’, see their nearby ‘Hospitals’, and easily connect with known ambulances in ‘Saved Ambulance’, check their every ‘Transactions’. Otherside hospitals can manage their patients, and update their doctors seat availability also. see their nearby hospitals, and can see a list of known ambulances. Finally in the driver profile driver can see their ride history, update their addresses, save their favorite users, check their nearby Hospitals, also check their transactions. They all can edit their Profile change passwords also.

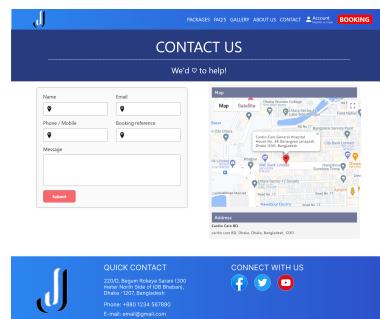


Figure 5: Contact page

In figure-5 the page provided the contact information to contact any kind of emergency help from the helpline.

Prototype Link: <https://xd.adobe.com/view/3c94e1d4-7848-4498-98c7-9a3b44148695-69c7/>

3 Literature Review

3.1 Introduction:

Our project’s title is “Emergency Ambulance Booking Software.” It’s web-based software. We are all aware that software packages might be generic or customized (custom). Generic software is designed to be offered to a wide range of users, such as Microsoft Word and

Microsoft Excel. Bespoke software, on the other hand, is designed for a particular customer according to their specifications. Because we launched it for specific users such as ambulance drivers and emergency ambulance users, we may classify our product as Bespoke software.

3.2 Why People Should Choose Our System:

All the ambulance booking systems in Bangladesh cannot provide emergency facilities like Uber and Pathao. This system will help to call the nearest available ambulance. Drivers will show their availability to the system, the system will show the user accordingly. From this website “sheba.xyz” we can see that this site is only dealing with user sites but we are integrating drivers and hospitals.

If you want to compare our website with other websites, our website has extra security, and users, drivers can contact each other. Users can easily find near the available ambulances.

3.3 Collection of Data from Uber And Pathao:

The choice to stagnate the transportation sector of 18 million people is ineffective in the face of 40,000 CNG auto-rickshaws and 40,000 trailers a day, where ride-sharing is transforming the transportation industry (Kamal, 2018; Sadat, 2018). Responding to local demand for economic dynamism warrants the expansion of email services (Kamal, 2018). This service is not a “silver bullet” to solve traffic congestion, but a “medium urban solution” to serve a large volume (Hassan, 2017). A global survey indicates that a personal car is only used for the owner’s consumption 4% of the time, with an average of 50 to 60 trips per month, while the rest of the time. again it is not used in the garage (Ahmed 2018). The carpooling market in Dhaka is estimated at 2,000,000 people and accounts for 23% of the market share of transport services in one year, signaling rapid expansion in Dhaka; Uber-Pathao contributed the most (Sadat, 2018). System-based ride-sharing services, primarily Uber and Pathao, are two game-changers transforming Dhaka city’s scheduled transportation sectors. Kamal and Ahsan (2018) have shown that the market currently operated by these services will flourish. More than 18 million people and a growth rate of 4.2% raise the worst living standards in Dhaka and according to a recent global report published on some news portals it turns out to be the second worst city to live in (<https://thefinancialexpress.com,2018>),

3.4 Effective Ambulance Service:

We are constantly seeing the usage of Uber and Pathao increasing day by day. In Dhaka’s traffic jam, it takes a long time for an ambulance to arrive from a distant hospital, which can be detrimental to the patient’s life. Our system will help the patient to call the nearest ambulance.

3.5 Global Positioning System(GPS):

The shortest path-based GPS for ambulance interprets the GPS as a grid of spacecraft, transmitting example information about the changing position of the device to and from the satellite to the planet, which is then captured by the satellites. Global Positioning System

transceivers, such as navigation objects, and used to estimate location, speed, and time at the location of service providers.

3.6 Conclusion:

It takes a lot of time for an ambulance to come from this congested city. Our system will try our best to reduce the time. Now, most of the people in the country have smartphones, so everyone can take maximum advantage of our system.

4 Objectives and Motivation

The “Emergency Ambulance Booking Software” is the title of our project. We have included functions in this software such as user registration, user log-in, ambulance driver list check, medical information view, a google map view, driver log-in, and patient information view, among others. Everyone knows that when a patient feels ill, we need an emergency ambulance service for better care. We have started this project because of that. A user of this software will be able to quickly get medical information and an emergency ambulance. Drivers will gain from the digital system as they learn to be patient. We have several plans to upgrade our software, including the ability to make digital payments using mobile banking and make payments using debit or credit cards. Additionally, we intend to include a rating option so that users can choose their drivers based on past ratings. This would benefit users more.

4.1 Motivation:

The human body is a natural machine. Machines tend to break down and sometimes need maintenance. Doctor at God’s side! They save lives in times of crisis. However, it can be difficult to get the System to operate medical care at the time of an emergency. Unfortunately, many people lost their lives due to not having an ambulance in time. Although basic and advanced needs like food, clothes, houses, etc everything is available online and in minimal time. But not a perfect System for ambulance service.

4.2 Objective:

The need of the hour is an ambulance service that is easily accessible and can provide the best possible assistance in an emergency with minimum time and cost. Don’t wait! This ambulance service system is a must-have on your smartphone so that you can save a life in one tap.

- The main objective of our system is to transport emergency patients to the nearest hospital anytime anywhere.
- This system will fill the gap between the user and the driver.
- Perform on-site para-clinical interventions for critically ill patients and transport them to the hospital in an emergency.

- There will be no confusion about cost.
- User can choose a high rating driver from our system.

5 Methodology

5.1 Introduction:

In the previous chapter 1, we discussed the project summary and the future scope of our project. We also discuss the design goals and at the end, we get a brief overview of our project. In this chapter 5, we will discuss the design methods, the architectural design that we Systemlied in this project, and the working processes - how this project works. We will discuss and describe the methodology and map of this project, how we pre-plan our project, and how we execute it.

5.2 Methodology of Emergency Ambulance Booking Website:

We map the project and note our project methodology. The methodology of the “Emergency Ambulance System” can be described as a sequence as it is a serial procedure and it is also done by fulfilling certain steps. If we show the Method sequence with a flowchart, we can execute the procedure. For a clear design, Use methods:

- HTML
- Bootstrap
- PHP
- CSS
- Login
- JavaScript
- Database connect

5.3 Architectural Design of Emergency Ambulance Booking website:

After Mind mapping, we have drawn an architectural design of our planned project which is given below for a clear conception of our project.

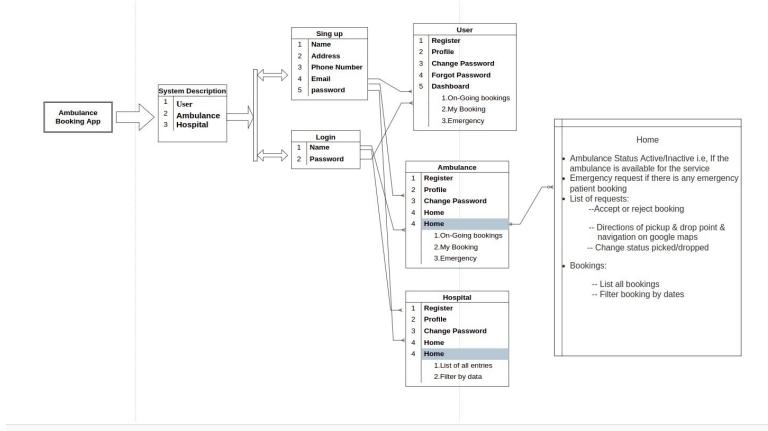


Figure 6: Architectural Design of Emergency Ambulance Booking website

5.4 Working Procedure of the Project:

In fact, our project is a System based on emergency ambulance booking. So here our main aim is to find the nearest ambulance driver and also to search for the best hospital according to our disease. That's why at first we created login pages like the user login page, and driver login pages and if they don't have an existing account because they can sign up we created a registration page and also store data in our database. The login page and registration page are just a form for a System, but our main job is to find the driver, final confirmed passenger information, and find medical information such as our illness, Which medical, and which doctor will be the best or not.

5.5 Summary:

In this chapter, we described the mind map of the “Emergency Ambulance Booking System” project, what knowledge we used here to create it, and methodology of this project, and how we designed the total work and implementation of the complete project. This chapter is the focus of this project report. If someone reads this chapter and tries to realize our methodology, people can understand the main topic and can have a clear concept about this project, what is the main goal of our project, how we are implementing our features, what are the future plans and how we satisfy our users by providing services and how we recognize the seriousness of our patients and how we treatment by managing the ambulance in the digital system.

6 Performance Evaluation

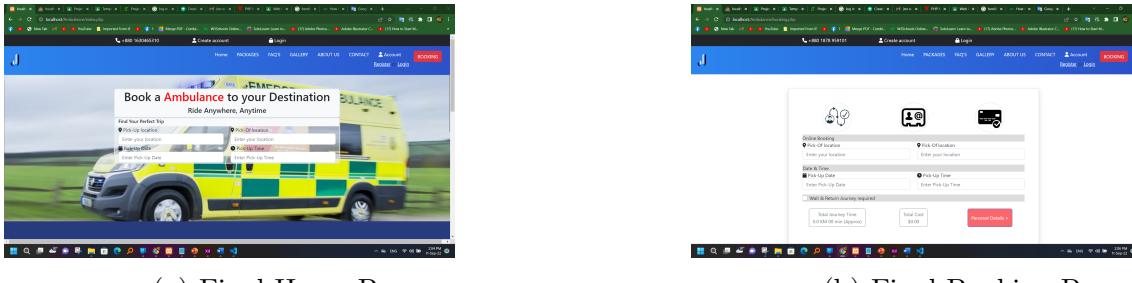
6.1 Introduction:

In this section, we will discuss the simulation procedure and final result.

6.2 Simulation Procedure

In this part (Chapter-[6.2](#)), We will simulate this project using xampp. Xampp is a database handling system. XAMPP is the most popular software package that provides all the necessary software components used to set up a PHP development environment for web services. In a software implementation, most web servers use almost the same type of components. Therefore, conversion from localhost to live server is easy using XAMPP. XAMPP is an AMP stack, which means cross-platform, Perl with some additional admin software tools like Apache, MySQL, PHP, PHPMyAdmin (for database access), FileZilla FTP Server, Server Mercury Mail, and Tomcat JSP Server.

Other software packages known as XAMPP are WAMP, LAMP, and others. XAMPP server is used to test PHP pages. It works as a local server. It has a MySQL database to manage or store data on the local server.



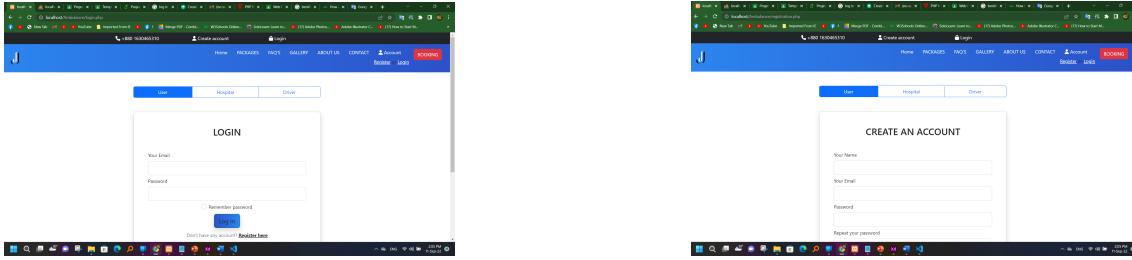
(a) Final-Home Page

(b) Final-Booking Page

Figure 7: Final-Home & Booking Page

6.3 Result:

In figure-7a & figure-7b these two pages are our home page where users can book an ambulance and we add an extra booking option. where the user can also calculate the total cost. For total costing, I am using JavaScript.



(a) Final-Log In Page

(b) Final-Registration Page

Figure 8: Final-LogIn & Creating Account Page

For the login and registration page, Here uses PHP and xampp databases for checking and storing registration data

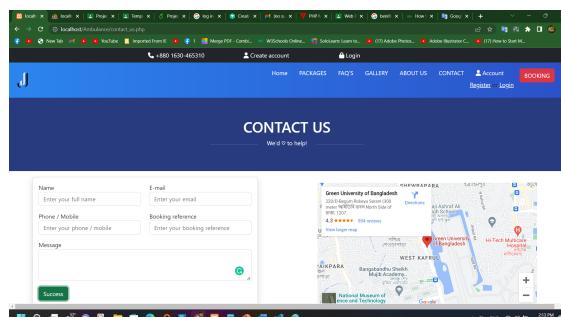


Figure 9: Final-Contact US

Here is the contact page.

6.4 Summary:

This chapter (chapter 6) is used to evaluate our project. In this chapter, we checked all the parts of the project and finally decided that our project is working perfectly and here we have no problem. All features are correct in our project.

7 Conclusion

7.1 Introduction:

This project is an “emergency ambulance booking System”. So from the title of the project, it is clear to everyone that this is a web-based project. Here, we not only create an ambulance booking system but also maintain a strong connection between the driver and the user.

7.2 Concluding Remarks:

In this project, since we have completed our project without any errors and in Performance Review (Chapter ??), we have tested our System and project performance and then I found that our project is working perfectly. So we can say that our project is perfect.

7.3 Practical Implementation:

In this project, we see that our project is an emergency ambulance booking System. By using this System we can check hospital information, we can book ambulances, and also we can check driver information. So this project is very practical and very important these days.

7.4 Future Plan of the Work:

Our project is the “Urgent Ambulance website” and in Chapter 6, we evaluated our project and confirmed that our project was completely error-free and in perfect working order. No problem, but if we update some features like the digital payment section and driver review, then this project will be more efficient.

7.5 Summary of the Project:

This project is an “emergency ambulance booking System” and here the user can log in, register and check the driver list and also order an ambulance. Users can also view hospital information through this System and drivers also get rides in a digital system so using this System benefits. Some needed updates in this System like the user reviews section, digital payment section, etc. We have discussed these options and have decided that in a future update we will add these features.

8 References

References

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