# HIRE A HELPER: A WEB APPLICATION BASED ON ONLINE SERVICE SOLUTION

 $\mathbf{BY}$ 

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Master of Science in Computer Science and Engineering

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# DAFFODIL INTERNATIONAL UNIVERSITY DHAKA, BANGLADESH JANUARY 2022

#### **APPROVAL**

This Project/internship titled "HIRE A HELPER: A WEB APPLICATION BASED ON ONLINE SERVICE SOLUTION", submitted by H. M. Nasim, ID No: 211-25-929 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of M.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on January 22, 2022.

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We hereby declare that this project has been done by us under the supervision of **Gazi Zahirul Islam, Assistant Professor, Department of CSE,** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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Finally, I must acknowledge with due respect the constant support and patients of our parents.

#### **ABSTRACT**

Each country on the planet is at the highest point of advancement where online administrations assume an extraordinary part. Bangladesh is no exemption. In this country, different exercises are done through internet-based administrations. My undertaking (Hire an assistant) can bring another aspect. Enlist a partner is a Web-based assistance arrangement that will convey administrations to your doorstep. My task is an online stage that permits talented and experienced proficient laborers to associate with clients searching for a particular help. This web application is for improves on our ordinary issues which I experience in day-to-day existence. Everyone realizes how elusive help laborers outside in a neighborhood I are constantly irritated with obscure valuing for administration work and administration items. Here, the proposed project is for clients who should be trusted, proficient adjusting laborers for their home or office or industry issues, a deliberate dependable overhauling framework, and simple to book online from home. This stage will assist clients with booking solid home administrations like apparatus fix, cleaning, electrical, plumbing, carpentry, spring administration, bug control, painting and so forth This stage is additionally for instructed, gifted, and prepared help laborers for bettercoordinated ways of taking care of their business. This stage can be a full-time or low maintenance work area for proficient specialists and associations. Our vision is to engage administration experts across our nation to convey benefits at home.

# TABLE OF CONTENTS

| CONTENTS  | PAGE |
|---|------|
| Approval  | i    |
| Declaration                                     | ii   |
| Acknowledgments                                 | iii  |
| Abstract  | iv   |
| List of Figures                                 | vii  |
| List of Tables                                  | viii |
| CHAPTER   |      |
| CHAPTER 1: Introduction                         | 1-3  |
| 1.1 Introduction                                | 1    |
| 1.2 Motivation                                  | 2    |
| 1.3 Objectives                                  | 2    |
| 1.4 Expected Outcome                            | 2    |
| 1.5 Report Layout                               | 3    |
| CHAPTER 2: BACKGROUND                           | 4-6  |
| 2.1 Introduction (Preliminaries/ Terminologies) | 4    |

|   | 2.2 Related Works                               | 4     |
|---|---|-------|
|   | 2.3 Comparative Studies                         | 4     |
|   | 2.4 Scope of the Problem                        | 5     |
|   | 2.5 Challenges                                  | 6     |
|   | CHAPTER 3: REQUIREMENT SPECIFICATION            | 7-15  |
|   | 3.1 Business Process Modeling                   | 7     |
|   | 3.2 Requirement Collection and Analysis         | 8     |
|   | 3.3 Use Case Modeling and Description           | 9-11  |
|   | 3.4 Activity Diagram                            | 12-13 |
|   | 3.5 E-R Diagram                                 | 14    |
|   | 3.6 Design Requirement                          | 15    |
|   | CHAPTER 4: DESIGN SPECIFICATION                 | 16-22 |
|   | 4.1 Front-end Design                            | 16-20 |
|   | 4.2 Back-end Design                             | 21    |
|   | 4.3 Interaction Design and User Experience (UX) | 21    |
|   | 4.3 Implementation and Requirements             | 22    |
|   | CHAPTER 5: IMPLEMENTING AND TESTING             | 23-28 |
|   | 5.1 Implementation of Database                  | 23    |
|   | 5.2 Implementation of Front-end Design          | 24-25 |
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| 5.3 Implementation of Interactions     | 26    |
|--|-------|
| 5.4 Testing Implementation             | 27    |
| 5.5 Test Results and Reports           | 28    |
| CHAPTER 6: Conclusion and Future Scope | 29    |
| 6.1 Discussion and Conclusion          | 29    |
| 6.2 Scope for Further Developments     | 29    |
| REFERENCES                             | 30-31 |

# LIST OF FIGURES

| FIGURES  | PAGE NO |
|--|---------|
| Figure 3.1: Business Process Modeling of Hire a Helper   | 6       |
| Figure 3.2: Use Case Model of Hire a Helper              | 8       |
| Figure 3.3: Activity Diagram of User from Hire a Helper  | 11      |
| Figure 3.4: Activity Diagram of Admin from Hire a Helper | 12      |
| Figure 3.5: E-R Diagram of Hire a Helper                 | 13      |
| Figure 4.1: Homepage                                     | 15      |
| Figure 4.2: About  | 15      |
| Figure 4.3: Service                                      | 16      |
| Figure 4.4: Contact                                      | 16      |
| Figure 4.5: Admin Panel                                  | 17      |
| Figure 4.6: Booking Info                                 | 17-18   |
| Figure 4.7: Service Provider Registration                | 18-19   |
| Figure 4.8: Backend Database                             | 19      |
| Figure 5.1: Database Implementation                      | 21      |
| Figure 5.2: Homepage of "Hire a Helper"                  | 22      |
| Figure 5.3: Services page of "Hire a Helper".            | 22      |
| Figure 5.4: Admin Control of "Hire a Helper"             | 23      |
| Figure 5.5: Search of "Hire a Helper"                    | 24      |
| Figure 5.6: Our team page of "Hire a Helper"             | 25      |
| Figure 5.7: Composer for running system                  | 26      |

# LIST OF TABLES

| TABLES                   | PAGE NO |
|--------------------------|---------|
| Table 1: Login Test Case | 26      |

#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1 Introduction

Where there is web in everybody's grasp there should be house to house administration. The course of activity can't be left behind when the world is pushing ahead at its own speed. Although Bangladesh is slacking, there is a ton of progress in internet-based administrations today. Online Service Solution Hire a Helper has concocted an internet-based web application that has never been done before in Bangladesh. Which will take care of the issue of Bangladesh will likewise take care of the everyday issues at home.

Where a brilliant gadget can undoubtedly take care of every one of its concerns through internet based Hire a Helper can be perhaps the best application. You can get administration of different issues from any gadgets issue comfortable. Employ a Helper is quite possibly the most confided in platform. Gifted working however joblessness will end this day at the hint of administration pickers. Gifted specialists will get a legitimate assessment of work and clients will get appropriate and die-hard faithfulness.

#### 1.2 Motivation

In staying up with trend setting innovation, Bangladesh is trapped in a low position where most of the nations of the world are created. On the off chance that the issue of inferior quality work and joblessness can be dispensed with, the streets of created nations can be cleared.

On a normal life premise fixing and overhauling laborers finding is an issue in our nation and furthermore to get effective specialist is troublesome.

- In any pandemic circumstance, a home help framework is the main most ideal method for getting alleviation.
- To make an optimal stage for the talented jobless specialists.
- By utilizing this application will assist with disposing of the syndication business of the neighborhood.

#### 1.3 Objectives

- To offer types of assistance in districts awful circumstance like pandemic with security
- To offer home types of assistance as quickly as time permits at the doorstep.
- To accumulate talented, accomplished, and proficient laborers the nation over.
- To make a full-time or low maintenance workplace for laborers.
- To give and sell fix gear or products with a guaranteed strategy.

#### 1.4 Expected Outcome

- To make a confided in stage that can offer types of assistance with security
- The experts will want to secure positions as indicated by their specialties and art and make contact straight by the application.
- With this application, clients will get dependable administrations at a reasonable cost.

#### 1.5 Report Layout

I developed the web Application-based system which name is "Hire a helper".I tried to make sure that the project has completed in time.

In chapter 2, a brief discussion on related works that are already implemented. And I made a comparison with all those existing works. I have sorted out the issue of the current framework and attempted to settle it. What sort of difficulties I have looked for in finishing this venture likewise examined in this section?

In chapter 3 is named Requirement Specification where i focused on business process modeling, requirement collection, and analysis, use case modeling and descriptions, logical data model, design requirements.

In chapter 4 named Design Specification, i have tried to show the front-end design, back-end design, and Interaction design, and UX. As Ill as I listed the component that I used to build the system.

In chapter 5 is named Implementation and testing where i discuss the Implementation of Database, Implementation of Front-end Design, Testing Implementation, Test Result, and Reports.

In chapter 6 I have discussed the present condition and future scope of our project. Also,I have tried to cover the whole things that I have done in our project is referred to as conclusion.

#### **CHAPTER 2**

#### **BACKGROUND**

#### 2.1 Introduction

For fostering a framework, need to cover some underlying examinations. It assists with exploring a framework's experience data. Likewise, it assists with finding the shortcoming of this framework so essential advances can be taken here to work on the venture by adding and refreshing new highlights.

My principal objective of this task to serve client with their ideal assistance with next to no issue. I fostered this venture for commoners when they need to administrations inside a brief time frame.

On the off chance that individuals get the arrangement at a time by this it will be exceptionally useful for them. Thus, individuals will presently get intrigued to utilize this framework.

#### 2.2 Related works

There are some connected works is accessible right now yet nobody is comparative. A significant number of the frameworks have a few restrictions. A significant number of the frameworks depend on the. From the investigation of this comparative venture, I got intrigued to foster our framework. A portion of the connected frameworks of our venture are referenced beneath [9].

#### 2.3 Comparative Studies

The web is critical in our new mechanical time. There are no such things as things that come out unbounded, yet I focused on doing all that could be expected for what I had. Our essential objective was to sort out what client needs. They are the framework's enormous populace, and they have the right to receive the best in return. Both client and associations benefit from utilizing this strategy. Numerous clients face issues, for example, not getting administrations on schedule. To resolve this issue, I made a framework that builds client ©Daffodil International University

benefits by giving predictable and opportune access. Subsequently, I need to have a structure that would be exceptionally valuable to them. The framework will give the best outcomes while yet saving them time.

#### 2.4 Scope of the Problem

As I said, client face a few troubles with administrations. My current framework isn't as the prerequisite is going. Along these lines, I can restate some issue here:

- ➤ There is some manual framework to the framework, however this is completely online based.
- The individuals are not completely trusted on the internet-based framework, so they won't get appropriate advantage from this framework.

As indicated by these issues, our framework offers arrangements that will help clients. Clients can undoubtedly get to the framework whenever and anyplace. This framework is exceptionally basic and easy to understand and above all there is no protection issue.

For Customers helps,

- There is a huge collection of services
- The smart way of taking services
- Find services
- Reduce cost

For Organizations helps,

- No need for an assistant for advertisement
- Easily entry organization details

# 2.5 Challenges

Each work has a few difficulties. Thus, I need to confront few difficulties as well.

- > There is no SMS office in this framework.
- > Entryway isn't SEO-accommodating.
- > The Review page as of now not dynamic.
- > New client enlistment email check not Available.

# **CHAPTER 3**

# REQUIREMENT SPECIFICATION

# **3.1 Business Process Modeling**

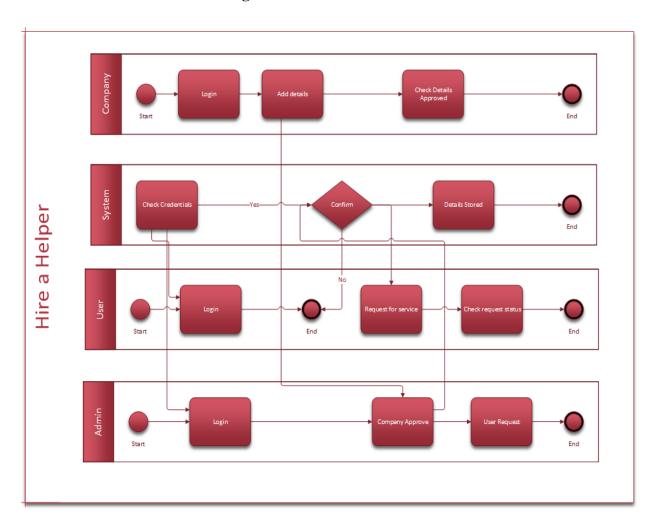


Figure 3.1: Business Process Modeling of Hire a Helper

3.2 Requirement Collection and Analysis

Prerequisite assortment and investigation are a critical piece of any undertaking. Without

investigation, gathering data, or extraordinary organizing, an undertaking will not at any

point finish true to form. Right when I am constructing project, a conveyance season of the

undertaking has effectively been given. That is the explanation project work ought to be

organized and executed to the cutoff time. My venture is an electronic assistance

application. Investigation and prerequisite assortment were enormous test when I begin

pondering this venture. I each comparable work for making my task not quite the same as

those works.

**Software Requirements:** 

• Visual Studio IDE

• Database: MySQL

• Figma

Composer

**Programming Requirements:** 

• Front end: HTML, CSS, BOOTSTRAP, JAVASCRIPT

8

• Back end: PHP, LARAVEL

• Database: MySQL

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#### 3.3 Use Case Modeling and Description

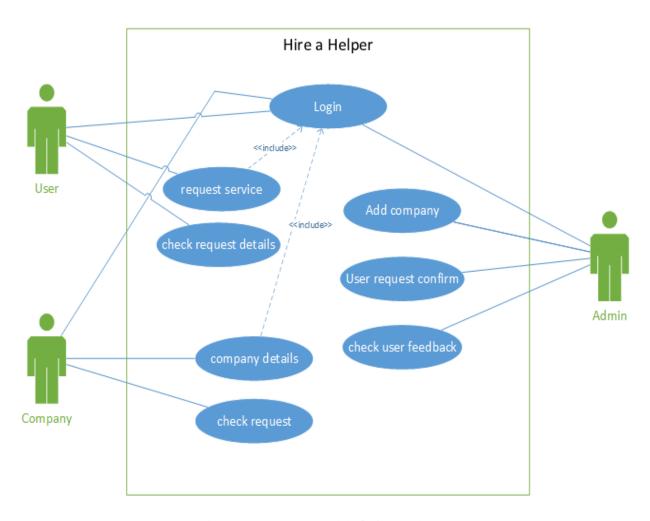


Figure 3.2: Use Case Model of Hire a Helper

Use case 1: Login
Actor: Admin, User

**Precondition:** No precondition is required

#### **Success Scenario:**

- 1. Actor enters his or her email in the email box.
- 2. Actor enters Password in the password box.
- 3.Actor enters his or her credentials by pressing the login button.

#### **Exception Scenario:**

- 1. The password is incorrect.
- 2. There is no password.

Use case 2: Find service

**Actor:** User

Precondition: No precondition is required

**Success Scenario:** 

- 1.Actor search service
- 2.Actor views service

#### **Exception Scenario:**

1. Service's list can't be empty

Use case 3: Check Request

**Actor:** User

**Precondition:** Service must be taken

#### **Success Scenario:**

1. Actor can see the request status

#### **Exception Scenario:**

1. Request cannot be empty

Use case 4: Do service Request

Actor: User

**Precondition:** No precondition is required

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#### **Main Success Scenario:**

- 1. Actor views services
- 2. Actor selects a service
- 3. Actor request for service

#### **Exception Scenario:**

1. Service can't be empty

**Use case 5:** Add Company

**Actor:** Admin

**Precondition:** Actor has just logged in

**Main Success Scenario:** 

- 1. Actor check provided company details
- 2. Actors add company

#### **Exception Scenario:**

1. Company details can't be empty

Use case 6: Check Requests

**Actor:** Admin

**Precondition:** Actor has just logged in

#### **Main Success Scenario:**

1. Actor can check all requests list

#### **Exception Scenario:**

1. Requests can't be empty

#### 3.4 Activity Diagram

Activity diagrams are graphical representations of workflows of step wise activities and actions with support for choice, iteration, and concurrency. Although activity diagrams primarily show the overall flow of control, they can also include elements showing the flow of data between activities through one or more data stores.[1]

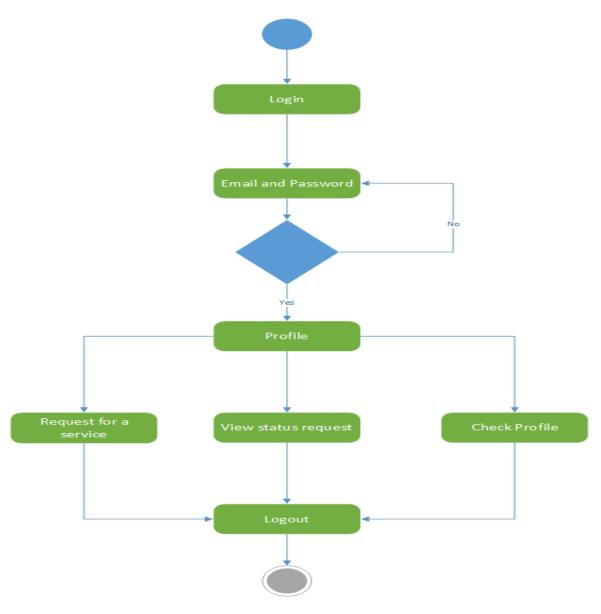


Figure 3.3: Activity Diagram of User from Hire a Helper

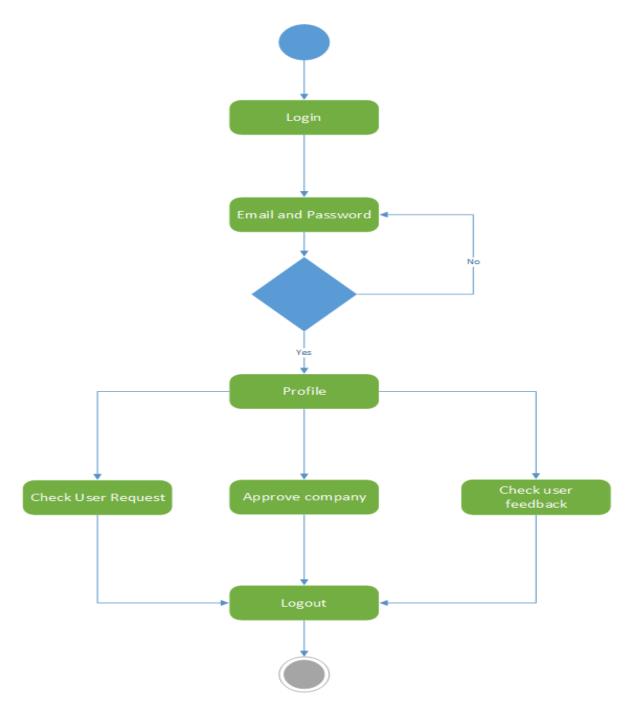


Figure 3.4: Activity Diagram of Admin from Hire a Helper

#### 3.5 E-R Diagram

ER-modeling is a software engineering data modeling methodology for creating a computational data model of an information structure. Entity-Relationship Diagrams are diagrams generated using this ER-modeling methodology. As a result, Entity Relationship Diagrams are used to depict the logical form of databases.

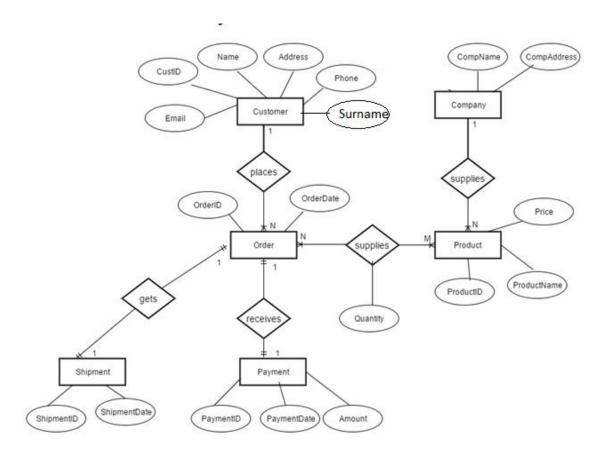


Figure 3.6: E-R Diagram of Hire a Helper

#### 3.6 Design Requirements

At the point when I plan programming or design a system, I consider a few prerequisites to make the task proficient. I have tried to build a user-friendly application. My systems user interface is very simple that everyone can use it without facing any problem. For better knowing, I have drawn a business process model, use case diagram, activity diagram. I have used MySQL for storing our data in the database. For application UI design I have used HTML, CSS, BOOTSTRAP.

#### **CHAPTER 4**

# **DESIGN SPECIFICATION**

#### 4.1 Front-end Design

Front-end configuration is significant for an application because it attracted the user. So,I focus on front-end design. I built an android application, for better user service.

Here some front-end design of our system:

#### 4.1 Homepage

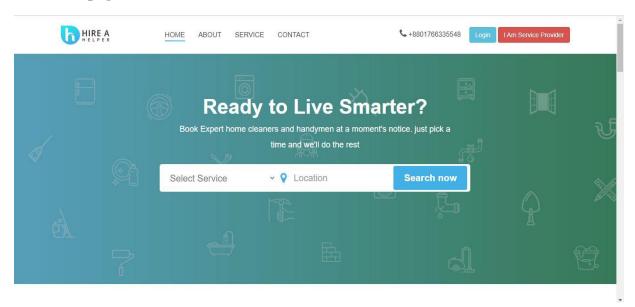


Figure 4.1: Homepage

#### 4.2 About

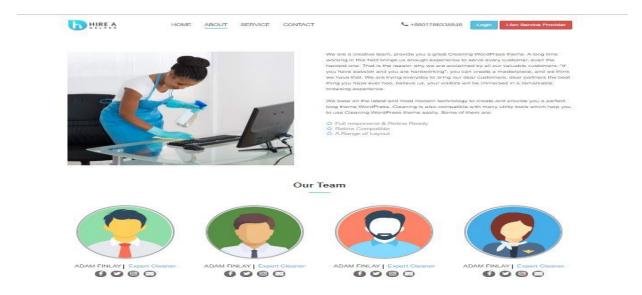


Figure 4.1.2: About

# 4.3 Service

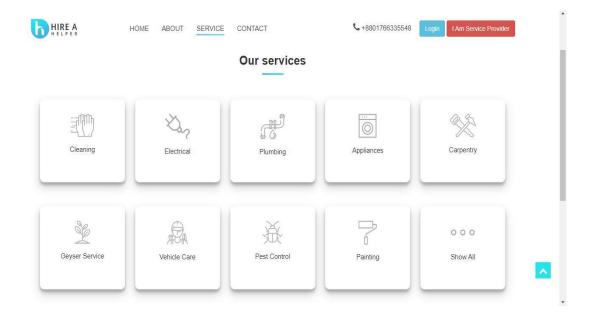


Figure 4.1.3: Services

#### **4.4 Contact**

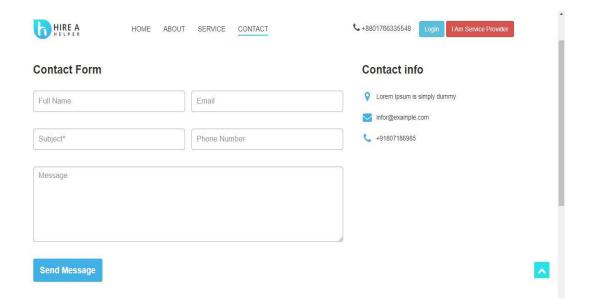
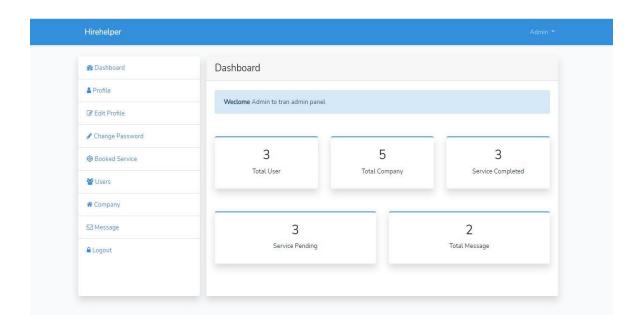


Figure 4.4: Contact

#### 4.5 Admin Panel



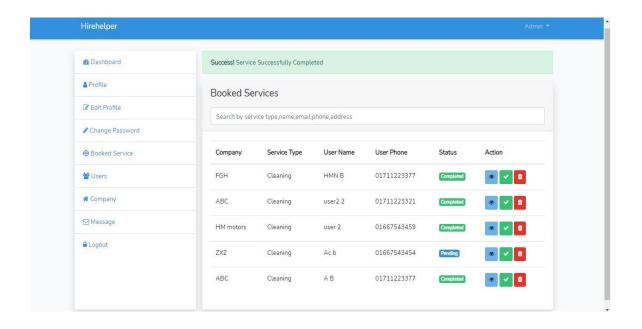


Figure 4.5: Admin Panel

# 4.6 Service Provider Registration

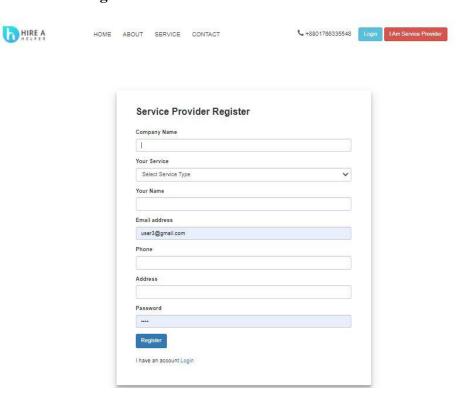


Figure 4.6: Service Provider Registration

# 4.7 Booking Info

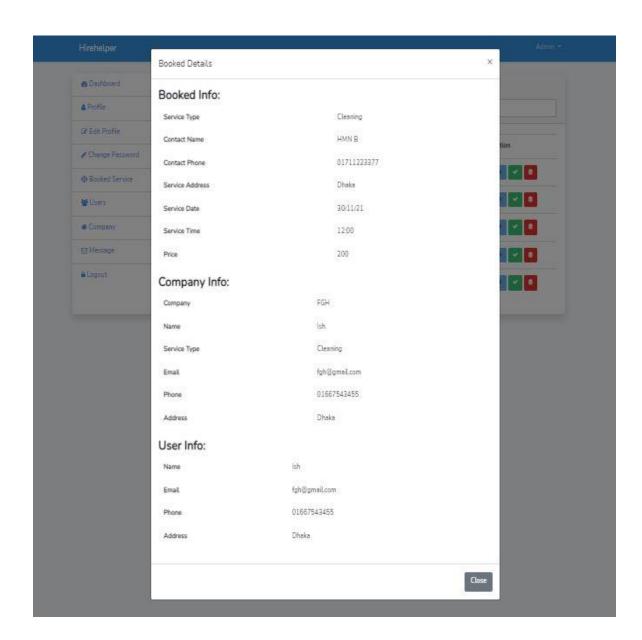


Figure 4.7: Booking Info

#### 4.2 Back-end Design

The back end is normally designed in three parts. A server, an application, and a database. User input the data that needed the application stores it in a database that was created on aserver. I use MySQL [6] to handle my system's back end.

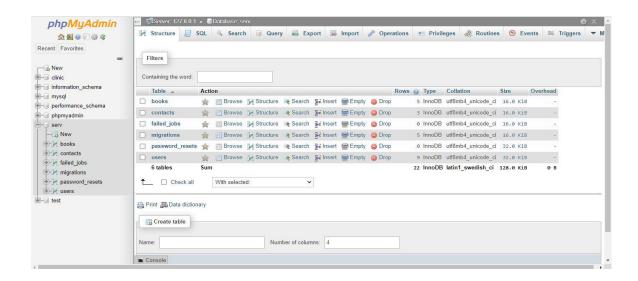


Figure 4.8: Backend Database

#### **4.3** Interaction Design and User Experience (UX)

The discipline of designing interactive software objects, environments, processes, and facilities is known as interaction design, or ID. Beyond the digital realm, interface designshould be applied to tangible (non-digital) products to see how users communicate with them. Design, human-computer interaction, and app development are also common subjects in interaction design. Though interaction design is interested in structure (as are other design fields), it is primarily concerned with behavior. The method by which design teams build goods that provide consumers with positive and appropriate interactions is known as user experience (UX) design. This includes elements of branding, architecture, usability, and operation, as Ill as the whole process of purchasing and implementing the product[3].

#### **4.4 Implementation Requirements**

The aim is to make it simpler, more useful, and more user-friendly. I had a great idea forthe deployment criterion. The list of implementation requirement is given below:

- Easy to create
- Easy to interact
- Easy to use
- User-friendly
- Dynamic pages
- Easy to manage

#### **CHAPTER 5**

#### IMPLEMENTATION AND TESTING

#### **5.1 Implementation of Database**

MySQL is a relational database management system based on SQL – Structured Query Language. The application is used for a wide range of purposes, including data warehousing, e-commerce, and logging applications.

The most common use for MySQL, however, is for the purpose of a web database. It can be used to store anything from a single record of information to an entire inventory of available products for an online store.

In association with a scripting language such as PHP or Perl (both offered on our hosting accounts) it is possible to create websites which will interact in real-time with a MySQL database to rapidly display categorized and searchable information to a website user [4].

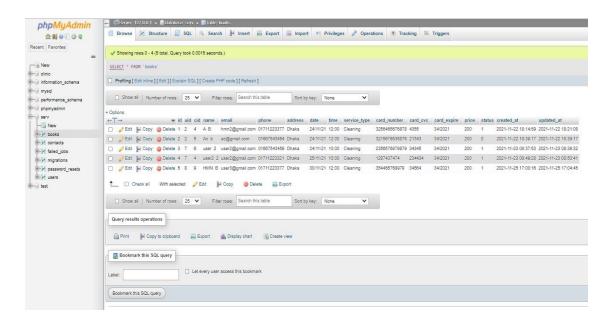


Figure 5.1: Database Implementation

#### 5.2 Implementation of Front-end Design

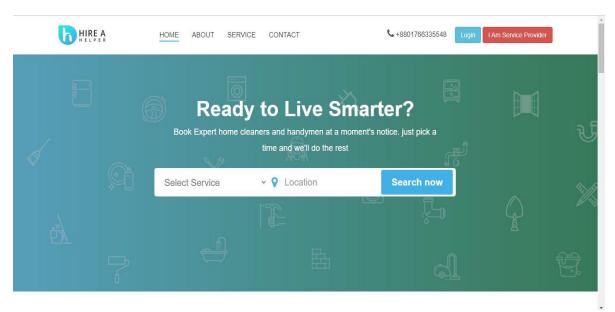


Figure 5.2: Homepage of "Hire a Helper"

This is the homepage of "Hire a Helper". Users can simply understand the whole system here.

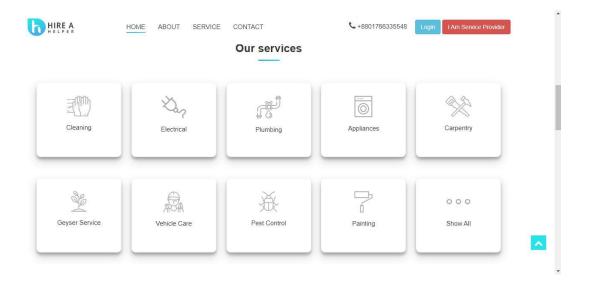


Figure 5.3: Services page of "Hire a Helper".

This is the service page of "Hire a Helper". User can choose their preferable services from here and can-do request for that service.

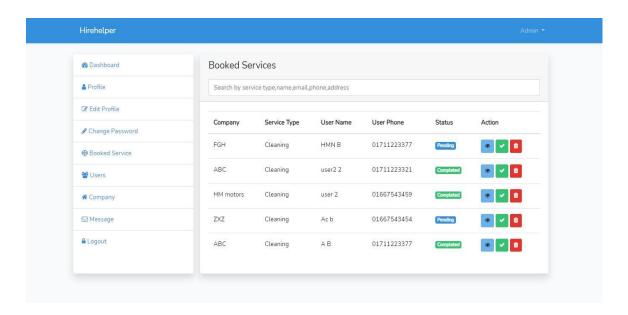


Figure 5.4: Admin Control of "Hire a Helper"

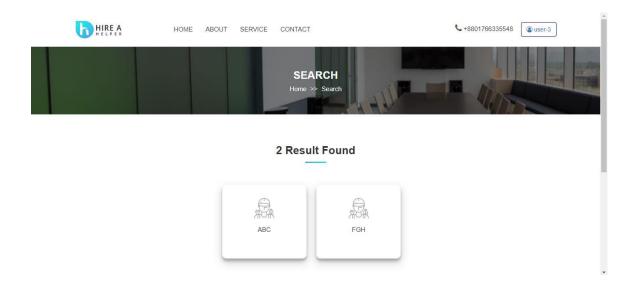


Figure 5.5: Search of "Hire a Helper"

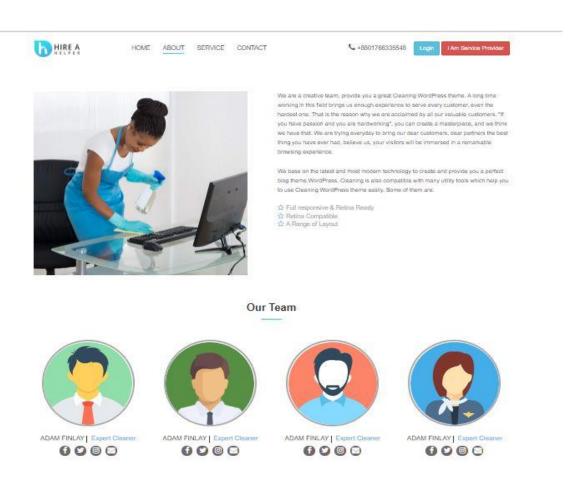


Figure 5.6: Our team page of "Hire a Helper"

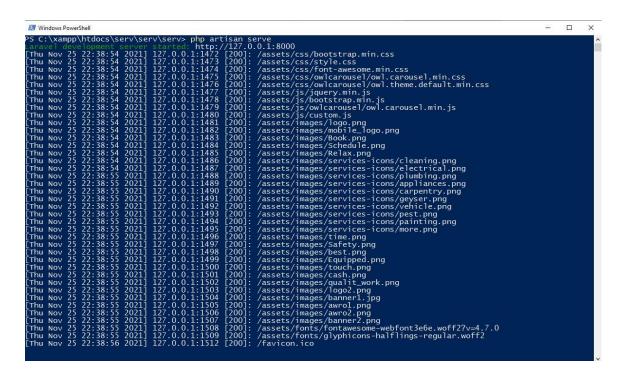


Figure 5.7: Composer for running system

#### **5.3 Implementation of Interactions**

In the current structure, interactions are the rule. Making a method dynamic and pleasing to the customer is critical. Furthermore, it is important to make a device user-friendly. I tried to make something easy to use and understand. I tried our hardest to make this in such a manner that it would be appealing to the customer [2].

#### **5.4 Testing Implementation**

The purpose of this test to evaluate is our system working properly with the specified requirement or not. Every single piece of data that a user inputs on our system must pass the test. There are three types of testing. The types are Unit tests, Integration tests, and UI tests [5]. Unit tests each handles a small piece of your business logic. Integrationtests usually focus on the UI/UX of one screen at a time. UI Tests pro grammatically locate and interact with UI elements in-app in a thread-safe way.

# **5.5 Test Result and Report**

Table1: Login Test Case

| Serial No. | Test Case      | Input               | Expected Outcome                                | Result |
|------------|----------------|---------------------|---|--------|
| 1          | Email check    | Invalid email       | I just must match with the database             | Passed |
| 2          | Email check    | Valid email         | Id matched with the database                    | Passed |
| 3          | Password check | Invalid<br>password | Password must<br>have to match<br>with database | Passed |
| 4          | Password check | Valid Password      | Password matched with the database              | Passed |

#### **CHAPTER 6**

#### CONCLUSION AND FUTURE SCOPE

#### **6.1 Discussion and Conclusion**

In this proposed work, I endeavor to make a framework that assists typical with peopling around us and make their life more straightforward. This current task's primary intention is to offer types of assistance in each circumstance like pandemic circumstance and an advanced protected and confided in home specialist co-op in our country. as of now, I can see our nation becoming computerized step by step. Everybody utilizes brilliant gadgets in this way, I have executed an easy-to-use plan that everybody can work without any problem. I figure it will make the country one stride further in the computerized period.

#### **6.2 Scope of Further Development**

Later, there are different ways I can refresh this proposed project. I accept this undertaking can help the nation over and a chance for jobless laborers in this country. Later, I trust I can begin this stage in different nations.

In future I have plan to add more Advance features like

- > SMS Alert
- Email Alert
- Upload Receipts
- Chatting Service

and will update our user interface to make it nicer.

#### Reference

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# HIRE A HELPER: A WEB APPLICATION BASED ON ONLINE SERVICE SOLUTION

| ORGINALITY REPORT                       |                         |                    |                |                |
|---|-------------------------|--------------------|----------------|----------------|
| 25%<br>SIMILARITY INDEX                 | 19%<br>INTERNET SOURCES | 4%<br>PUBLICATIONS | 23%<br>STUDENT |                |
| PRIMARY SOURCES                         |                         |                    |                |                |
| Submitt<br>Student Pape                 | ed to Daffodil Ir       | nternational Ur    | niversity      | 11%            |
| 2 Submitt<br>Universi                   |                         | ves National       |                | 4%             |
| dspace.                                 | daffodilvarsity.e       | du.bd:8080         |                | 3 <sub>%</sub> |
| 4 Submitt<br>Student Pape               | ed to Griffth Un        | iversity           |                | 2%             |
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| 6 Submitt<br>Student Paper              | ed to The Britisl       | n College          |                | 2%             |
| 7 Submitt<br>Student Paper              | ed to Computer          | College            |                | 1%             |
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