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UNDER GRADUATE THESIS

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ImanBooster Mobile Application

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Authors:

Abdouroihamane Mmadi	**160033405**
Mohammad Elmi Hassan	**160033407**
Muslim Musa	**160033408**

Supervisor: Mr. **Md. Hamjajul Ashmafee** Lecturer Department of Computer Science and Engineering.

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Contents

Declaration of Authorship

We **Abdouroihamane Mmadi (160033405) , Mohammad Elmi Hassan (160033407) and Muslim Musa (160033408)**, declare that this thesis titled, "

ImanBooster Mobile Application" and the work presented in it are our own. We confirm that this work was done   during our final two semesters which took the development of this software at our University. We declare that the work is our own and has not been submitted for a degree of another university. In which place we have consulted the published work of others, this is always clearly attributed. If we have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely our own work. We have acknowledged all main sources of help. Where the thesis is based on work done by ourselves jointly with absolute cooperation within us as a team.

Authors:

Abdouroihamane Mmadi   160033405

Mohammad Elmi   Hassan   160033407

Muslim Musa   160033408

Supervisor:

Mr. **Md. Hamjajul Ashmafee** Lecturer CSE, IUT.

Supervisor:

Mr. **Md. Hamjajul Ashmafee**

 Lecturer CSE, IUT.

Authors:

Abdouroihamane Mmadi

160033405

Mohammad Elmi   Hassan

  160033407

Muslim Musa

 160033408

Abstract

Iman in addition to *Islam* and ihsan form the three dimensions of the Islamic religion.

Iman in Islam denotes a believer's faith in the metaphysical aspects of Islam. Its most simple definition is the belief in the six articles of faith known as *arkān al-iman*.

In the Quran, Iman is one of the 10 qualities which cause one to be the recipient of God's mercy and reward, The Quran states that faith can grow with remembrance of God. The Qur'an also states that nothing in this world should be dearer to a true believer than faith.

The purpose of this study is to assess and evaluate the effectiveness of people's performance in different Islamic activities within a day, months and year.

All practicing Muslims accept belief in the 'Six Articles of Faith' and are obliged to follow the 'Five Pillars.' They are:

1. Muslim profession of faith or shahada.

2. Ritual Prayer or salah.

3. Obligatory Charity or zakat.

4. Fasting or Sawm.

5. Pilgrimage or hajj

Millions of people worldwide pray daily, fast weekly, say adhkars, some engage themselves in Quranic study and recitations and other Islamic related activities. Review of our ImanApp gives a great opportunity for different users to evaluate themselves based on their daily Islamic activities they do, this will assist you check how good you are performing and will help state how good/bad you are doing in Islamic related activities .

Acknowledgements

Thanks to The Organization of the Islamic Co-operation (OIC) which sponsored our study in this beautiful university.

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To Islamic University of technology (IUT) our second home we love you and will always do, you are the best in the world. Thank you very Much

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We would like to thank all our teachers for their kind participants in our study life and making us from good to better to best .This was really an incredible journey.

Chapter 1

1.1 Introductions and overview

The Five Pillars of Islam (arkān-al-Islām أركان الإسلام; also arkān ad-dīn أركان الدين "pillars of the religion") are five basic acts in Islam, considered obligatory by Sunni Muslims. The Qur'an presents them as a framework for worship and a sign of commitment to the faith. They are

(1) The shahada (creed),

(2) Daily prayers (salat),

(3) Fasting during Ramadan (sawm),

(4) Almsgiving (zakat), and

(5) The pilgrimage to Mecca (hajj) at least once in a lifetime.

The ImanBooster Application is a software developed specifically for users to check their daily salat and other Islamic activities and later evaluate how good or bad their performance on salat is, the evaluation/ assessment is mainly based :

1. The activities user wants to be involved in
2. The prayers you want to be reminded for
3. And finally how a user checks his prayers whether he performed alone or in the Mosque with other people.

So our primary objective here is to focus mainly on the salat. Here, let's see what the salat is all about.

Salah (Prayer) is the second pillar of Islam. It is one of the most important pillars of Islam. **Salah** is the key to Islam. **Salah** is **Ibadah** or worship.

In our lives we have many duties that we do like school, jobs and other sort of activities. And when we are doing these things we forget Allah (Subhanahu wa Ta'ala). Allah (Subhanahu wa Ta'ala) doesn't want us to forget that we are His servants and also why we are here in this universe. That's the purpose of **Salah** and

why Allah (Subhanahu wa Ta'ala) made **Salah**. **Salah** not only helps us to remember Allah (obligatory) **Salah** in a day.

1. **Fajr** is the first **Salah** of the day, which helps us to start our day with remembering Allah (Subhanahu wa Ta'ala). **Fajr** is prayed early in the morning before sunrise.

2. **Zuhr** is the next **Salah**. It is prayed after mid-day in the afternoon, so that after you have eaten your lunch you can remember Allah (Subhanahu wa Ta'ala).

3. Then comes **Asr** which is prayed when most parents and children come back from school or work. This is another time to remember our Great Lord, Allah (Subhanahu wa Ta'ala).

4. After the **Asr Salah** is **Maghrib** which is prayed immediately after sunset. We remember Allah (Subhanahu wa Ta'ala) before sunrise and now we remember our Mighty Lord again after sunset.

5. After **Maghrib** comes **Isha** at night. It is the last **Salah** of the day, when we pray to Allah (Subhanahu wa Ta'ala) to thank Him for all He has given us that we asked for! We pray for the forgiveness of our sins. We also pray for a peaceful night and also another happy and successful day tomorrow.

   Salah is so important that you must perform it in any circumstance. Even if you are on a journey, and also if you are very ill and are confined to bed you still must pray **Salah**.

1.2 The Application Main User

The user is the main active module here, having all the rights to:

- ✓ Set notification for each prayer and Iqamah reminders, with the ability to adjust their times.
- ✓ Select all the prayers he wants to be reminded for and Notification for each prayer and Iqamah reminders, with the ability to adjust their times.

- ✓ Check the evaluation of his performance in ibadat such as prayers in group or alone and Ability to adjust prayer times manually.
- ✓ Provide his/her own performance of each ibadat a day which will be algorithmically calculated. So the user here performs much more.
- ✓ Checks for the nearest mosques in his current Location and Finding the location automatically using Network or GPS, or manually by searching in the Internet.
- ✓ See the good (Halal) places near his current location
- ✓ See the Islamic calendar and even download Islamic related books and articles.
- ✓ View and Edit his own profile

All this can be done depending on different platforms such as the Android version, web version, IOS version, windows Phone version, and so on.

1.3 App Installation

The results show that participants find installing mobile apps to be very easy. This is not surprising because the installation of a mobile app is an uncomplicated procedure compared to the installation of desktop applications. Mobile apps are not usually customized to the same extent as desktop applications and this simplifies their installation.

1.4 App Usage

Even though the results of the laboratory usability testing show that mobile spreadsheet app bring a lot of challenges during their use, the survey's results show that mobile apps are still perceived to be easy to use. The wide range of apps that are available allows users to find alternatives to ones they find complicated or unpleasant to use. The number of apps that users have installed on their device varied widely among the participants; however on average participants had approximately 35 apps installed on their device. This relatively high number of apps can make it more difficult to locate a single app. The survey found that as time progresses the number of apps increases and this lengthens the search time to locate a single app. We also found that participants only used a small percentage of their apps on a daily basis. Unfamiliarity with the location of apps complicates the search problem. Providing users with a grouping option on the handset would help to solve this problem: we envisage that on installation the user could be given an option to group the apps in a meaningful way. The user then simply has to remember which group the app is in to reduce the search space.

1.5 App Removal

Removing apps from a mobile device was reported (through the survey) to be an easy task. The majority of participants removed apps once they were no longer needed, implying that participants may need to re-install an app if they unexpectedly need to repeat a given task. Although the majority of participants removed apps individually, the survey found that 16% of participants removed multiple apps simultaneously. For these participants it would be useful to provide a feature which allows them to select, from a list, the apps they want to remove so that this can be done with the click of a single button

Chapter 2

2.1 PROJECT OVERVIEW

What are Mobile Devices?

The meaning of the term 'mobile device' is now quite well understood. Traditionally the term referred to a smart phone but with the advent of larger devices the term is now used more widely. The differences between larger devices (such as the iPad) and small devices (such as smart phones) are considerable and reduce our ability to generalize research results. The meaning of 'mobile device' as used here only considers the physical size of the device. Other factors, such as the presence of an internet connection or the ability to connect to other devices or services, may also play an important role in the context of mobile apps but are not considered here. This paper focuses on smart phone devices: tablets and e-Readers are outside the scope of this paper. Although these are mobile devices according to our use of the term the differences in interaction styles and abilities raises different research questions to those presented here.

2.2 Purpose

Advances in technology have allowed a range of sophisticated devices to emerge which enable users to perform a variety of tasks in a mobile context. These tasks include both tasks which were previously only available on traditional desktop applications and tasks that are only enabled by the use of mobile devices. To facilitate these tasks a wide range of mobile applications, referred to here as apps, are available from easy to install locations, such as the App store provided by Apple or the Android Marketplace provided by Google. In order to improve the portability of both of these types of apps, a number of compromises are necessary. These compromises, such as smaller screen size, more limited processing power and the mobile context in which the device is used, have frequently had a negative effect on the usability of these apps.

Giving the opportunity of this online world, we want to help develop the Islamic world by filling it with such glorious benefits like this. In the life here after we are going to be asked how we performed in our ibadat and this is nothing but the evaluation of our **Salah**, Sawm and other ibadat. So this Application software will

help individuals to check in different activities, evaluate themselves as there will be special notifications for users whose performance is bad which is like a warning with some sort of Quranic sayings , learn new things from our Library and so on. The main goal here is just for us to help the Islamic world to get an online reminder which will help users straighten their Faith (IMAN)

2.3 Scope

The scope of the project is the system on which the software is installed, i.e. the project is other features (Finding nearby Mosques) developed as a hybrid Application basically (Android, IOS, and Windows Phone) and it will work for individual registered users as the project is already executed online.

Chapter 3

System Analysis

3.1 Weaknesses in Current System

People are of different type and we all know how some are better than some in Iman, people with strong mind and who care some may put it at the back of their minds on the activities that they do. But you will never be accurate on you judging yourself and thereby enabling the evaluation looks good there will be no fear in overcoming your bad performance in Ibadat.

Calculating how good you are doing will definitely not be efficient and accurate and you can't store all your records in your head. This is will take a lot of time as there is greater chance of errors.

Those who take their time to calculate their performance in Ibadat requires lot of paper work. Loss of even a single /record led to difficult situation because all the papers are needed to generate the reports and you may end of getting a result.

3.2 Requirements of New System:

User Requirements

The User requirements for the new system are to make the system fast, flexible, less prone to errors and reduce expenses and save time.

➢ A system that can automate the checking of performances in ibadat so that results can be generated as soon as the user gives the input

➢ A facility that can generate result charts as per required.

➢ The New system should be more secure in managing your personal evaluation records and reliable enough to be viewed in any condition.

Chapter 4

4.1 Feasibility Study

A key part of the preliminary investigation that reviews anticipated costs and benefits and recommends a course of action based on some factors.

Feasibility study is the determination of whether a project worth nothing. Once preliminary area of application has been defined its subject to a more rigorous examination in a feasibility study. In conducting the feasibility study three types of feasibility can be considered. These are Technical feasibility, Economical feasibility and Operational feasibility. The purpose of the study is to determine if the systems request should proceed further.

➢ **Technical Feasibility:**

Technical feasibility is concerned with specifying equipment and software that will meet the requirement and goals. The analyst must find out whether current technical resources can be upgraded or added to in manner that fulfills the requests under consideration. However "add-ones", to existing systems are costly and not worth wide simply because they must need inefficiently. If existing systems cannot be added onto, then the next question becomes whether there is technology in existence that needs the specification.

The system being developed is economic with respect to individual reminder and users records. It is cost effective in the sense that it has eliminated the paper work completely. The system is also time effective because the calculations are automated which are made at the end of the month or as per the user requirement. The result obtained contains fewer errors and are highly accurate as the data is required.

➢ **Economic feasibility:**

Economic feasibility is the second part of the resource determination. The

basic resources to consider are, the time and that of system analysis team, the cost of doing a full system study, estimated cost of hardware, and estimates cost of software and/or software development

The technical requirement for the system is economic and it does not use any other additional Hardware and software.

➢ **OPERATIONAL Feasibility:**

OPERATIONAL FEASIBILITY For a moment that technical and economic resources are both judged adequate. The systems analyst must still consider the operational feasibility of the requested project. Operational feasibility is dependent on human resources available for the project and projecting whether the system will operate and used once it's installed. If users are virtually wed to the present system see on problems with it, and generally are not involved in requesting a new system, resistance to implementing the new system will be strong.

The system working is quite easy to use and learn due to its simple but attractive interface. User requires no special training for operating the system.

4.2 Features of our System

Login/Register

The login is where users will use their account personal details (username and password) to login into their accounts. New users won't login unless Registration is completed.

Home Page

The first page after login/registration is the prayers page; the five daily prayers are shown accordingly and you will be able to select the prayers you want to be evaluated for.

Quran

This feature contains the Audio content of the Holy Quran with its surah, along with its appropriate translations in different world languages.

Nearby Mosques

As the name implies we can have a notion of what this does. With user opening his/her mobile location all the nearby mosques can be located with their names and exact location, they can as well be a tracked using Google map directing you to the exact location
Of the desired mosque. Nearest mosques locator using Google Map Services API, Places API library. This also:

Provides mosque locations for a maximum of 45 kilo meters radius.
- Also provides masjid's name.
- Also shows the paths going to the mosque by Google map.
- Finds Mosques for your current location by entering radius.
- Locates mosque for any point on the map you click, for specified radius in meters.
This will require location and internet permission.

99 Names of Allah
You can read all the beautiful 99 Names of Allah one by one

Prayer, Call to Prayer & Evaluate Prayer

The five daily prayers performed by Muslims are central to the practice of Islam. After performing ablutions, a physical preparation in which such parts of the body as the face, arms and feet are washed, the prayer begins and
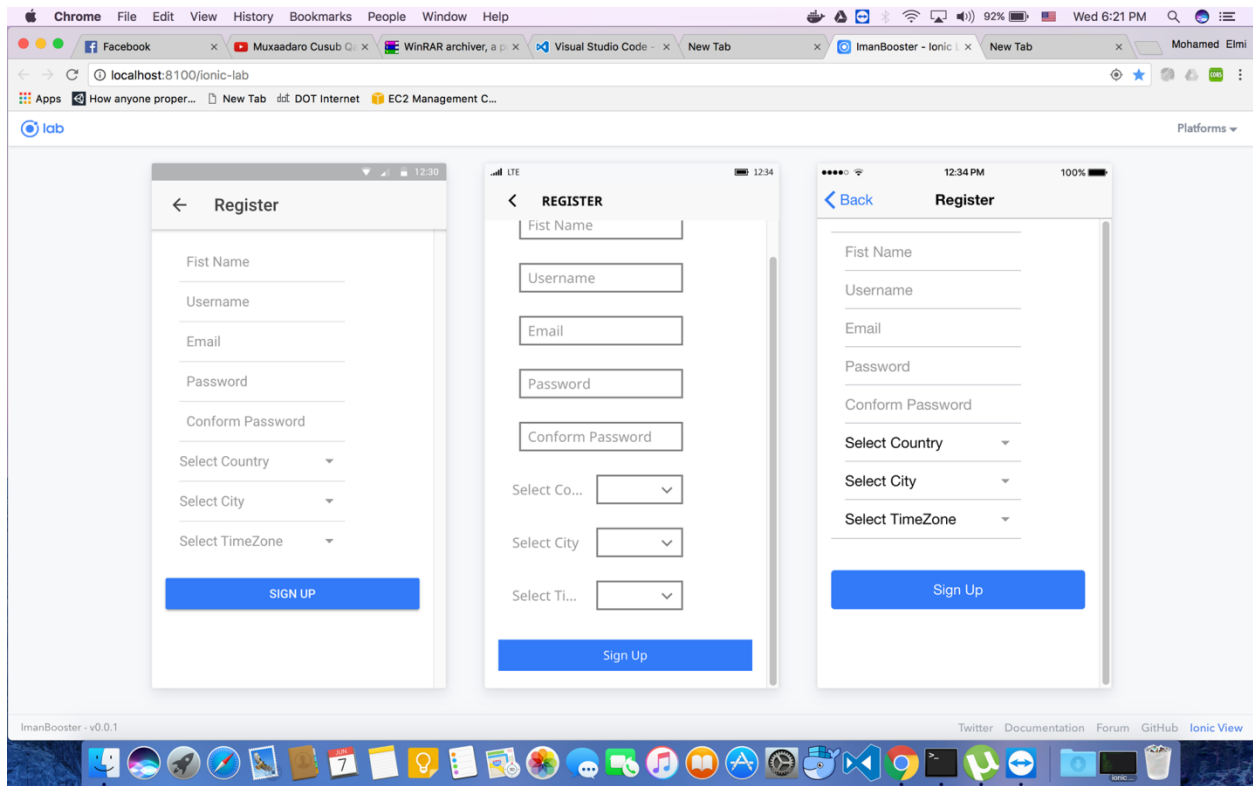
includes set movements and recitations from the Qur'an spoken in the original Arabic. One cycle of prayer is called a rakah, and varying numbers of rakah are performed for each of the prayer times. Prayer involves body, mind, and soul in an act of remembrance and surrender amidst the business of every day affairs. It is a few minutes apart from the concerns of the day that can infuse other activities with a sense of peace and purpose. Jews pray standing; Christians pray kneeling whereas Islamic prayer covers these positions as well as prostration. As for the congregational setting of prayer, Muslims stand in line shoulder to shoulder which symbolizes the equality of all believers. The timing of the prayers is calculated according to the movement of the sun: for example, the noon prayer time begins when the sun has just passed its zenith at one's location. Therefore, it changes with seasons according to where one is in the world. Thus, there is not even a single moment without a prayer being made throughout the world. To remind people of the prayer times, the call to prayer (adhan), is recited in Arabic aired from the minaret. This is done by the muezzin who is chosen for the task based on recitation skills and good character. The very first muezzin was Bilal, an Ethiopian Black Muslim, known for his beautiful voice.
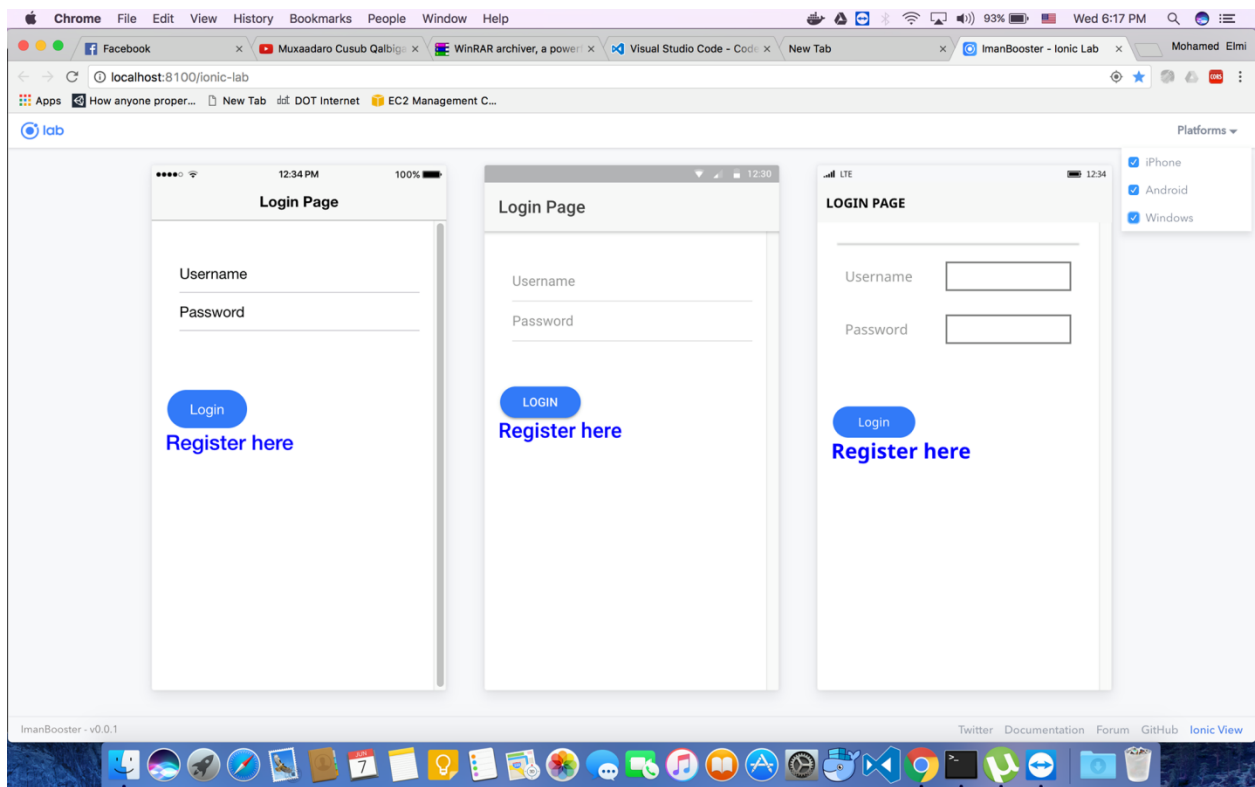
Our primary goal of this software is the evaluation of prayers which is this feature, having selected the prayers you want to be reminded for this part helps generate all the necessary evaluations needed.
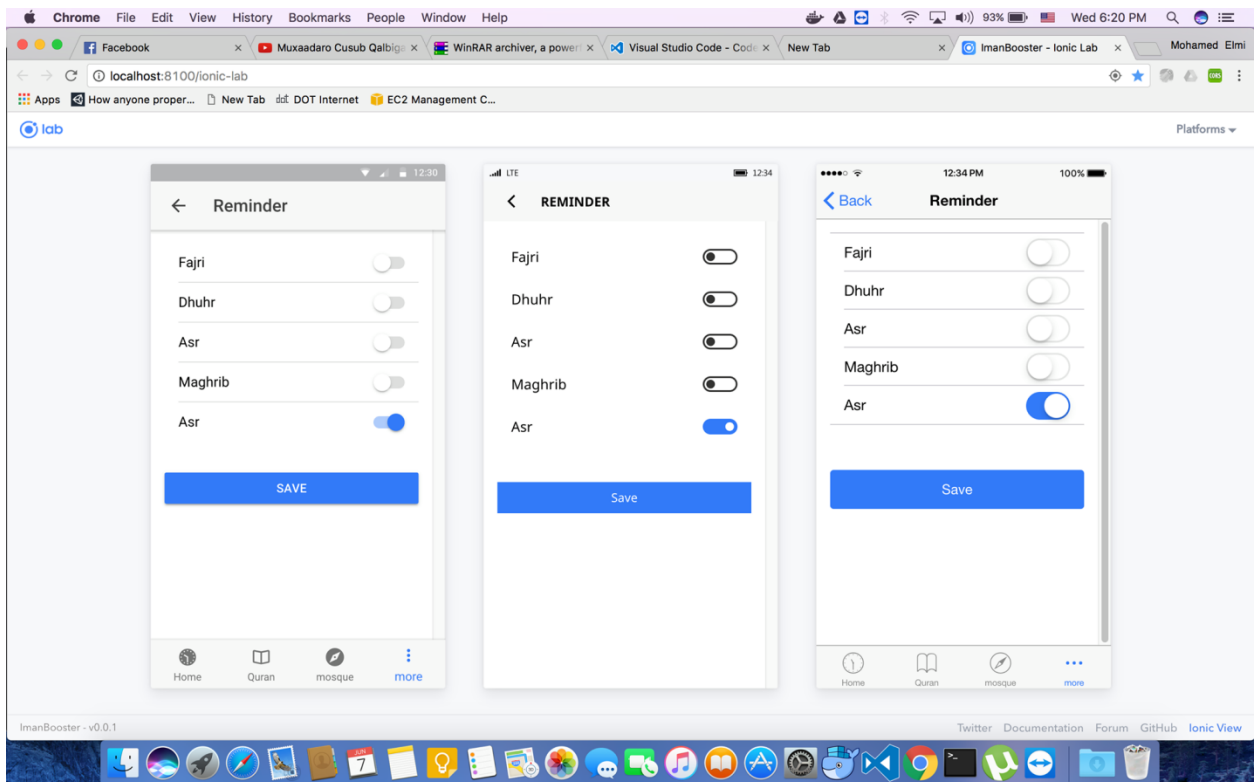
Chapter 5

Diagrams & Interfaces
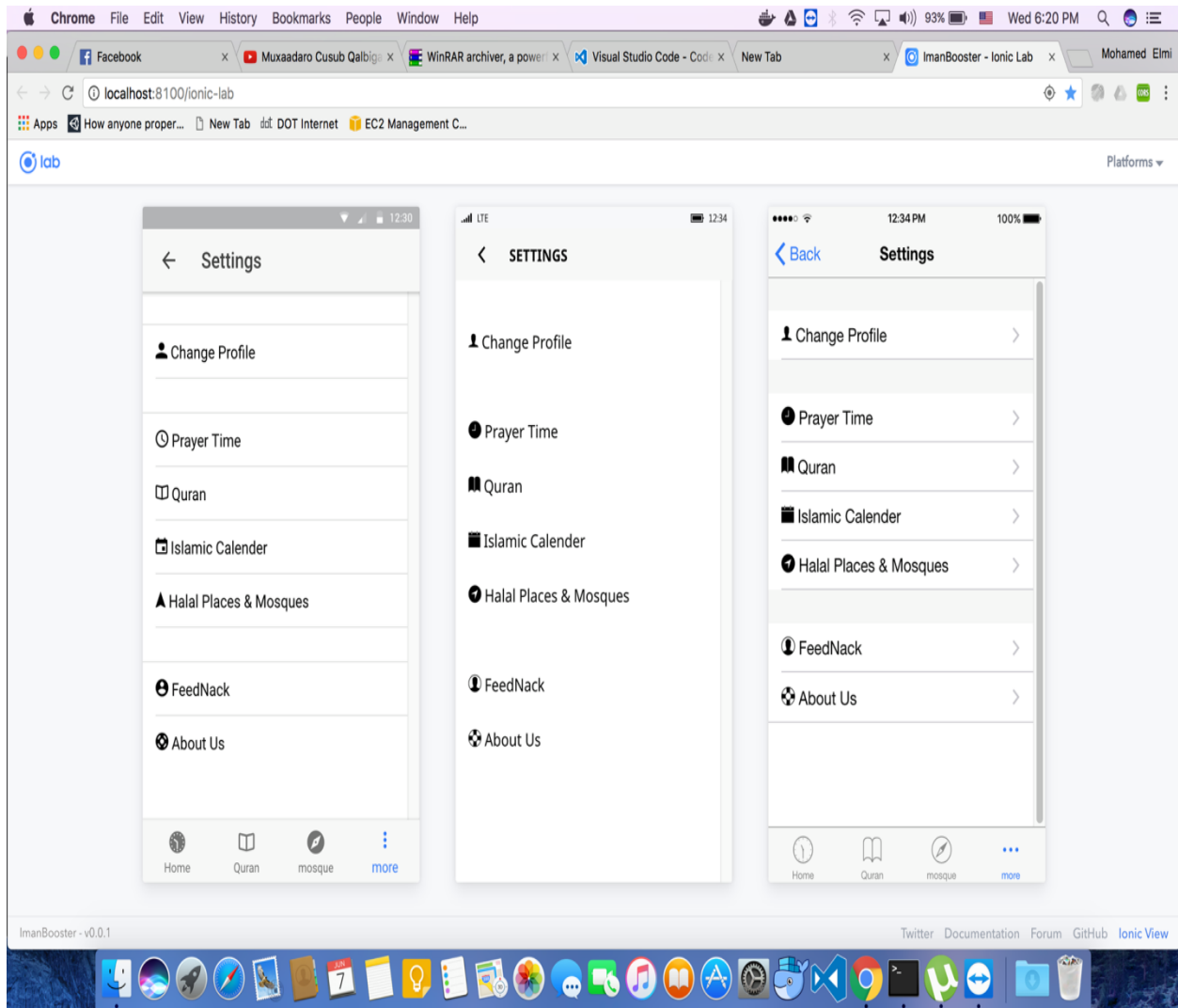

The Registration part of all the systems
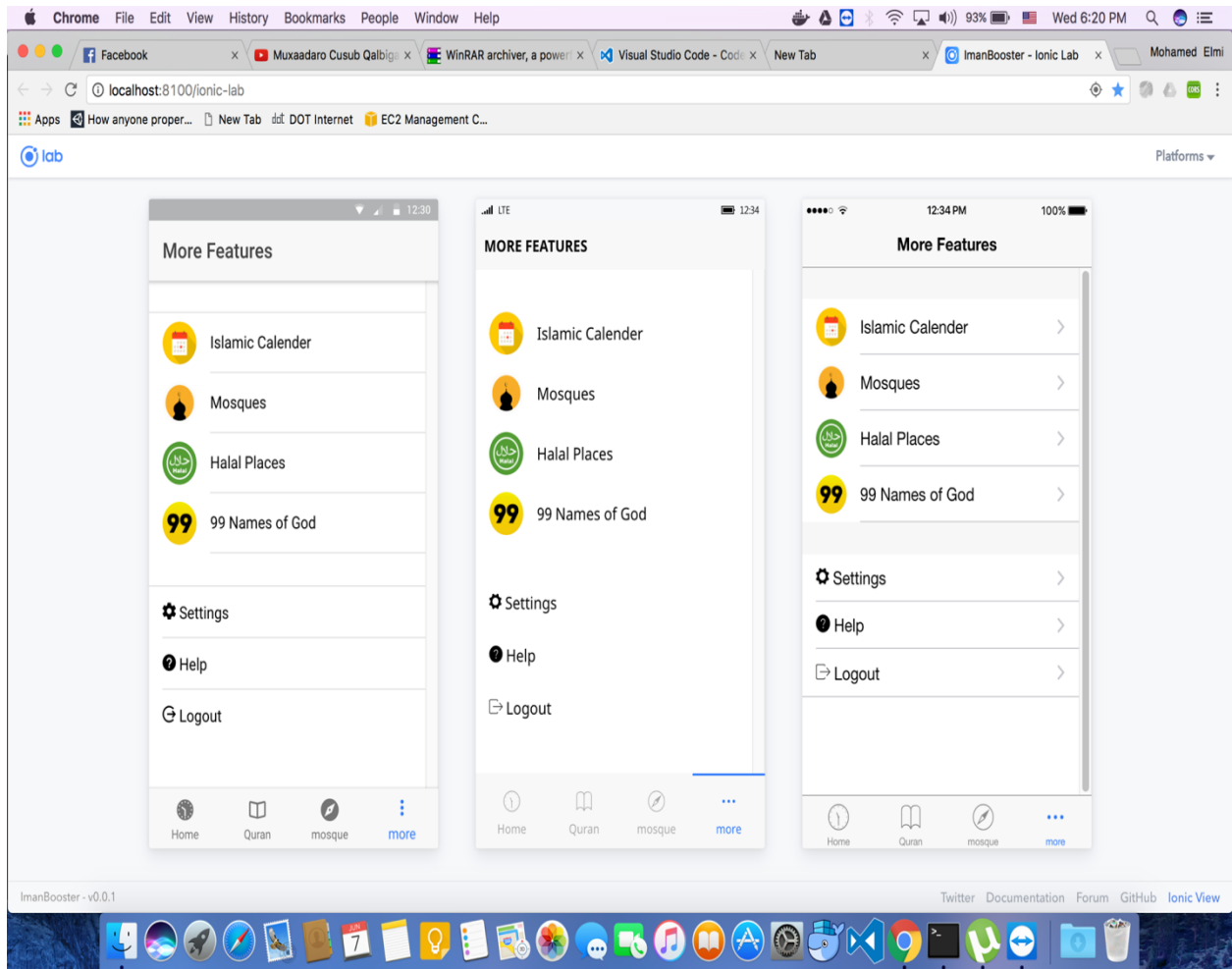
The Login Part of all the systems
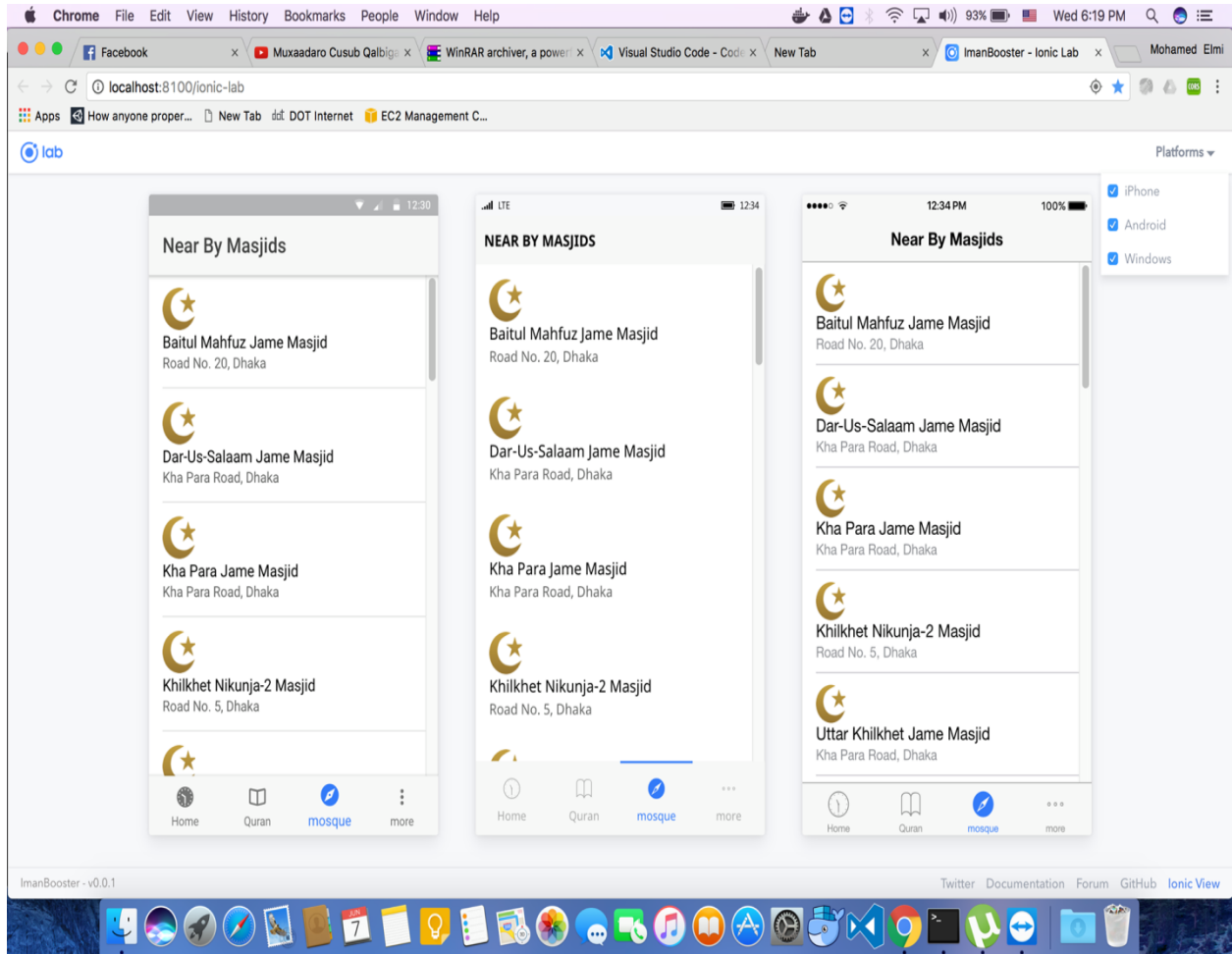
The Homepage along with the selected prayers

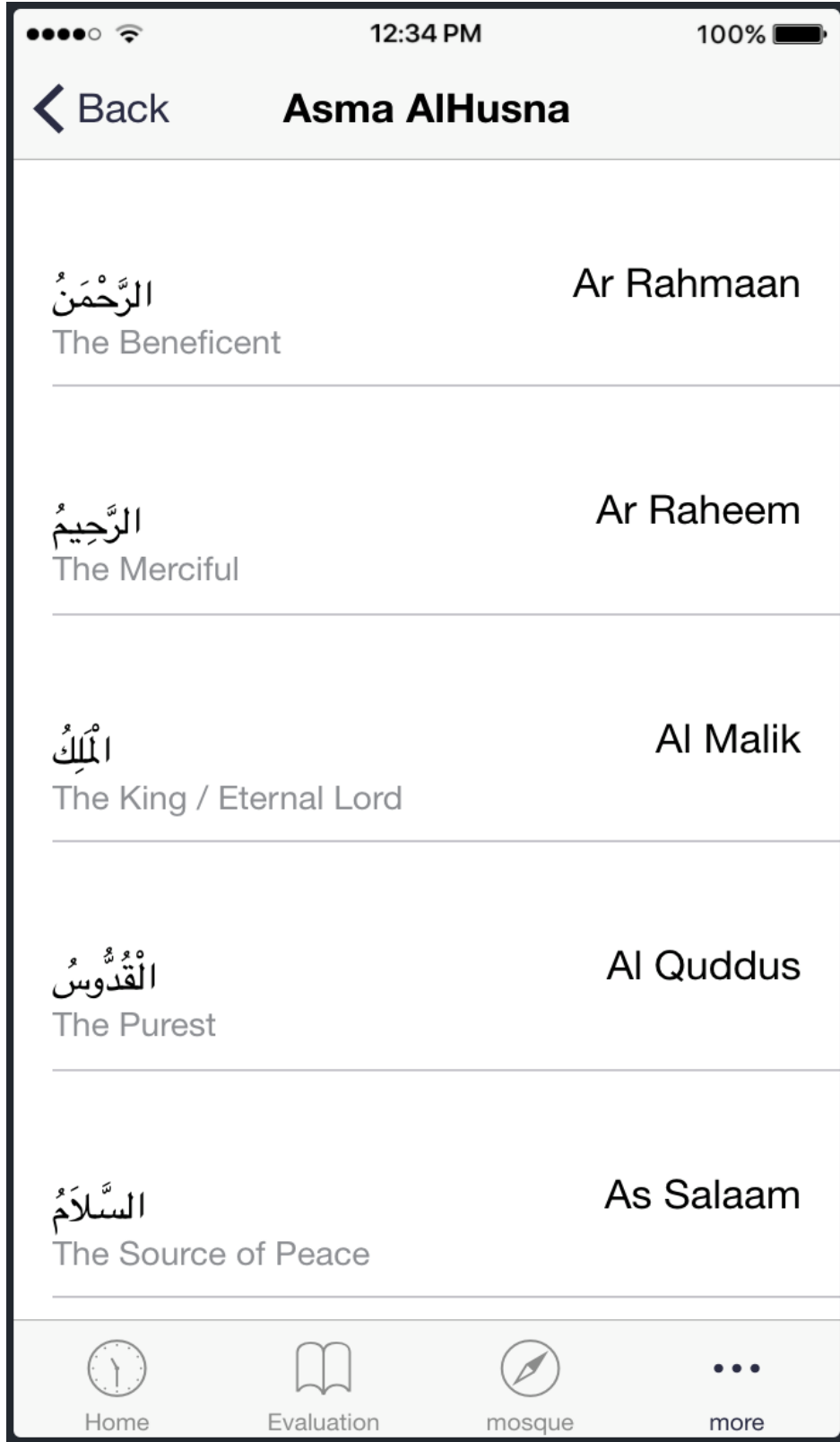The settings part of all the system

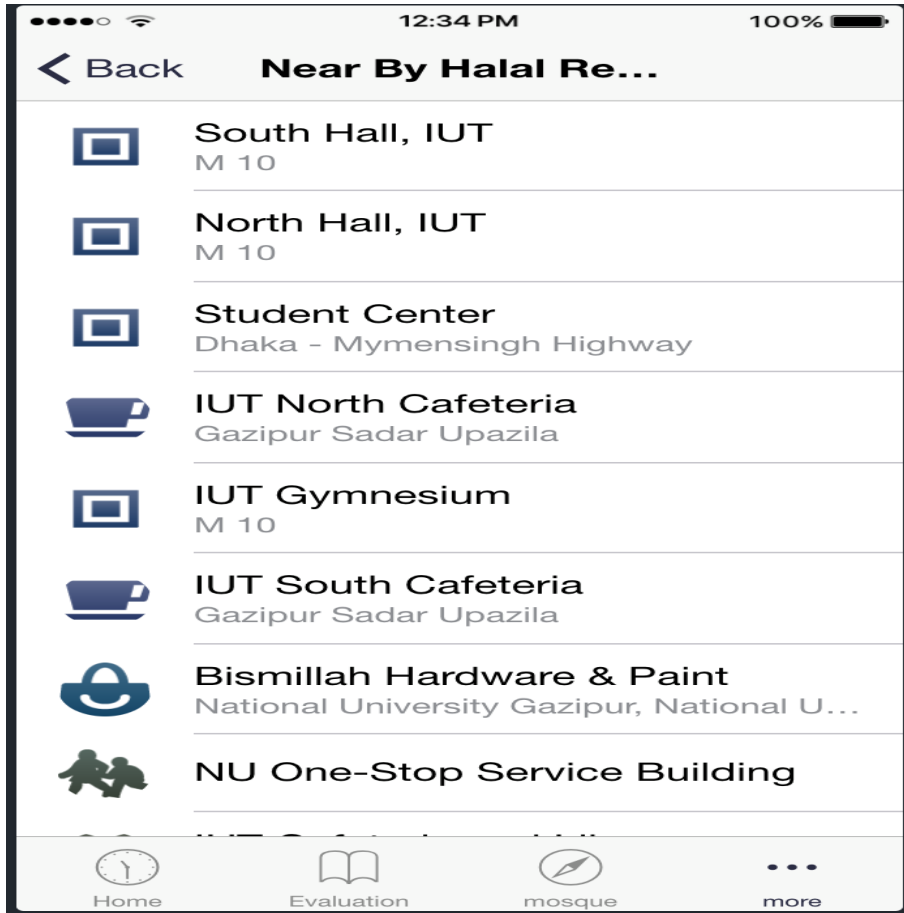Other features in the system

The nearby mosques with their names

The Evaluation of prayers performed.

| الرَّحْمَنُ | Ar Rahmaan |
| The Beneficent | |

| الرَّحِيمُ | Ar Raheem |
| The Merciful | |

| الْمَلِكُ | Al Malik |
| The King / Eternal Lord | |

| الْقُدُّوسُ | Al Quddus |
| The Purest | |

| السَّلاَمُ | As Salaam |
| The Source of Peace | |

Home   Evaluation   mosque   more

The Beautiful 99 Names of Allah .

The good halal places

Chapter 6

6.1 System Design and Implementation

The tools and technologies used during the development and implementation of our project include:

SOFTWARE USED

Software's can be defined as programs which run on our computer .it act as petrol in the vehicle. It provides the relationship between the human and a computer. It is very important to run software to function the computer. Various software's are needed in this project for its development.

HARDWARE USED

In hardware requirement we require all those components which will provide us the platform for the development of the project. The minimum hardware required for the development of this project is as follows:

Processor: 2.31 GHz
Memory: 2GB
Disk: 250GB

These all are the minimum hardware requirement required for our project. We want to make our project to be used in any. Type of computer therefore we have taken minimum configuration to a large extent 2 MB ram is used so that we can execute our project in a least possible RAM.5 GB hard disk is used because project takes less space to be executed or stored. Therefore minimum hard disk is used. Others enhancements are according to the needs.

6.2 Implementation

Programming Language, Scripting Languages And Frameworks used:

Backend (Restful Backend API)
- Nodejs
- Express js

Database
- MongoDb

FrontEnd (Hybrid Application)

- IONIC 2
- TypeScript
- Angular 2
- Bootstrap 4
- Vanilla Javascript
- SCSS

Software tools Used:

- **Visual Studio**
- Chrome Browser
- Photoshop
- Sublime

Platform Used:

Windows 8
Ubuntu 16.04
Mac OS X 10.13