

MARRAIEGE: A WEB APP FOR ONLINE MARRIAGE REGISTRATION

BY

KHALILULLAH MUHAMMAD IBRAHIM

ID: 151-15-5149

AND

MD. NOOR ALAM

ID: 151-15-5056

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

Supervised By

Abdus Sattar

Senior Lecturer

Department of CSE

Daffodil International University

Co-Supervised By

Muhammad Muhaiminul Islam

Lecturer

Department of CSE

Daffodil International University



DAFFODIL INTERNATIONAL UNIVERSITY

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APPROVAL

This Project titled “**MARRIAGE**”: A Web App for Online Marriage Registration”, submitted by Khalilullah Muhammad Ibrahim, Md. Noor Alam 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 B.Sc. in Computer Science and Engineering (BSc) and approved as to its style and contents. The presentation has been held on 10th December, 2018.

BOARD OF EXAMINERS

Dr. Syed Akhter Hossain
Professor and Head

Department of CSE
Faculty of Science & Information Technology
Daffodil International University

Chairman

Dr. Sheak Rashed Haider Noori
Associate Professor and Associate Head

Department of CSE
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner

Md. Zahid Hasan
Assistant Professor

Department of CSE
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner

Dr. Mohammad Shorif Uddin
Professor

Department of CSE
Jahangirnagar University

External Examiner

DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Abdus Sattar, Senior Lecturer, 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.

Supervised by:

Co-Supervised by:

Abdus Sattar
Senior Lecturer
Department of CSE
Daffodil International University

Muhammad Muhaiminul Islam
Lecturer
Department of CSE
Daffodil International University

Submitted by:

Khalilullah Muhammad Ibrahim
ID: 151-15-5149
Department of CSE
Daffodil International University

Md. Noor Alam
ID: 151-15-5056
Department of CSE
Daffodil International University

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ABSTRACT

Our project titled “MARRIAGE: A Web app for Online Marriage Registration” is a web app for Muslim Marriage registration of Bangladesh. Using this application, bridegroom/bride will be able to get married through the marriage register Office or a registered marriage. Now-a-days Computer becomes a part of our life. We can’t think a single moment without our Computer. We are more likely to use our Computer for practical purpose in our daily life. Among these Computer OS, Web has majority percentage. Computer OS is also an open source platform and it has large number of users. For this we thought that we should build something in Web that has practical use to the user. And it will help them in difficult situations. Our app will help you with all the information about Muslim wedding. This will increase the security and decrease crime. It also reduces time. We no need to go to the police station to provide our information and it will reduce harassment. We use Bootstrap, html and CSS for front-end design and Larval for back-end design. We also use My SQL as our main database. This app is very user friendly. After finishing all the task and test process this application proved to be working effectively.

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CHAPTER 1

Introduction

1.1 Introduction

In the Shari'ah, marriage (nikah) is a relationship of mutual love, mercy and sympathy. In Islamic law marriage is a civil contract between parties which allows them mutually to agree upon the terms and conditions of their future together. Like any contract, the free consent of the parties to the concurrence to marry is essential. In order to avoid any prospective for confusion it is best that the agreed terms and conditions of the contract be put down in writing [1].

1.2 Motivation

A Marriage Certificate is an official declaration that two people are married. Visit the Marriage registrar office close to your residence and get the approved application form. Sometimes they don't fill up the form because of idleness and thinking the harassment.

The Holy Quran says,

“And marry those among you who single and those who are fit among your male slaves and your female slaves; if they are needy Allah will make them free from want out of his grace; and Allah is Ample-giving ,Knowing.” (Surah an-nur, 24:32)

1.3 Objective

We want to make this web application. This web application will have contained these features.

- i. To keep all fundamental information about the couples.
- ii. To keep a legal document.
- iii. To provide security both of them.
- iv. To maintain security in Child marriage
- v. Polygamy

1.4 Expected Outcome

By using this Web app a Marriage Registrar can easily get all the information about the bridegroom/brides such as national id number or Passport number or SSC certificate registration number or Birth certificate number, picture and all previous record of the bridegroom/brides .On the other hand bridegroom/bride also easily fill up the information form which are easy and comfortable from the previous analog system and is saves their time.

1.5 Report Layout

Chapter 1 we will discuss about introduction, objectives, motivation and the expected outcome of our project.

Chapter 2 contains the works related with our app, comparative studies and the challenges we have to face to implement this web app.

In chapter 3 we will discuss about requirement specification such as business process modeling, requirement analysis and modeling, logical data model and design requirement.

Chapter 4 contains the Front-end design, back-end design interaction design and UX and implementation requirements are described in this section.

In chapter 5 we discuss about the implementation of data base, implementation of front-end design, implementation of interaction, testing implementation and test results and reports.

The subject to describe in chapter 6 is conclusion and the future scope of our project.

CHAPTER 2

Background

2.1 Introduction

A Web app can provide the solution by offering the ability to share issues and information between bridegroom/brides and marriage registrar which lead to rapid issue resolution and less misinterpretation. The goal of the web app is to create a better relationship between bridegroom/bride and marriage Registrar. The Marriage registrar web application is designed to support both bridegroom/bride and marriage registrar by enabling them to document and communicate repair issues, send automatic marriage reminders, marriage notifications and emergency information. Effectively resolving the child issues is important to the bridegroom/brides long term future and this web app will be an important tool for creating rental marriage stability by helping bridegroom/brides speak with greater credibility through initiating and documenting communications and marriage productive relationships with marriage registrar.

2.2 Related Works

There are some web app almost similar with our web app but these have many difference with our web app. Some web apps are:

Kazi office BD web App: This is an interior design web application which provides the tools and information needed to complete Booking for Marriage and Divorce Certificate projects [2]. The marriage couples can enter the marriage certificate and get a marriage certificate by marriage registrar using this web application [3]. Bangladeshi Matrimony.com: The web application allows marriage to enter bridegroom, bride and they advertise about themselves. [4].

2.3 Comparative Studies

Kazi office bd web Application can only be used by the one Marriage registrar. But in our web application the user can be marriage registrar can fill up the entire information of the bridegroom/brides but the bridegroom/brides can't update it without the approval of the marriage registrar. In our web application there two log in page. One for admin and another for user. The user can be marriage registrar or bridegroom/bride. The bridegroom/brides can pay his marriage fees for the fixed amount. Marriage registrar can't registrar marriages by completing the form the minor children [2], [4].

2.4 Scope of the problem

Its web application, so if the marriage registrar or the bridegroom/bride does not have smart phone or if they do not know how to use smart phone it will be no effective for them. In this application should contain bridegroom/brides user id and Password and the user will get the marriage completing after the marriage form. The marriage registrar must be logged in with the specific government registration number. Otherwise marriage registrar will not be able to fill the marriage, Divorcé form. We want to add the bridegroom/brides and Marriage registrar law in our app. But most of the people do not know how to implement this law in their day to day life.

2.5 Challenges

- i. The main challenges are to language barrier. Because most of the people in our country do not know English.
- ii. We use English to develop this application.
- iii. The application user connected by using internet. So they must have net connection.
- iv. The next challenge is to implement this app in rural area.
- v. The bridegroom/brides have to keep track of all notification from the Marriage registrar as marriage reminders.
- vi. Use a suitable database that store all the information and give security.

CHAPTER 3

Requirement Specification

3.1 Business Process Modeling

BPM or Business Process Modeling is a process of constructing a structural view of a system or process. It includes some process, starts and symbol, condition as like a flow chart [5]. In our system we construct a BPM model which shows how to send the bridegroom/bride information to the marriage registrar and if marriage registrar verifies the information then the information will send to the Admin panel. And it also shows that what will happen if the marriage registrar dose not verifies the information. If the information is correct then it will be saved in the couples and marriage registrar information database by the Admin. Figure 3.1 shows business process modeling.

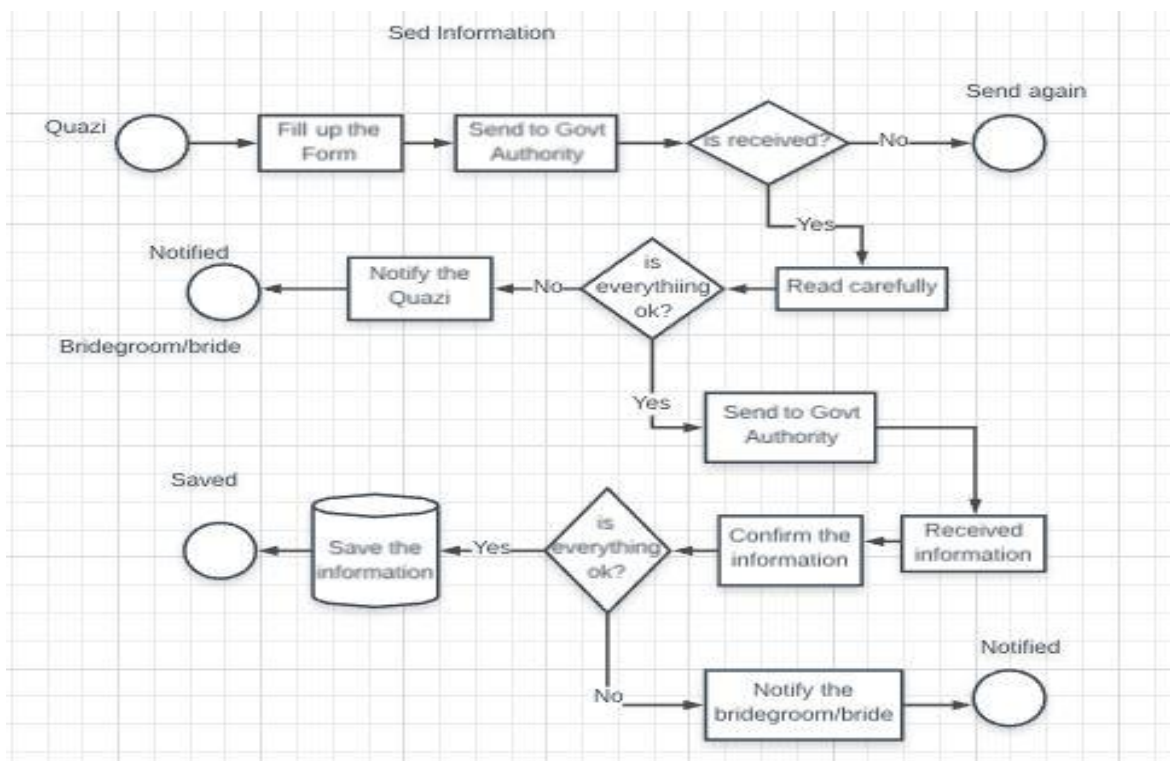


Figure 3.1: Business Process Model

3.2 Requirement Collection and Analysis

Requirement collection and analysis are very significant term to develop a system or any kind of web application. It meets the goal of the user and the admin. As our application is concerned with the requirement of the marriage registrar, bridegroom/bride and the admin so, we went to them and tried to know what their requirements for this app are [6]. Here the Government is the admin user. They all suggested developing a simple app which they can use expediently. To maintain the information of the marriage registrar and the bridegroom/bride this app will provide them a great service. Because they are deprive of facing the police. And they think that it will be a great process if they send their information to the police despite of going there.

3.3 Use Case Modeling

A use case model is a graphic description of the interactions among the elements of a system. A use case is a methodology used in system analysis to identify, clarify and organizing system requirements [7]. Figure 3.2 shows the use case modeling of the app.

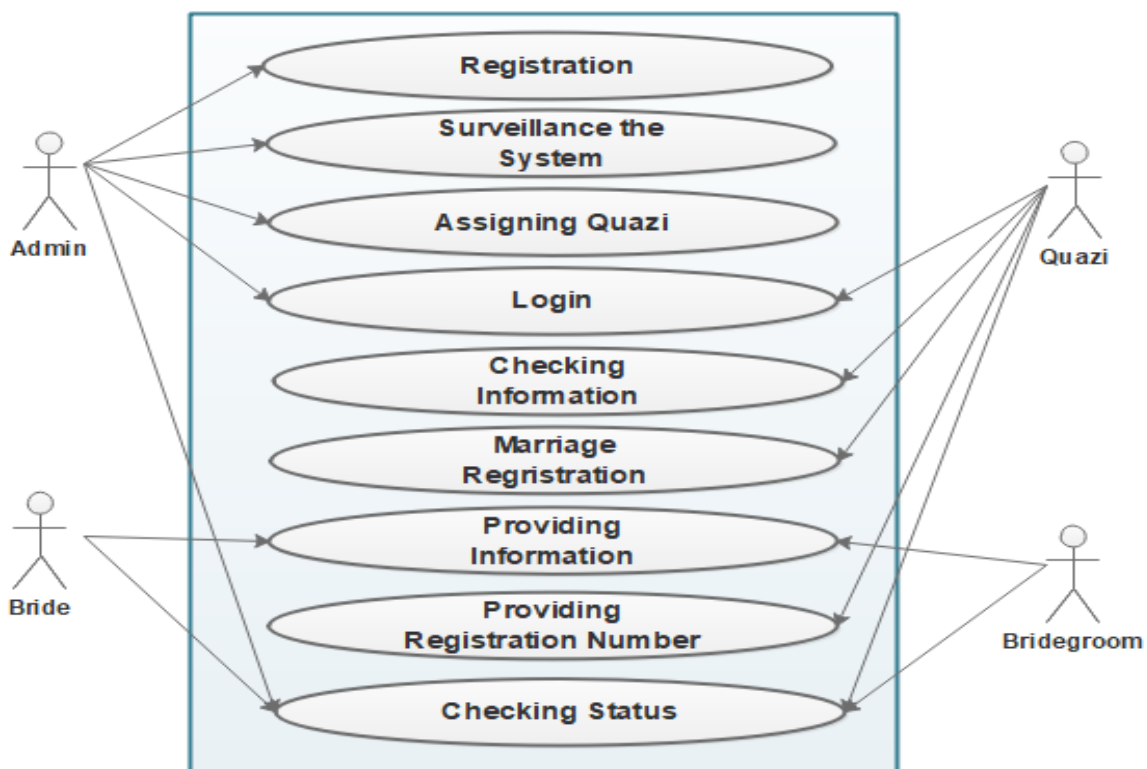


Figure 3.2: Use Case Model

Use Case: Admin Registration

Actor: Admin

Precondition: None

Primary Path:

1. Enter email address
2. Set a password

Alternate Path:

1. Enter valid email or password

Use Case: Admin Sign In

Actor: Admin

Precondition: Registration

Primary Path:

1. Enter Email
2. Enter Password
3. Click on “Sign In” button

Alternate Path:

1. Email or Password is incorrect

Use Case: Receive information

Actor: Admin

Precondition: Provide key

Primary Path:

1. Verify information

Alternate Path:

1. Information is not Received

Use Case: Store information

Actor: Admin

Precondition: Information received

Primary Path:

1. Check the accuracy
2. Manage database

Alternate path:

1. Inform the marriage registrar

Use case: Admin sign out

Actor: Admin

Precondition: Sign In

Primary Path:

1. Click on “Sign Out” button

Alternate Path:

1. None

Use Case: Marriage registrar Registration

Actor: Marriage registrar

Precondition: None

Primary Path:

1. Enter email address
2. Set a password

Alternate Path:

1. Enter valid email or password

Use Case: Marriage registrar Sign In

Actor: Marriage registrar

Precondition: Registration

Primary Path:

1. Enter Email
2. Enter Password
3. Click on “Sign In” button

Alternate Path:

1. Email or Password is incorrect

Use Case: Create Account

Actor: Marriage registrar

Precondition: Sign In

Primary Path:

1. Enter a key
2. Enter password

Alternate Path:

1. Use valid key or password

Use Case: Verify Information

Actor: Marriage registrar

Precondition: Sign In as Marriage registrar

Primary Path:

1. Enter Marriage registrar key
2. Verify information
3. Fill information

Alternate Path:

1. Enter a valid Marriage registrar key

Use case: Marriage registrar sign out

Actor: Marriage registrar

Precondition: Sign In

Primary Path:

1. Click on “Sign Out” button

Alternate Path:

1. None

Use Case: Bridegroom/bride Registration

Actor: Bridegroom/bride

Precondition: None

Primary Path:

1. Enter registration number
2. Set a password

Alternate Path:

1. Enter valid email or password

Use Case: Bridegroom/bride Sign In

Actor: Bridegroom/bride

Precondition: Registration

Primary Path:

1. Enter Registration Number
2. Enter Password
3. Click on “Sign In” button

Alternate Path:

1. Registration Number or Password is incorrect

Use Case: Fill Information

Actor: Bridegroom/bride

Precondition: Sign In

Primary Path:

1. Set image
2. Enter full name
3. Enter father’s name
4. Enter date of birth
5. Select marital status

Alternate Path:

1. Enter valid information

Use Case: Send Information

Actor: Bridegroom/bride

Precondition: Fill up the Information

Primary path:

1. Enter Marriage registrar key
2. Click on “Send” button

Alternate Path:

1. The Marriage Registrar key is incorrect

Use case: Bridegroom/bride Sign Out

Actor: Bridegroom/bride

Precondition: Sign In

Primary Path:

1. Click on “Sign Out” button

Alternate Path:

1. Null

3.4 Logical Data Model

Our project's logical data model has relational table named Admin, marriage registrar, bridegroom/bride and Registrar Office. Here, we can describe how these entities are connected with each other. The total relational model has shown on the following figure 3.3.

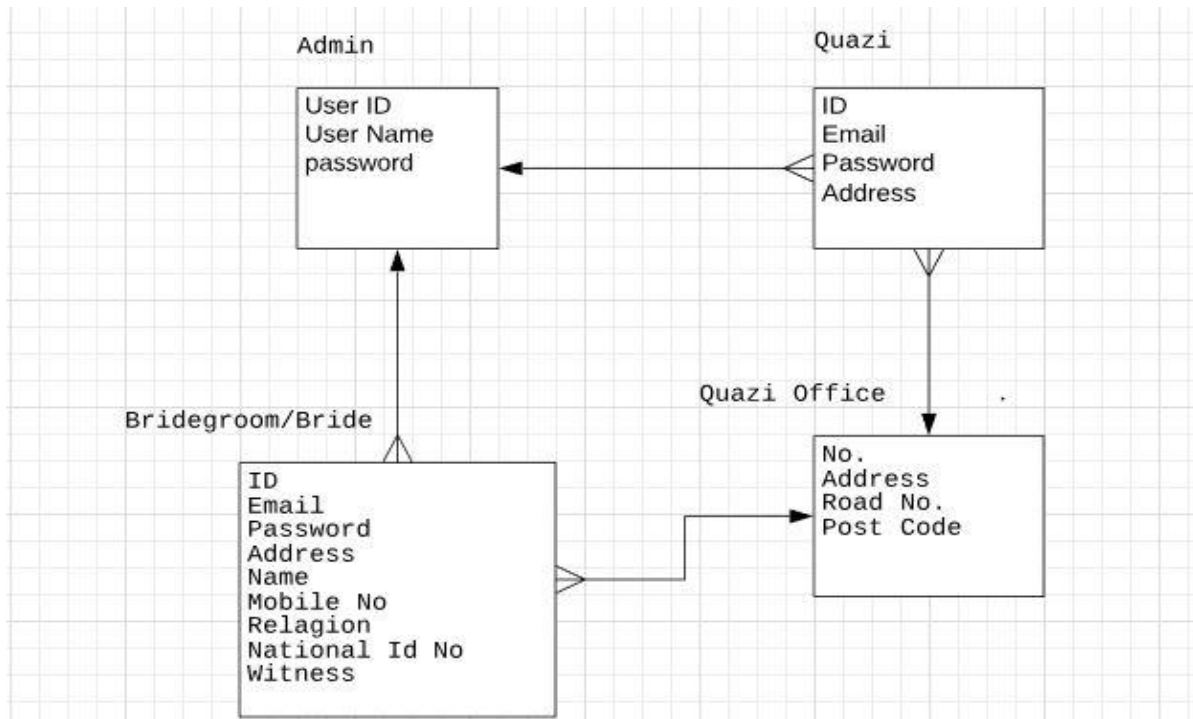


Figure 3.3: Logical Data Model

3.5 Design Requirement

A well design web app is pleasure to use. Our app provides service to the marriage registrar, bridegroom/bride and the government to maintain security in an area. Here, government authority does their job as the admin of the database and the marriage registrar and bridegroom/bride is the field user. Though the users of our app are the marriage registrar and the bridegroom/bride so, we try to make the interface of the app convenient to the user. Well design of web app is very essential but we should concentrate to the output design of the app first. User typically uses this app to maintain their personal information which is required by the government. So simplifying this app by making user interface simple is our primary responsibility.

CHAPTER 4

Design Specification

4.1 Front-end Design

Front page of web application must draw the attention of the user. To make our application attractive to the user we use some Graphical User Interface (GUI). We design our project with easily understandable GUI so that, the user can easily access the app. In the front page we simply use a registration option and a sign in option. To sign in this app the user must complete the registration first [8].

4.2 Back-end Design

Back end design is only seen by the programmer. How will the application interact with the user is implemented in the back end. User cannot interact with the back end design. As our project maintain the information that send by the marriage registrar to the government authority via marriage registrar so, we need to create a database to store these information. We also provide the unique id of the user. We use MySQL to create the database. The following figures describe how we designed the back end of our project. Figure 4.1 shows the back end design for the user. This authentication function shows all the users who registered in the database by using our app. When a user sign in this app, a database is automatically generated for the user [9].

Admin																															
Dashboard	<h2 style="text-align: center;">Kazi List</h2> <div style="text-align: center; border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <input type="text" value="Search for names..."/> </div> <table border="1"> <thead> <tr> <th>Reg. No:</th> <th>Kazi Name</th> <th>Kazi Email</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td>5137</td> <td>Nahian</td> <td>nahian15-5137@diu.edu.bd</td> <td></td> </tr> <tr> <td>5149</td> <td>arif</td> <td>arif.ds@gmail.com</td> <td></td> </tr> <tr> <td>5144</td> <td>Tankul Islam</td> <td>torik5144@gmail.com</td> <td></td> </tr> <tr> <td>5154</td> <td>Mehedi Hasan Khan</td> <td>mehedi5154@gmail.com</td> <td></td> </tr> <tr> <td>5156</td> <td>Nayeem Khan</td> <td>nayeem5156@gmail.com</td> <td></td> </tr> <tr> <td>5056</td> <td>Noor Alam</td> <td>noor5056@gmail.com</td> <td></td> </tr> </tbody> </table>			Reg. No:	Kazi Name	Kazi Email	Action	5137	Nahian	nahian15-5137@diu.edu.bd		5149	arif	arif.ds@gmail.com		5144	Tankul Islam	torik5144@gmail.com		5154	Mehedi Hasan Khan	mehedi5154@gmail.com		5156	Nayeem Khan	nayeem5156@gmail.com		5056	Noor Alam	noor5056@gmail.com	
Reg. No:				Kazi Name	Kazi Email	Action																									
5137				Nahian	nahian15-5137@diu.edu.bd																										
5149				arif	arif.ds@gmail.com																										
5144				Tankul Islam	torik5144@gmail.com																										
5154				Mehedi Hasan Khan	mehedi5154@gmail.com																										
5156	Nayeem Khan	nayeem5156@gmail.com																													
5056	Noor Alam	noor5056@gmail.com																													
Add Kazi																															
Kazi List																															
Review Registration																															
LogOut																															

Figure 4.1: User List

Figure 4.2 shows all the sub database we create in our project. All the sub database contains different types of information of the user. It provides the personal unique key for the each user by which the information of individuals is managed.

```

<?php
$dbhost="localhost";
$dbuser="root";
$dbpass="";
$dbname="onlinemarriage";
$connection=mysqli_connect($dbhost,$dbuser,$dbpass,$dbname);
if(mysqli_connect_errno()){

    die("Error fix please!");

}
else{

    echo "Connection Success<br>";

}
?>

```

Figure 4.2: Database Creation

Figure 4.3 shows the table of image that are provided by the bridegroom/bride. It contains every detail of the Bridegroom/bride with their image.

id	date	RegNo	d1	d2	f1	a1	d3	d4	f2	a2	d5	d6	d7	d8	d9
4	2018/11/02	58171406	aSa	Monsur sasa	sasa	aSa	ASas	Shuki	asdasdasd	sadasd	asdasd	sadasd	asdasd	asdasd	sadas
5	2018/11/03	60348132	Barisal	Arif khan	Abdus salam	Barisal	2-5-1988	Afsana mimi	Kamal Ahamed	Rajshahi	No	5-4-1992	Golem Morsed,Faisal Islam,khulna	Habib Hemal,uncle,Barisal	Akbor khan,Rajshahi
6	2018/11/03	75617248	Dinajpur	Golem Morsed	Faisal Ahamed	jamalpur	3-6-1987	Nazma Islam	Mijanur Rahaman	chapai Nawabgon	No	6-4-1993	Habib Hemal,Barisal	Farhad Ahamed,uncle,Dinajpur	Ibrahim,Manikgonj
7	2018/11/03	34366125	Rajshahi	Imrul khan	Akbor Ahamed	chapai Nawabgon	7-8-1988	Mou Islam	Mijanur Rahaman	Rajshahi	No	5-6-1992	Habib Hemal,Barisal	Golem MOrsed,uncle,khulna	Ibrahim,Manikgonj
8	2018/11/03	95167076	Barisal	Habib Hemal	Akbor Ahamed	chapai Nawabgon	9-4-1992	Nazma Islam	Kamal Ahamed	Rajshahi	No	4-2-1992	Golem Morsed,Faisal Islam,khulna	kamal Islam,uncle,khulna	Akbor khan,Rajshahi
9	2018/11/03	20290846	chapai Nawabgonj	Ibrahim Babu	Abdus salam	jamalpur	3-6-1987	shilpi Islam	Kamal Ahamed	chapai Nawabgon	No	5-6-1992	Golem Morsed,Faisal Islam,khulna	Farhad Ahamed,kamal khan,khulna	Akbor khan,Rajshahi

Figure 4.3: Information of Bridegroom/Bride

4.3 Interaction Design and UX

Interaction design describes the relationship between the application and the user. It is important to know how much web application will popular among the user that depends on the interaction of the app with the user. If the app is convenient to use and it provides a great outcomes to the user then it will gain the popularity. Experience is very essential for interaction design. Because mainly the user experiences focuses on the experience between the user and the application. From this experience we tried to make most of the features of our app that can interact with the user. Though ours is a security based web app so we tried to provide great security to them by using the registration option which required valid email id and password of the user [10].

UX design or user experience design is the most challenging part for a programmer. Always the need to focus on the experience of user of using web app and how they satisfy with a product. We pay attention on this sector and tried to implement an application that has satisfactory interface which should be accepted by the user.

4.4 Implementation Requirement

To implement a project we need different types of tools, components, and software. We also need some tools and component to implement our project. Ours is web based application project so we used web based design tools and components to implement our application. Here is a short description of the tools and components that required implementing our application.

4.4.1 Web platform

Web platform is a popular platform to implement any kind of Web application. It provides the great features to the programmer to implement a web app. it provides almost all the components and tools and frame works for developing web app easily and quickly. We use web platform as our application IDE. It's an open source platform so, programmer prefers Web application to develop various types' web application.

4.4.4 MySQL

MySQL is the most popular real time database. We need a database to store the information of the user. We use MySQL as the main database of our application to store and maintain the information of the user. We also had to maintain the security of the personal information of the bridegroom/bride. It synchronize the data in real time to every connected user in the application. If we build apps that has a cross platform with PHP all of the user use the real time database instance and the user will automatically receive with the newest data by MySQL [11].

CHAPTER 5

Implementation and Testing

5.1 Implementation of Database

In this section we describe how we implemented our database. As we describe in the previous chapter that we use MySQL as our main database. MySQL is a real time database so there is no need to use SQL query to perform the action. MySQL also has some other features like as hosting, crash reporting, cloud storage authentication, hosting and so on. How we use fire base to maintain our data is described below with proper diagram.

To store information in the database the user has to register and sign in. To sign in our database MySQL gives several choices to the user. In our app user can sign in by their email and in some case they can also use their phone number. Figure 5.1 shows the authentication option.

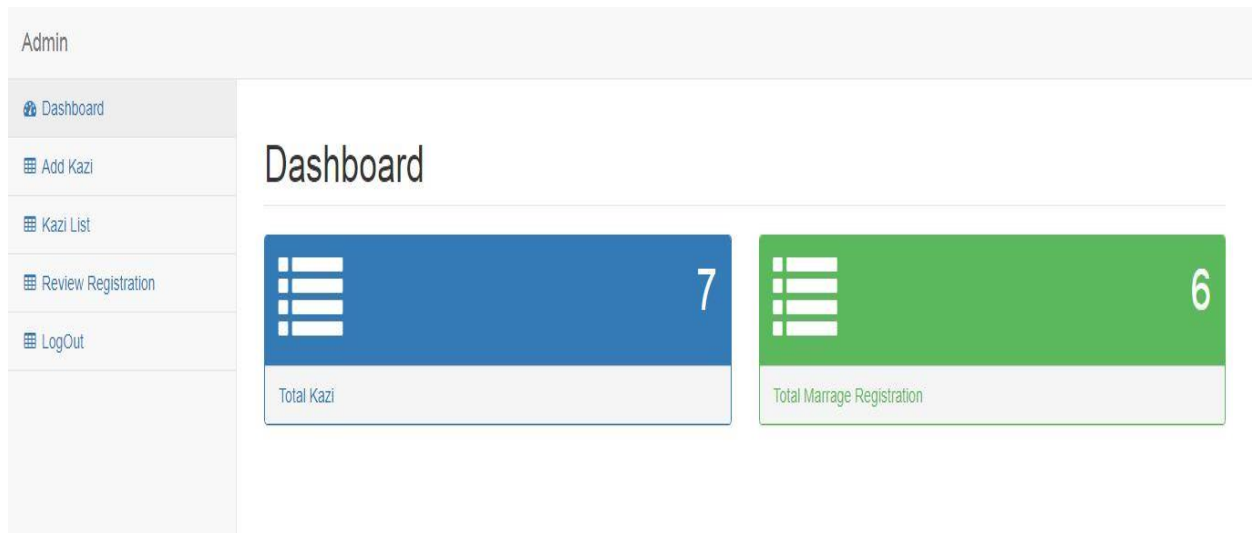
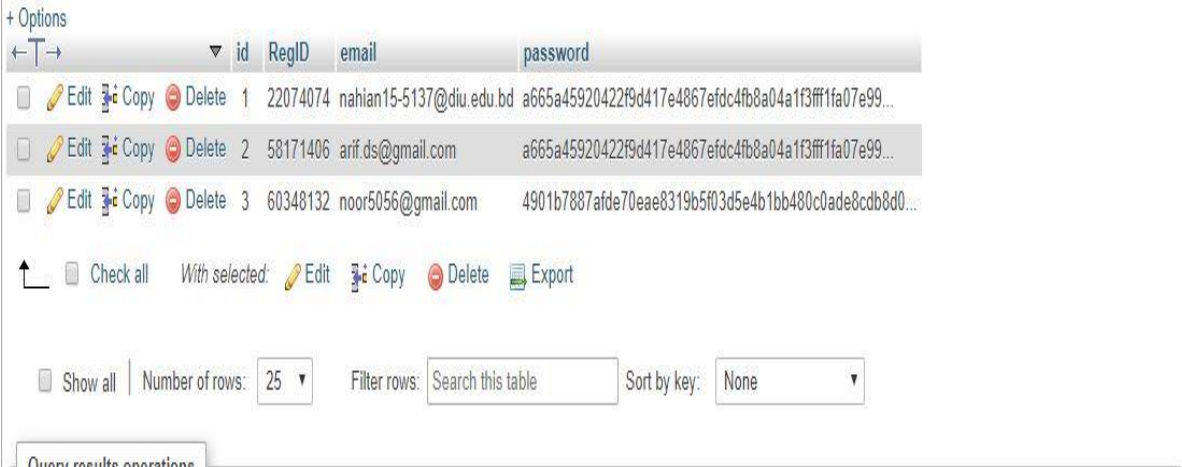


Figure 5.1: Authentication Choice

To sign in at the farther time if the user does not provide the valid user id or password then he cannot sign in. MySQL use an authentication rule if the email is valid or invalid. Figure 5.2 shows the authentication rule.



The screenshot displays a MySQL database table with the following columns: id, RegID, email, and password. The table contains three rows of user data. Below the table, there are controls for filtering and sorting, including a search box and a dropdown menu for sorting by key.

	id	RegID	email	password
<input type="checkbox"/>	1	22074074	nahian15-5137@diu.edu.bd	a665a45920422f9d417e4867efdc4fb8a04a1f3fff1fa07e99...
<input type="checkbox"/>	2	58171406	arif.ds@gmail.com	a665a45920422f9d417e4867efdc4fb8a04a1f3fff1fa07e99...
<input type="checkbox"/>	3	60348132	noor5056@gmail.com	4901b7887afde70eae8319b5f03d5e4b1bb480c0ade8cdb8d0...

Figure 5.2: Authentication Rule

The user of our app is admin, marriage registrar and bridegroom/bride. All the registered user have their own user table with unique user id. The information is stored in each unique table through the unique id. When a user sign in the database MySQL gives a unique id. Marriage registrar database and the bridegroom/bride database are different. Each Marriage registrar has their own personal key. Figure 5.3 shows marriage registrar information.

+ Options

	id	name	email	RegID	password
<input type="checkbox"/> Edit Copy Delete	2	Nahian	nahian15-5137@diu.edu.bd	5137	a665a45920422f9d417e4867efdc4fb8a04a1f3fff1fa07e99...
<input type="checkbox"/> Edit Copy Delete	3	arif	arif.ds@gmail.com	5149	a665a45920422f9d417e4867efdc4fb8a04a1f3fff1fa07e99...
<input type="checkbox"/> Edit Copy Delete	4	Tarikul Islam	torik5144@gmail.com	5144	7dd49e56d655438a5069f7f65fd8328c9f66b21dd3dd296702...
<input type="checkbox"/> Edit Copy Delete	5	Mehedi Hasan Khan	mehedi5154@gmail.com	5154	b0cc7072ef8aa1665efaea655d17d1c841048a5b4e6df3545d...
<input type="checkbox"/> Edit Copy Delete	6	Nayeem Khan	nayeem5156@gmail.com	5156	74fda8dfc96f191ae4199e6e49c015474141aa242bba7b0b7b...
<input type="checkbox"/> Edit Copy Delete	7	Noor Alam	noor5056@gmail.com	5056	fcf40aad4b47bd255955ec65d40b3f2ebe41a58d2ecc381fd5...
<input type="checkbox"/> Edit Copy Delete	8	Nadim Ahmed	nadim5167@gmail.com	5167	2a9bc42abbb7a7640b5e4c6323378d7ee9d87f3e1f46100c8d...

Check all With selected: Edit Copy Delete Export

Figure 5.3: Marriage Registrar Information

A bridegroom/bride sign in this database using the personal key of his marriage registrar and MySQL creates a sub key for the bridegroom/bride which is also unique. Figure 5.4 shows the tenant information.

Kazi

- Dashboard
- Marrage Registration
- Registration List
- Divorce
- LogOut

Registration List

Reg. No:	Date	Bridegroom's info	Action
60348132	2018/11/03	Arif khan	
75617248	2018/11/03	Golem Morsed	
34366125	2018/11/03	Imrul khan	
95167076	2018/11/03	Habib Hemal	
20290846	2018/11/03	Ibrahim Babu	

Figure 5.4: Bridegroom/bride Information

5.2 Implementation of Front-end Design

Only the front end design is visible to the user. So it should affectionate to look at. It also should user friendly and convenient to use. We already have said that the user of our app is marriage registrar, bridegroom/bride and the admin. At the first page of our app we arrange registration and sign in option. Figure 5.5 shows how we implement the front-end of our app.

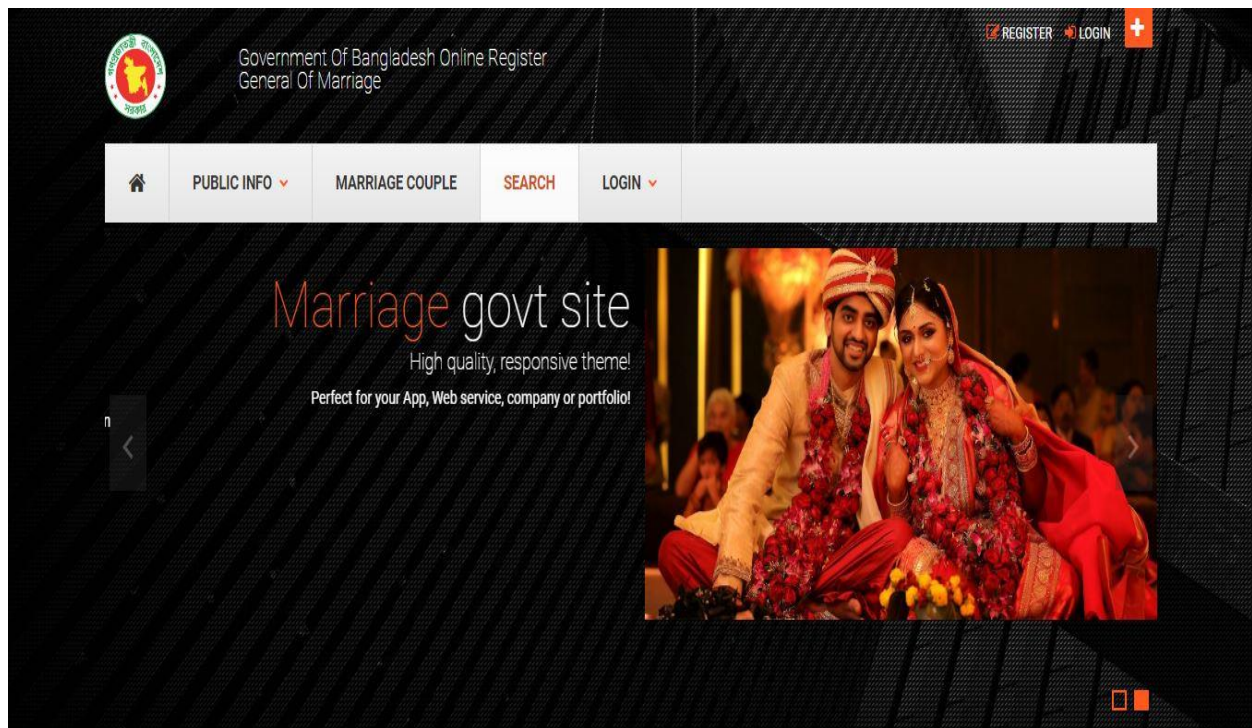


Figure 5.5: Home page

If any user wants to use our app at first he or she needs to register using register option. After clicking on the register option the following page will appear to the user. In figure we can see how a user completes the registration to use our app.

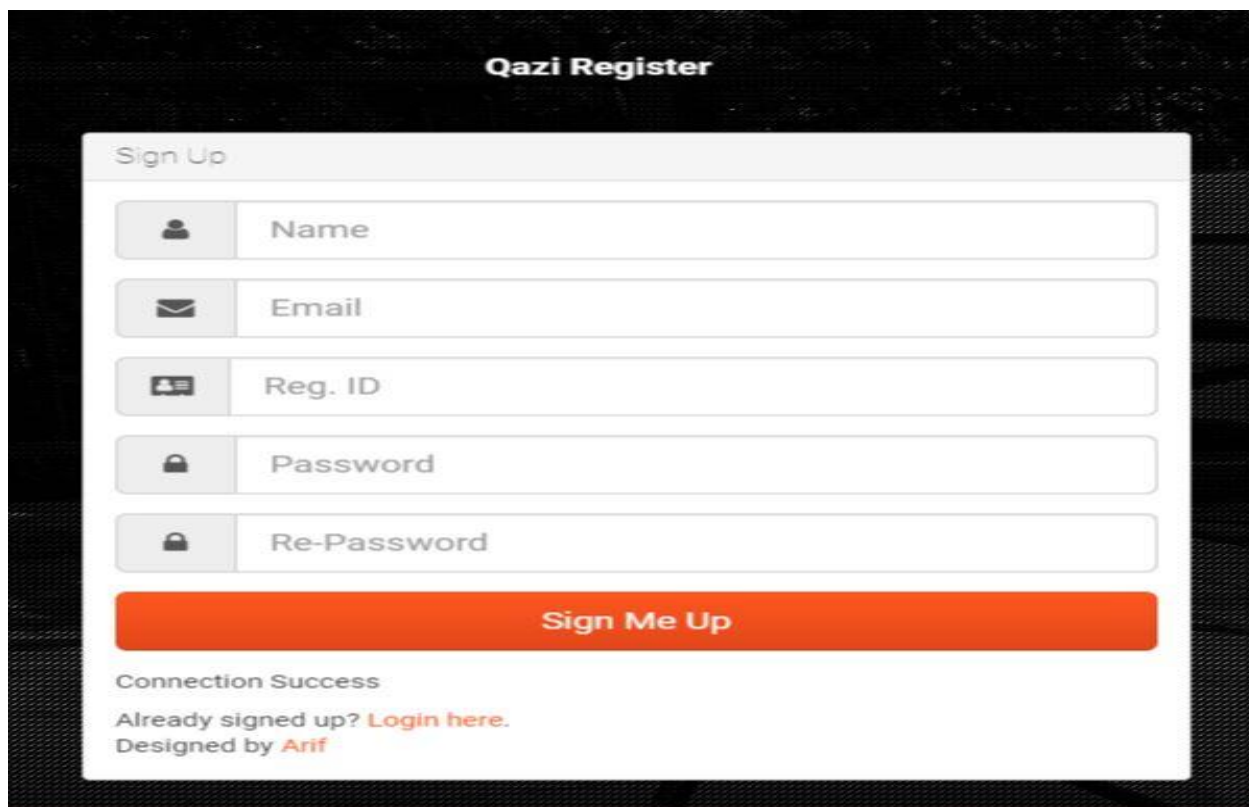
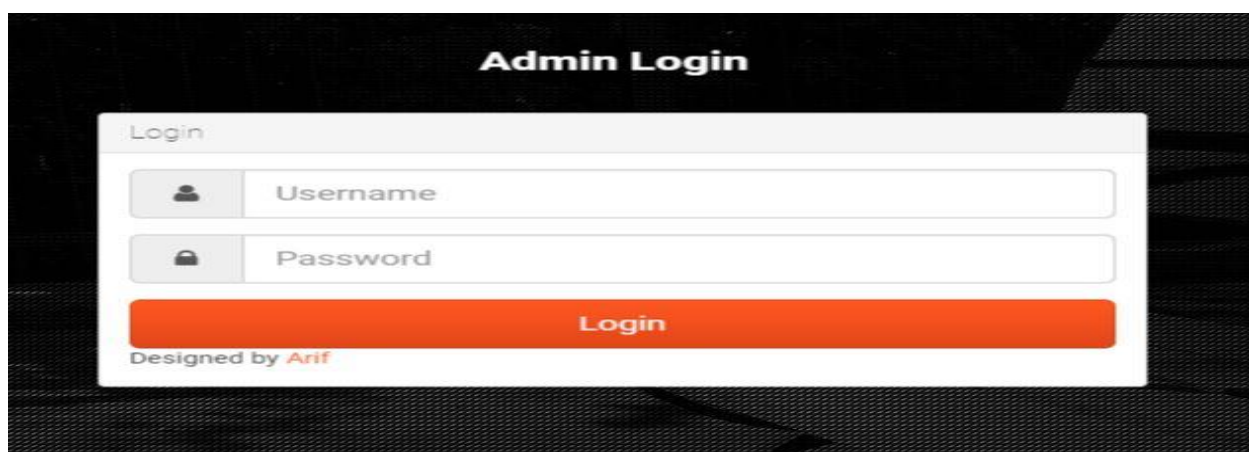


Figure 5.6: User Registration

User can register into the app by using name, email and password. After registration the user can sign in into the app as a marriage registrar, bridegroom/bride or admin and they have provided their email address and password here. Figure 5.7 shows user sign in option.



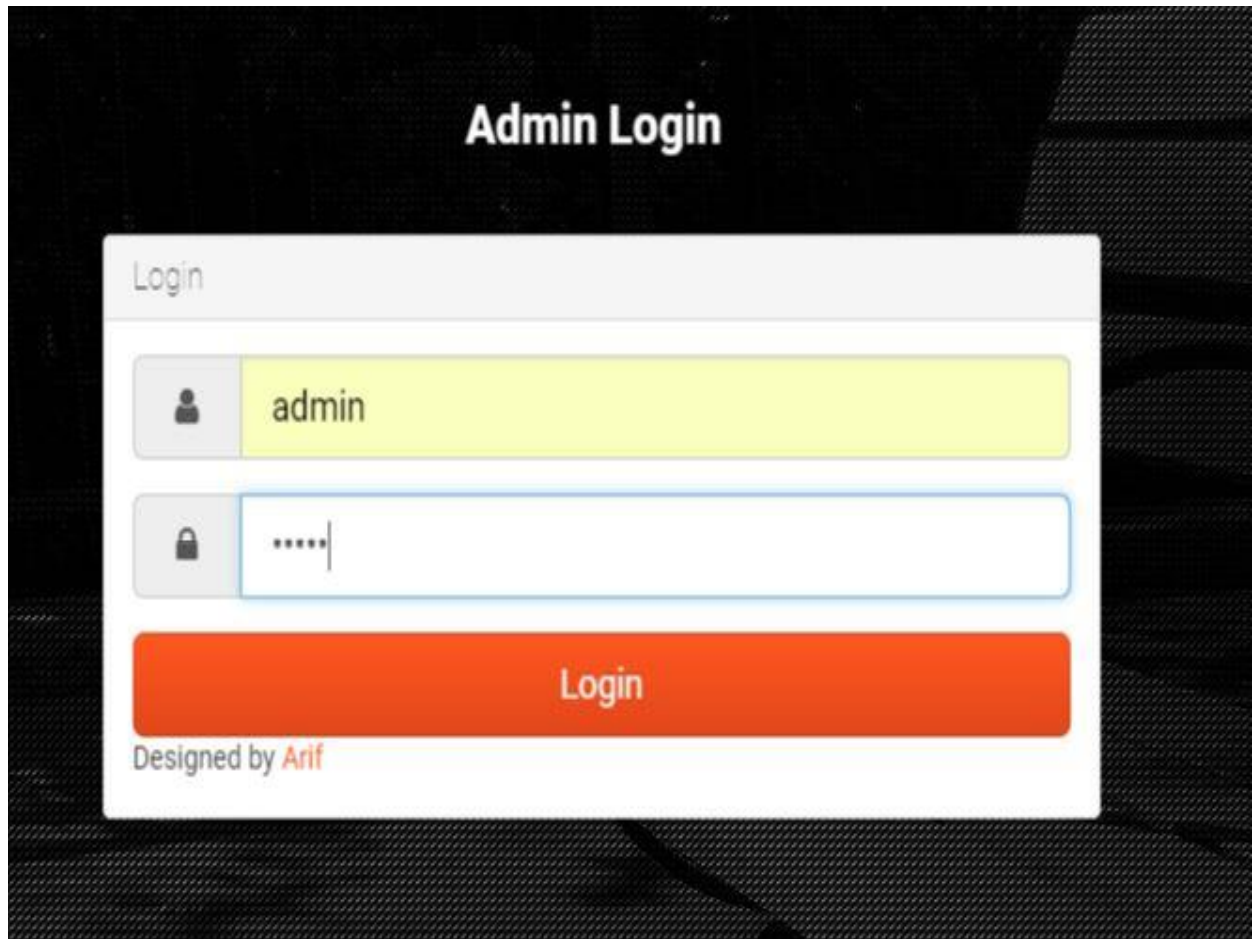
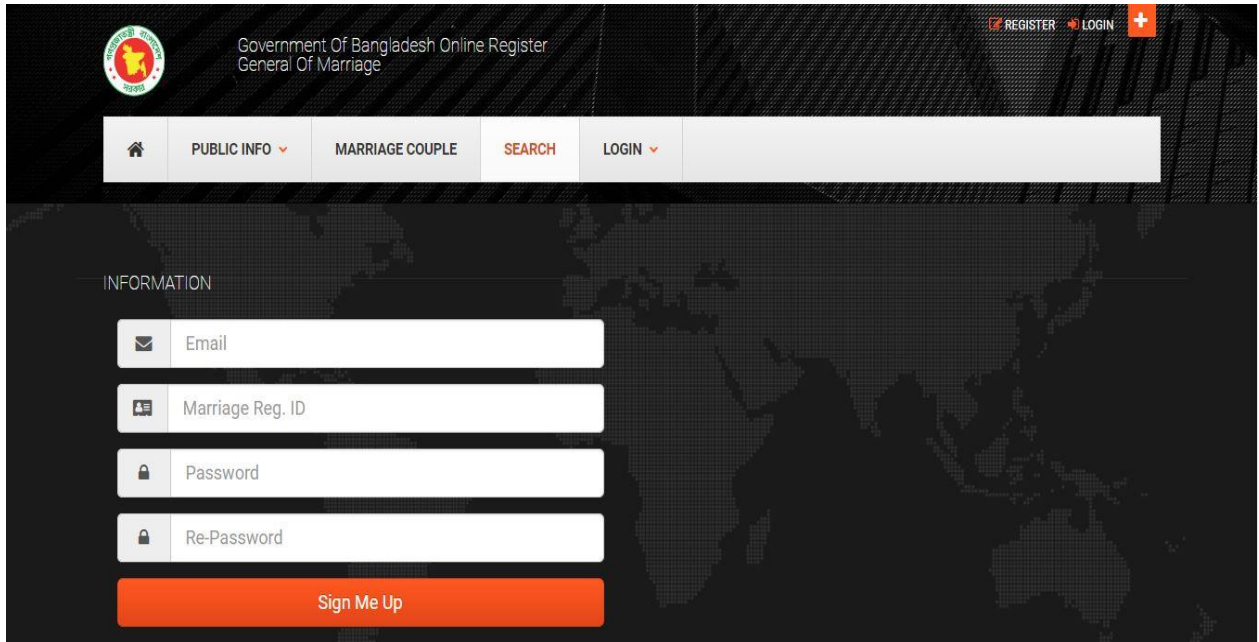


Figure 5.7: Sign In

If the user sign as a bridegroom/bride then he needs to choice **bridegroom/bride** option. In the same process the marriage registrar and admin can sign in in the system. In figure 5.8 bridegroom/bride will able create an account under a marriage registrar key or sign in. to create a new bridegroom/bride id the bridegroom/bride has to set the mobile number, key and a verification key that is provided by the marriage registrar. If the bridegroom/bride verify himself as a bridegroom/bride using the marriage registrar key then he can simply sign up and fill his information and send to the marriage registrar to verify.



Government Of Bangladesh Online Register
General Of Marriage

REGISTER LOGIN

PUBLIC INFO MARRIAGE COUPLE SEARCH LOGIN

INFORMATION

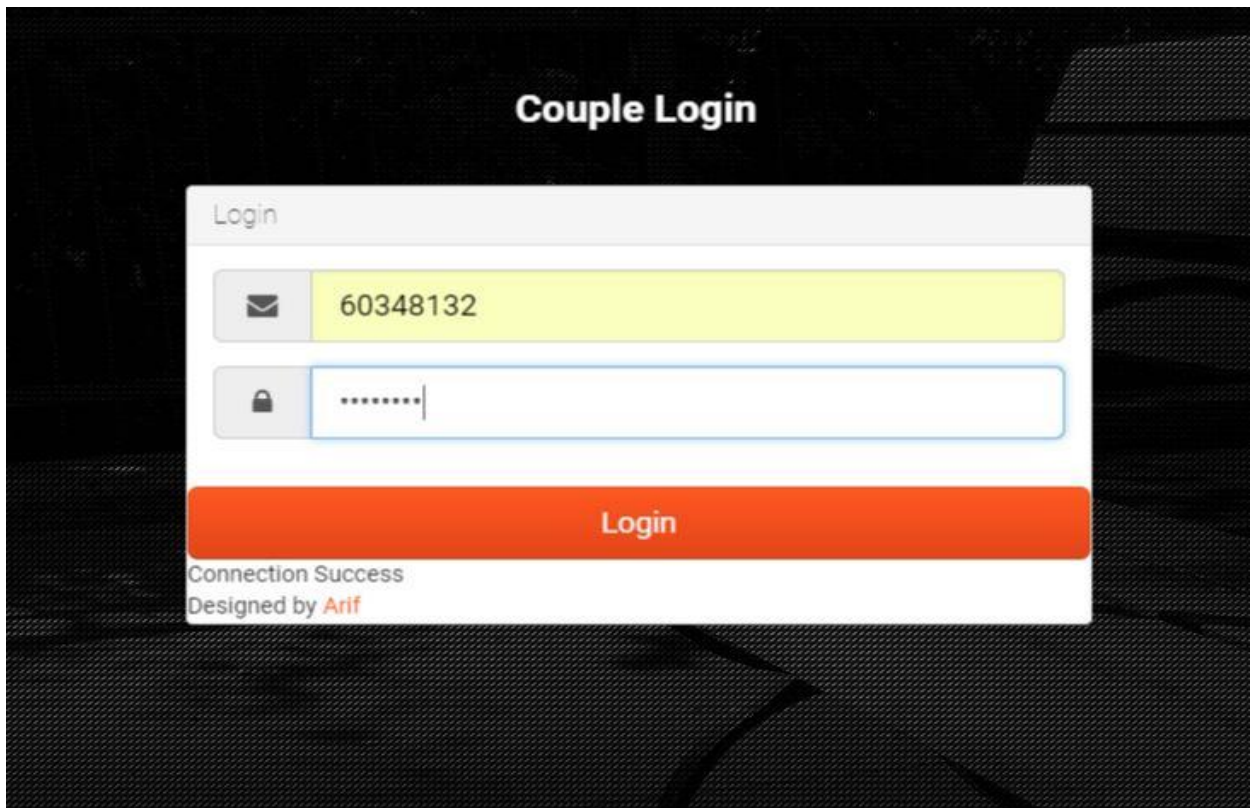
Email

Marriage Reg. ID

Password

Re-Password

Sign Me Up



Couple Login

Login

60348132

.....

Login

Connection Success
Designed by Arif

Figure 5.8: Account Creation

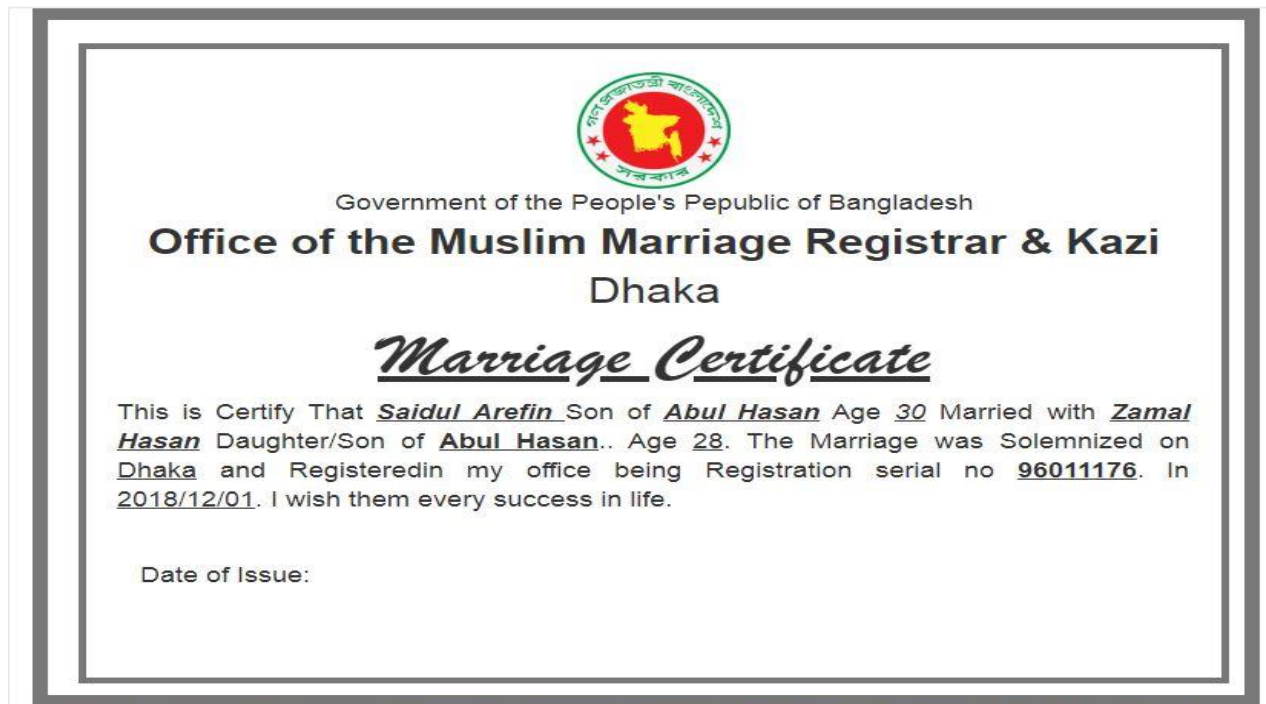


Figure 5.9: Marriage Certificate

5.3 Implementation of Interaction

We implement our app for the user. Interaction makes a system attractive and popular to the user. So it's very important to interact with the user so that it can meet up their need. To interact with the user we try to make our app simple and easily usable. We implement our app with responsive UI for better user experience. To implement an easy interface we use easily understandable icon, text and button option.

Our app is successfully implemented with necessary equipment that can easily interact with the user. It has an impressive interaction with the user.

5.4 Testing implementation

Our goal is to design a series of test cases that has a high likelihood of finding errors. To uncover the errors software techniques are used. These techniques provide systematic guidance for designing test [12]:

1. Exercise the internal logic of software components and
2. Exercise the input and output domains of the program to uncover errors in program function, behavior and performance.

Table 5.1: Test case shows the following test case has been done for several time to detect errors.

Sl. no	Test Case Id	Test Case Name	Test Case Description	Step	Expected Result	Actual Result	Test Case Status Pass/Fail
1	Login Admin	Validate login	To verify that login name on login page	Enter the login name and password and click Sign in button	Login successful or an error message "Failed Sign in" must be shown	Login successfull	Pass
2	Login User	Validate login	To verify that login name on login page	Enter the login name and password and click Sign in button	Login successful or an error message "Failed Sign in" must be shown	Login successfull	Pass

3	Password	Validate Password	To verify that password on login page	Enter password and login name and click Sign in Button	An error message "password invalid" must be displayed	Password -rd is invalid	Fail
4	Sign Out	Sign out from the system	To log out from the account	Click on the Sign out button	Sign out from the system	Sign out Success -full	Pass

5.5 Test Result and Reports

Test Reports represent the result of the test in a formal way. Report contains the data which we evaluated in a professional and organized manner. Report describes the operating condition and shows the result with test objective. By analyzing the testing report we can say whether the app is ready to use or not. In table 5.1 we describe the test case no, test case id, test case description, step of the test case, expected result and what is the actual result is and the test case status which can be pass or fail. Using these criteria we took several numbers of tests and got the accurate result. The accuracy is 100%. So, we can say that our app is error free and user acceptable.

CHAPTER 6

Conclusion and Future Scope

6.1 Discussion and Conclusion

Now-a-days maintain security in a city is a big problem. To maintain security the government should have the information about the people of an area. Our app is implemented to maintain information about the people. So it will render a great effort to the government and the people of an area. In the age of computer science analog system for maintaining information is an old process. People can serve their personal information by using their android phone. It will also save their time. Using our app government can easily maintain all the information at a time in a single database.

If the user fills free to use our app and accept our work in a cordial heart then the implementation of the application will successful.

6.2 Future Scope

We cannot implement some important feature in our app. But our exertion won't be stop. We want to add some more features that will bring benefit to the marriage registrar and the bridegroom/bride. The main field user of our app is the bridegroom/bride and the marriage registrar. This app also gives service to them for communication. We want to add another marriage registrar system in our application. The app will also keep a record of the database. We are concern to implement a feature where marriage registrar can give add for bridegroom/bride and the bridegroom/bride can easily find his suitable place for living.

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APPENDIX

Appendix A: Project Reflection

We started our journey from fall 2017 to implement this web application. We tried to make a user friendly interface of our project. The main feature of our project is to fill the Bridegroom/bride information to the Government authority through the marriage registrar. Our app will give the better service to maintain security and manage crime in a city area. It's very essential to keep the information of the marriage registrar and the bridegroom/bride to the government. Now-a-days people are more likely to use the Smartphone in their practical life. This app provides them a service in practical Life. To implement this application first we build a model of our application then we implement our app step by step. After a long journey and hard work finally we able to reach our goal.

Our app provides service both of the user and the government. It also reduce time and the use of paper. Information can also be stored in a single database which helps to reduce data Redundancy. Using this app people can easily send their personal information to save in the Database. So, they will aware of providing information to the government and will not deprive of giving information. We believe that our application will be a positive and effective for Users.

Appendix B: Related Works

To implement our proposed application at first we build a model of our app. We use some diagrams and use case model to analyze how we can implement our app. The first diagram we create the use case diagram. From the use case diagram we can know about user of our app and what is their activity in the app. In our Marriage app there are three users. They are marriage registrar, bridegroom/bride and the Admin panel. Government authority acts as the admin. We also use business process model which acts a flow chart. In this section we describe the activity of the user and how they interact with the system. We implement our application using web platform and MySQL. In this section we add some diagrams from the user interface and back-end. Figure A.1 shows the use case diagram.

PLAGIARISM REPORT

Checked by: