

Online Tenant Verification System

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This Report is presented in Partial Fulfillment of the Requirement for the
Degree of Bachelor of Science in Computer Science and Engineering

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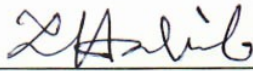
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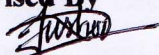
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I hereby declare that. This project has been done by me under the supervisor of **Raja Tariqul Hasan Tusher, Senior Lecturer, Department of CSE Daffodil International University**, I also declare that, neither this project nor any part of this project has been submitted elsewhere for Awards of any degree or diploma.

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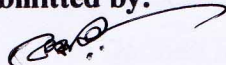
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Finally, I must acknowledge with due respect the constant support and patients of my parents.

ABSTRACT

In this day online system make people life more easy and comfortable. And so it is important to make a police verification system in online. There have been done many researches in Bangladesh I find today's police verification system is in traditional system and it has many Limitations and police can not verify easily it's also take a long time. On the other hand, the owner and the renter fell many harassments on it. To solve all those problems, it's very important to make police verification system.in online. So I have made an online police verification Android application system. In my Android application online police verification system, the owner and the renter do not need to go to the police station. If they have android phone they can download this app from internet and can install in their mobile phone. After installation they need to create an account and they need to select his user type, and then, they need to feel their registration from with their real information and finally send it to their nearest police station. When police will get renter information, police analysis all the information and if all of those information will be real then verified.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

An interactive Android based mobile application “Online police verification system” can be define as an online Police, Homeowner and Renter portal. Where All the information of a Home owner and the renter are collected by the nearest police station. We know all the big city or town like Dhaka, Chittagong, Rangpur and so many are most populated city in Bangladesh. People are come there from all over the country site for their livelihood and so many reason. So people need to stay and as a result they need to rent home or flat. But for the security reason they need to give their information to the police station and the owner of the home or flats. But unfortunately we do not have a good verification system to verify the renter and the owner identity easily.

To verify the owners and the renter identity is very important because, sometime renter rent a home or flat and they do anti-social activities and which are very dangerous and threatening to the society sometimes it causes great damage to the society and to the country. If they occur this type of danger police cannot verify the identity of the terrorist because police don't have any kinds of documents and information about the renter or home owner who had involved that antisocial or terrorist activities. To solve all of those problems online police verification system is a must. The online police verification system is an android application system, police, renter and home owner can use it very easily. If they have an android if they have an Android OS device they can download this app from internet and just create an account and fill the rental or owner verification form and they can easily send all of their information to the nearest police station. when police get all of their information they should have analyzed the information and if they find all the information of the renters or owner is real they verified them. And also all the information automatically become save on online database.

1.2 Motivation

In the modern era, I believe that, using technology, we can make our daily activities more beautiful and easy. We can keep ourselves even more secure safe and faster. I believe that online police verification system will be faster and easier Android based mobile application for the for the police home owner and renter. Here I am attempting to approximate the shared and supportive environment of a real life. Online police verification system android application become more helpful for all its user. The home owners and the renters do not need to go to the police station. They don't need to submit any hard copy document to the police station. All document will be collected on online database so police can find easily and fast any of the information, and also could see information from anywhere and anytime using this android application.

1.3 Aims and Objectives

To make police verification system easier, faster and perfect the online police verification system android application will Contribute a great role. To improve the quality and effectiveness of police verification system the online police verification system android application is a must. Since these days people are very busy, this apps will help them a lot. Because they are getting their services on hand. My goal and purpose is to make people's life easier and faster.

1.3.1 Aims of the project

The main aims of this project are as follows

- Exposure to an online verification platform
- Everybody can get benefits of information technology
- People can make their life more beautiful, easy and faster.
- Keep Document and information better organized and protected.
- Find the information in the fastest time and identify the people
- Stop all types of corruption

1.3.2 Objectives of the Project

The main objective of this project are as follows:

Table 1.1: Specific options for police, homeowner and renters

| Police | Homeowner | Renter |
|---|---|---|
| <ul style="list-style-type: none">• Can create, delete, update profile• Can views all information about homeowner and renter• Can verify homeowner and renter information• Find exact location using google maps• Can give feedback• Can give any Important Instructions• Can give emergency help | <ul style="list-style-type: none">• Can create and update profile• Can fill Verification form and submit to the nearest police station• Can get information about nearest police station• Can give feedback• Can see Renters information• Find exact location using google maps• Can get other emergency services• Can give any Important Instructions | <ul style="list-style-type: none">• Can create and update profile• Can fill Verification form and submit to the nearest police station• Can get information about nearest police station• Can give feedback• Find exact location using google maps• Can get other emergency services• Can give any Important Instructions |

1.4 Feasibility Study

A feasibility study is an analysis used in measuring the ability and likelihood to complete a project successfully including all relevant factors. It must account for factors that affect it such as economic, technological, legal and scheduling factors. Project managers use feasibility studies to determine potential positive and negative outcomes of a project before investing a considerable amount of time and money into it.

Five Areas of Project Feasibility

- Technical Feasibility
- Economic Feasibility
- Legal Feasibility
- Operational Feasibility
- Scheduling Feasibility

The feasibility of the system “Online Police Verification System” is viewed with the help of these five areas.

Technical Feasibility: This system development of online police verification system is proposed with uses simplest and easily available Technology. This system is based on Android Operating System like mobile interface, which is very easy to use. This system developed by programming language Java, PHP, MySQL for database and XML for design.

Economic Feasibility: This assessment typically involves a cost/ benefits analysis of the project, helping organizations determine the viability, cost, and benefits associated with a project before financial resources are allocated. It also serves as an independent project assessment and enhances project credibility—helping decision makers determine the positive economic benefits to the organization that the proposed project will provide. Using this android application police, Homeowner and Renter both can save money.

Legal Feasibility: This assessment investigates whether any aspect of the proposed project conflicts with legal requirements like zoning laws, data protection acts, or social media laws. Let's say an organization wants to construct a new office building in a specific location. A feasibility study might reveal the organization's ideal location isn't zoned for that type of business. That organization has just saved considerable time and effort by learning that their project was not feasible right from the beginning. For this Android application have legal feasibility.

Operational Feasibility: This assessment involves undertaking a study to analyze and determine whether and how well the organization's needs can be met by completing the project. Operational feasibility studies also analyze how a project plan satisfies the

requirements identified in the requirements analysis phase of system development and this online police verification system android application has all the laws of operational feasibility.

Scheduling Feasibility: This assessment is the most important for project success, after all, a project will fail if not completed on time. In scheduling feasibility, an organization estimates how much time the project will take to complete and this online police verification system android application has all the laws of operational feasibility.

1.5 Expected Outcome

To make police verification system easy, faster and more secure online police verification system is a must. The online police verification system is an android application system, police, renter and home owner can use it very easily. If they have an android if they have an Android OS device they can download this app from internet and just create an account and fill the rental or owner verification form and they can easily send all of their information to the nearest police station. when police get all of their information they should have analyzed the information and if they find all the information of the renters or owner is real they verified them. And also all the information automatically become save on online database.

1.6 Report Layout

Report layout describe a summary of all the chapter. A brief summary of all chapters is given below.

- **Chapter 1:** To describe an introduction of the online police verification system, Motivation. Aims and Objectives, Feasibility study, Expected outcome and the Report layout.
- **Chapter 2:** Describe the background related work competitive, All Challenges of the Online police verification system.
- **Chapter 3:** Describes the Android Studio, XAMPP, System requirements, Visual Studio, System requirements, Sublime Text.
- **Chapter 4:** Describes the Block diagram, Description of application, Use case modelling and description, System architecture, E-R diagram and description.
- **Chapter 5:** Describe the implementation of FROND-END design, BACK-END design, The Data table structure, Data type architecture, MySQL table structure of database, Functional Testing, Testing methodology, Unit test, Compatibility test and result.
- **Chapter 6:** Describes the conclusion and goal, Describes the limitation and the future scope.

CHAPTER 2

BACKGROUND

2.1 Introduction

We can see all the big city or town like Dhaka, Chittagong, Rangpur and so many are most colonized city in Bangladesh. People are come there from all over the country site for their livelihood and so many causes. So those people need to stay there and as a result peoples need to rent home or flat. They need to give their information to the police station and the owner of the home or flats for the security reason. But tactlessly we do not have a good police verification system to verify the renter and the owner identity easily and keep all their documents on online database serve. To verify the owners and the renter identity is very important because, sometime renter rent a home or flat and they do anti-social activities and which are very dangerous and threatening to the society sometimes it causes great damage to the society and to the country. If they occur this type of danger police cannot verify the identity of the terrorist because police don't have any kinds of documents and information about the renter or home owner who had involved that antisocial or terrorist activities. On many countries use online police verification system and they get benefit on it. So it is very necessary to use online police verification android application in Bangladesh.

2.2 Related works

In this section we discussed the related and recent project works

Online Police Clearance Certificate: It's an web base online verification system. Police Clearance Certificate certifies an individual as free from any criminal or anti-social activities. Naturally, Police Clearance Certificate is needed for going abroad or for joining any important Govt. job. The citizens of Dhaka have to collect their police clearance certificate from the DMP Headquarters located at Ramna. All these certificates are attested in English from the Ministry of Foreign Affairs.

How to get a Police Clearance Certificate: You have to maintain the following procedure if you want to get a Police Clearance Certificate. Submit an application on a plain paper in English/Bangla to The Honorable Police Commissioner. Attach the photocopy of your passport attested by a Class-1 Gazetted Officer. If required by the authority, you have to submit your main passport. Usually 2 addresses are mentioned in a passport; one is the present address and other is the permanent address; one of these addresses must be in Dhaka; and the applicant must live in that address. If the address is changed for some reason, the applicant has to rectify the fact by the local administration and submit the attested copy of the passport with the correct address. Necessary Documents: The main copy of a Treasury bill worth tk500 has to be submitted in favor code no-1-2201-0001-2681 in any branches of Bangladesh Bank/ Sonali Bank.

In case of M.R.P., if the address is not mentioned in the passport, then the applicant must submit any legal identity card like birth Certificate etc. attested by a first class gazette officer. For Police Clearance Certificate for Spain, the applicant has to include additional 3 copies of attested p.p. photographs and appeal to the Secretary of Ministry of Home Affairs. For getting a Police Clearance Certificate an expatriate Bangladeshi has to appeal through his nominee in Bangladesh with the photocopy of his passport attested by the responsible officer of the Bangladesh Embassy/High Commission of the country where he/she lives. If the address mentioned in the passport is outside Dhaka, the applicant has to appeal to the Police Super of the respective district. When you submit all necessary documents to the office, they will give you a token with a serial number. You will get the Clearance Certificate within 7 days. Home minister Asaduzzaman Khan on Sunday said Bangladesh has moved one more step towards building digital Bangladesh with the inauguration of the online police clearance certificate service. "Service seekers will face no harassment while the process will ensure transparency and accountability," he said. The minister was addressing a programme marking the inauguration of the online police clearance certificate service of Bangladesh Police at Rajarbagh Police Lines in the capital. From now on, people, including expatriates, who want to go abroad can apply online for police clearance certificates browsing www.pcc.police.gov.bd <<http://www.pcc.police.gov.bd>> website. The scan copies of necessary documents and receipt of government fee will have to be submitted online. There is no possibility of

making any counterfeit copy of the police clearance certificate as anyone can check authentication of the certificate online. The online police clearance certificate service experimentally began in Comilla district on 20 November last year and Sylhet Metropolitan Police (SMP) from 1 January. From now on, an applicant can collect the certificate personally from the office of the respective police super at district level while from commissioner's office in metropolitan area. They also can get it delivered at doorstep by courier service paying charge.

2.3 Comparative Studio

Online police verification system is like with other police verification. But we can use it on the different field. Online police verification system is an android Base application. So it's very easy to use, user just download the application from online and then create an account and fill their verification form and send it to the nearest police station. User also can get the exact location of the police station and also can get fire services hotline, ambulance facilities and so many. User do not pay any payment for using this android application.

2.4 Scope of the Problem

As I consider that online police verification system will be fastest and easiest and best mobile application for police, homeowner and the renters but possibility of the problem for the users who use iOS and Microsoft operated mobile phone. So they are dispossessed to using the android application. For being internet based application people also need internet connection and android supported mobile phone to using this application. Responses to user's errors and undesired situation have been taken care of to ensure that the system works without halting and proper error handling codes are put with the codes.

2.5 Challenges

Work with new platforms, changing roles and developing its user's demands, need to take care to maintain effective social helpful across the internet is never easy.

2.5.1 What am I thinking?

The first challenge was faced after submitting the first under documentation of this project with our ideas about how we want to create an online police verification system. I'm getting data from database and the interaction with database was all teams how owner and renter submit their data to the nearest police station and how they find the nearest police station location and how they submit their information via their mobile phone. I also think which data is mandatory for police about homeowner and renter. I had claimed that most of the owner and renter face many of problems and harassment. There are existing many surveys that shows me the rate of Smartphones and simple phone and also some which shows and Android as the dominant operating system in the field of online police verification system, but I decided to run out local survey to have my own experience.

And for this reason to solve this problem I have got a decision I will solve this problem and finally I decide to make this Android base application online police verification system.

2.5.2 Young Researchers

I believe that this processes and the challenges I had faced, I have become and young engineer that i have learn and how to

- Think about it
- Research around the concept
- Have an idea
- Not need to be afraid to confess about being wrong and
- To do what its take to finish the job

2.5.3 Time

Become last but not least which can be even called my biggest high challenge in my work has been the factor of time as all of me is working full time and also studying beside it. To agree on appointment and meet up was one of the most challenging part of this job. As the project itself was a very interesting subject and it was fun to get the job done well but I learnt quite a lot from this process but be well structured and well intentional.

2.6 Summary

I have been described several related works in police verification system. From the above contents it is very clear that in this day it is very important and we necessary to use an online police verification system being more safe and easy to life. All the more and more research and project are being done in this area however people are trying to find out more easy process of police verification system.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Android Studio

An Android studio is the official integrated development environment (IDE) for google android working framework, built on built on JetBrains IntelliJ IDEA software and designed specifically for Android development. It is accessible for download on Windows, macOS and Linux based working frameworks. It is a substitution for the Eclipse Android Development Tools (ADT) as essential IDE for local Android application advancement. Android Studio was declared on May 16, 2013 at the Google I/O conference.

It was in early access see organize beginning from variant 0.1 in May 2013, at that point entered beta stage beginning from adaptation 0.8 which was discharged in June 2014. The principal stable form was discharged in December 2014, beginning from rendition 1.0. The present stable rendition is 3.0 discharged in October 2017. Android software development is the procedure by which new applications are made for the Android working framework. Applications are typically created in the Java programming dialect utilizing the Android Software Development Kit. ADT (Android Development Tools) is the product used to create android applications. It fundamentally encases Eclipse IDE, which is a multi-dialect Integrated advancement condition (IDE) containing a base workspace and an extensible module framework for tweaking the earth.

The most recent rendition accompanies ADT module preinstalled and packaged to the IDE. This is the manner by which the IDE looks like with the essential components checked. Application programming interface (API) determines how some product segments ought to communicate with each other. In most of the cases an API is a library that as a rule incorporates particular for schedules, information structures, question classes, and factors.

An API detail can take numerous structures, including an International Standard such as POSIX, seller documentation, the Microsoft Windows API, the libraries of a programming dialect, Standard Template Library in C++ or Java API. Google APIs can be downloaded

from Google Code, Google's website for engineer instruments, APIs and specialized assets. The Google Data API enable software engineers to make applications that read and compose information from Google administrations. Right now, these incorporate APIs for Google Apps, Google Analytics, Blogger, Google Base, Google Book Search, Google Calendar, Google Code, Search, Google Earth, Google Spreadsheets, Google Notebook, and Picasa Web Albums.

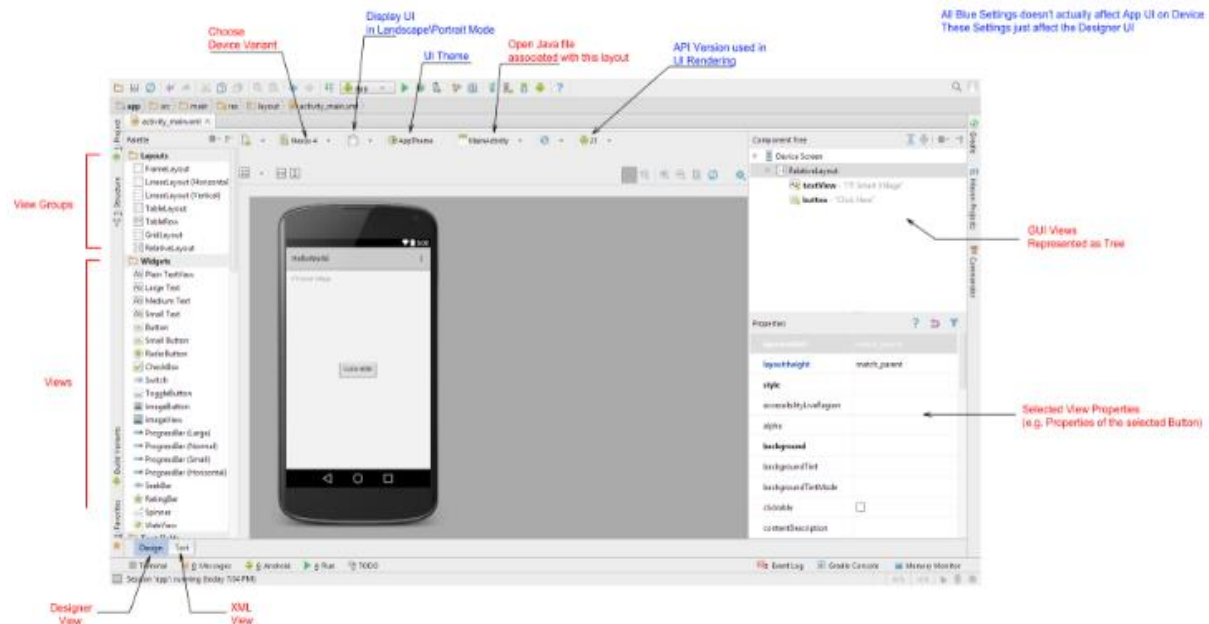


Figure:3.1 Android Studio Figure

SDK (Software Development Kit or "Dev kit") is normally an arrangement of programming improvement apparatuses that takes into account the production of uses for a specific programming bundle, programming structure, equipment stage, PC framework, computer game comfort, working framework, or comparable advancement stage.

It might be something as straight forward as an application programming interface (API) as a few records to interface to a specific programming dialect or incorporate modern equipment to speak with a specific inserted framework.

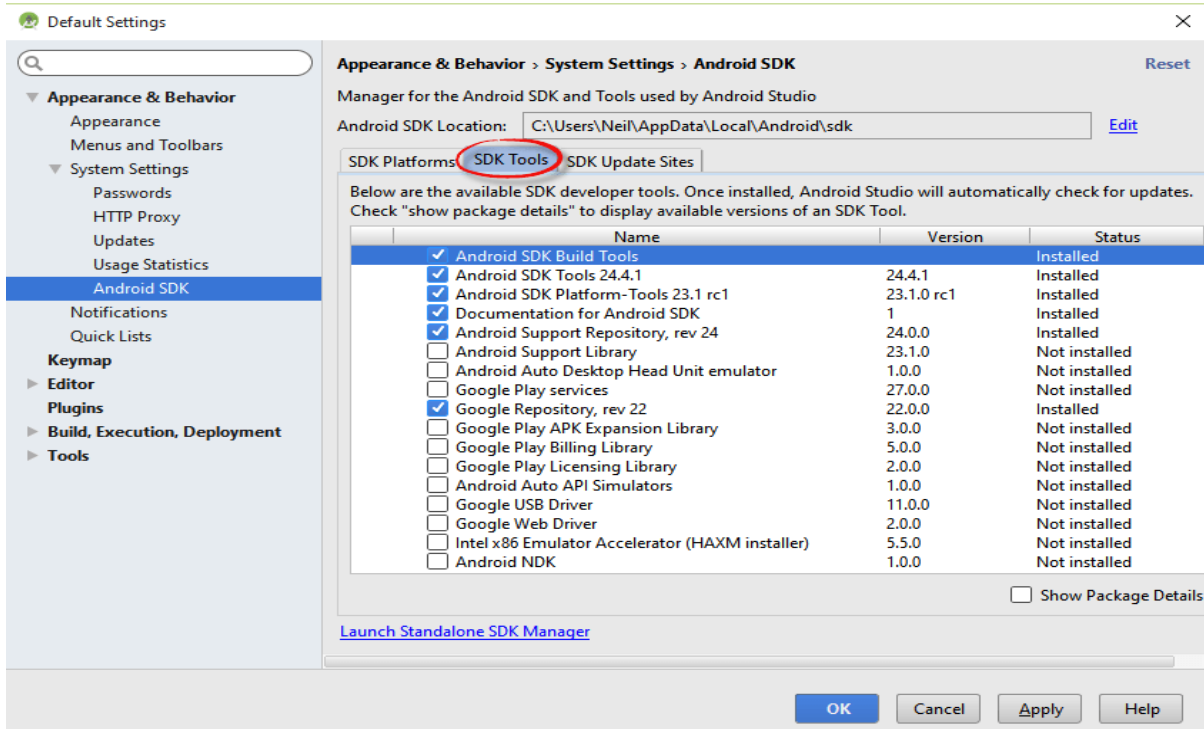


Figure: 3.2 SDK Manager of Android Studio

Basic instruments incorporate investigating helps and different utilities frequently displayed in a coordinated advancement condition (IDE).

In the most recent variant of ADT, the android SDK includes to the IDE consequently when you unfasten and stack the IDE.

SDK Manager empowers us to download Google APIs and utilize them in our code.

3.1.1 The System Requirement

Table: 3.1 Version 1.x.x

| Criterion | Description |
|-----------|-------------|
| | |

| | |
|-------------------|--|
| OS version | Mac OS X 10.8.5 or later Windows 7 or later GNOME or KDE or Ubuntu or Fedora or GNU/desktop Linux |
| Disk space | SDK emulator system images, and caches Minimum 512 MB disk space for Android Studio, at least 1.5 GB for Android |
| RAM | 3 GB RAM recommended and plus 4 GB for the Android Emulator. |
| Java version | Java Development Kit (JDK) 7 version |
| Screen resolution | 1280× 800 minimum screen resolution |

Table 3.2: Version 2.x.x

| Criterion | Description |
|-------------------|--|
| OS version | Mac OS X 10.9.5 or later Windows 7 or later GNOME or KDE desktop Linux |
| Disk space | SDK emulator system images, and caches Minimum 500 MB disk space for Android Studio, at least 1.5 GB for Android |
| RAM | 8 GB RAM recommended and plus 1 GB for the Android Emulator. |
| Java version | Java Development Kit (JDK) 8 version |
| Screen resolution | 1280× 720 minimum screen resolution |

Table 3.3: Version 3.x.x

| Criterion | Description |
|------------|--|
| OS version | Microsoft Windows 7/8/10 (32-bit or 64-bit) Mac OS X 10.10 (Yosemite) or higher, up to 10.13 (MAC OS High Sierra) GNOME or KDE desktop Linux (64 bit capable of running 32-bit applications)(GNU C Library (glibc) 2.19 +) |
| RAM | 3 GB RAM minimum, 8 GB RAM recommended; plus 1 GB for the Android Emulator |

| | |
|-------------------|--|
| Java version | Java Development Kit (JDK 8) |
| Screen resolution | 1280 * 720 minimum screen resolution |
| Disk Space | 2 GB of available disk space minimum, 4 GB recommended (500 MB for IDE + 1.5 GB for Android SDK and emulator system image) |

3.2 XAMPP

XAMPP is an open-source web server bundle that deals with different stages. It is really an acronym with X suggesting "cross" stage, A for Apache HTTP server, M for MySQL, P for PHP, and P for Perl. XAMPP was projected to help webpage designers, programmers, software engineers, and planners check and audit their work utilizing their PCs even without connotation with the web.

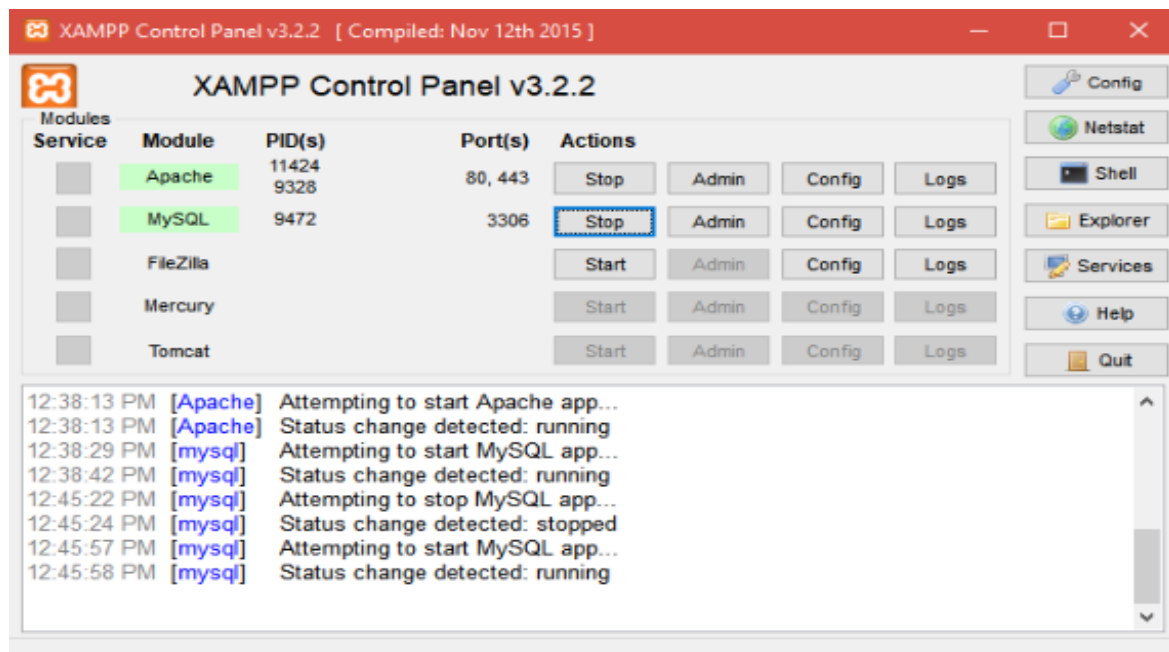


Figure: 3.3 Local Server

Along these lines, essentially XAMPP might be exploited to remain as pages for the web even without association with it. It can likewise be exploited to make and design with databases written in MySQL and furthermore SQLite. What's more, since XAMPP is planned as a cross-stage server bundle, it is accessible for an assortment of working frameworks and stages like Microsoft Windows Operating System, Mac OS X, Linux, and Solaris.

3.2.1 Usage

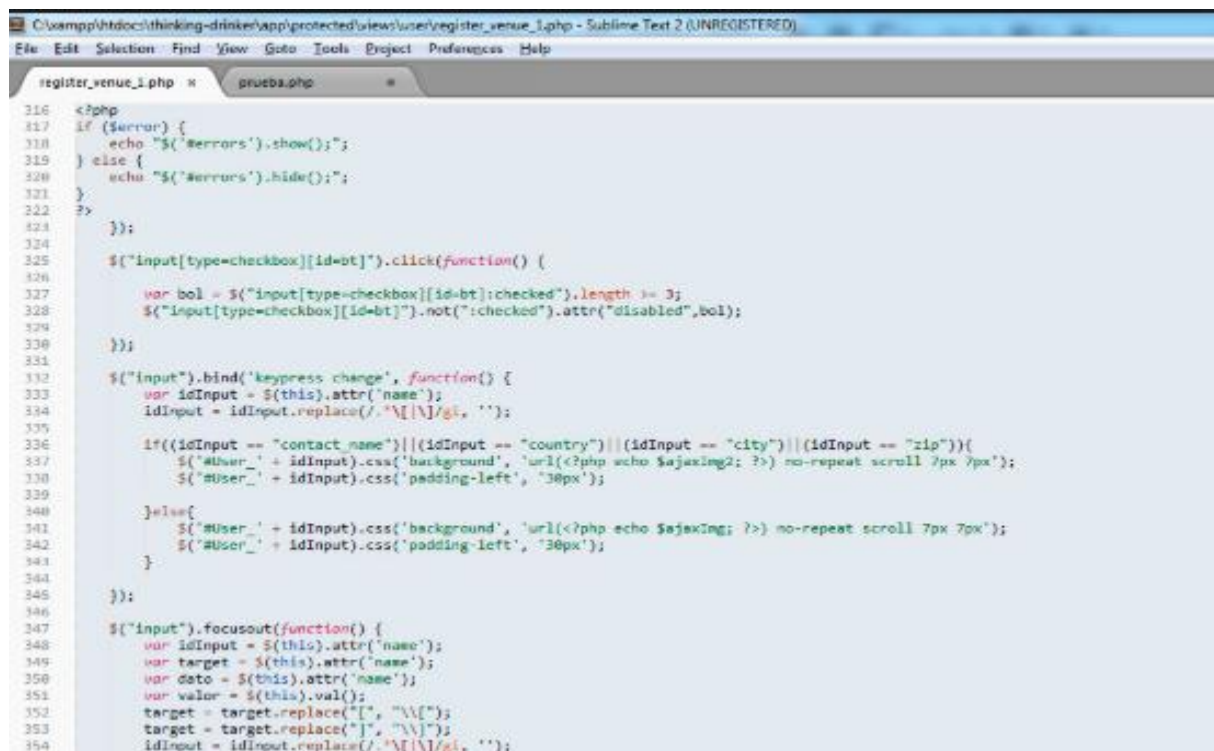
Formally, XAMPP's fashioners expected it for utilize just as a development gadget, to permit web specialists and software engineers to test their work alone PCs with no

appearance to the Internet. To make this as simple as could be predictable under the circumstances,

frequent critical security highlights are handicapped as a matter of course. XAMPP can serve pages on the World Wide Web. An astonishing device is given to watchword secure the most vital parts of the bundle.

3.3 Sublime Text

Sublime Text is an exclusive cross-stage source code manager with a Python application programming interface (API). It locally underpins numerous programming dialects and markup dialects, and capacities can be included by clients with modules, ordinarily group assembled and kept up under free-programming licenses.

The image shows a screenshot of the Sublime Text 2 (UNREGISTERED) editor. The title bar indicates the file path is C:\xampp\htdocs\thinking-drinker\app\protected\views\user\register_venue_1.php. The menu bar includes File, Edit, Selection, Find, View, Goto, Tools, Project, Preferences, and Help. The editor has two tabs open: register_venue_1.php and prueba.php. The register_venue_1.php tab is active, displaying PHP code with line numbers from 316 to 354. The code includes error handling, jQuery click and keypress events for form validation, and CSS background color changes based on input values. The code is as follows:

```
316 <?php
317 if ($error) {
318     echo "{$errors}.show();";
319 } else {
320     echo "{$errors}.hide();";
321 }
322 }
323 });
324
325 $("input[type=checkbox][id=bt]").click(function() {
326
327     var bol = $("input[type=checkbox][id=bt]:checked").length >= 3;
328     $("input[type=checkbox][id=bt]").not(":checked").attr("disabled",bol);
329
330 });
331
332 $("input").bind('keypress change', function() {
333     var idInput = $(this).attr('name');
334     idInput = idInput.replace(/.*/gi, '');
335
336     if((idInput == "contact_name") || (idInput == "country") || (idInput == "city") || (idInput == "zip")){
337         $('#User_' + idInput).css('background', 'url(<?php echo $ajaxing2; ?>) no-repeat scroll 7px 7px');
338         $('#User_' + idInput).css('padding-left', '30px');
339
340     }else{
341         $('#User_' + idInput).css('background', 'url(<?php echo $ajaxing; ?>) no-repeat scroll 7px 7px');
342         $('#User_' + idInput).css('padding-left', '30px');
343     }
344
345 });
346
347 $("input").focusout(function() {
348     var idInput = $(this).attr('name');
349     var target = $(this).attr('name');
350     var dato = $(this).attr('name');
351     var valor = $(this).val();
352     target = target.replace("[", "\\[");
353     target = target.replace("]", "\\]");
354     idInput = idInput.replace(/.*/gi, '');
```

Figure:3.4 View of Sublime Text

3.3.1 Features

The following is a list of features of sublime text is:

- "Command palette" utilizes versatile coordinating for speedy console summon of self-assertive charges
- Project-particular inclinations
- "Goto Anything" speedy route to records, symbols, or lines
- Auto save, macros and repeat the last action
- Extensive adaptability by means of JSON settings documents, including venture particular and stage particular settings
- Compatible with numerous dialect sentence structures from TextMate
- Cross-stage (Windows, macOS, and Linux) and Supportive Plugins for cross-stage.

CHAPTER 4

PROPOSED MODEL AND DESIGN

4.1 Block Diagram

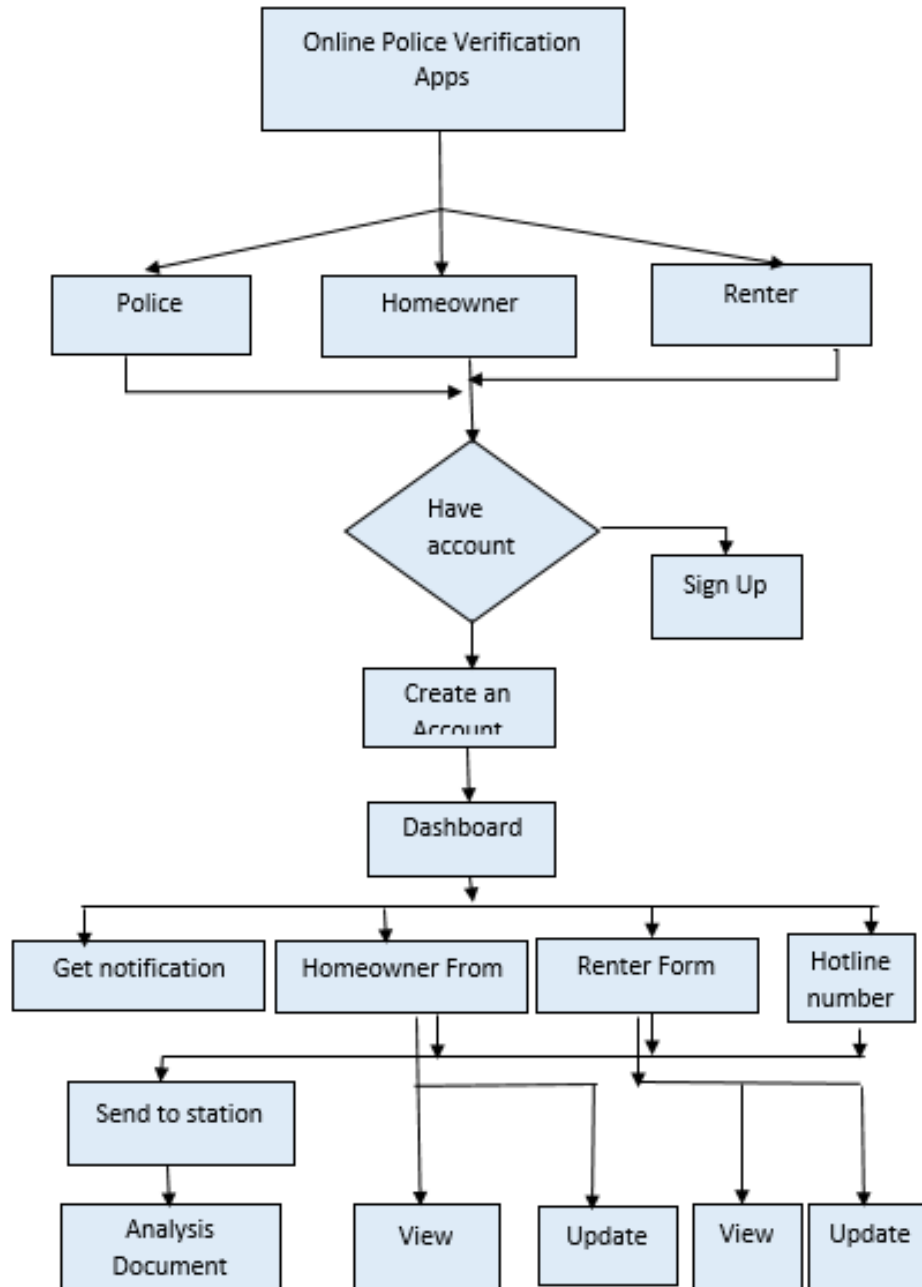


Figure 4.1: Block diagram

4.2 Description of Application

Create Account: If the user become new, they need to create an account.

Log In: Logging in is the process by which an individual user access to our application by identifying and authenticating themselves.

Sign Up: Sign up for an account and give some basic information about teachers or students. Which will be stored in database.

Profile: A short description of user's. They can update and delete their profile

Police: police can see all the user details can analysis all the data and youth he get everything will be fine police verified them.

Homeowner: owner can create an account, then they fill the verification form and send to the nearest police station also Gate the headlines of other social services. Homeowner can also see the renter documents.

Renter: If is new user of this online verification systems android applications then they fill the verification form and send to the nearest police station also Gate the headlines of other social services

Update: All the user can update their information, but can't delete their data permanently.

Services: Home owner and renter can get another social services from the government and the agencies

4.3 System Architecture

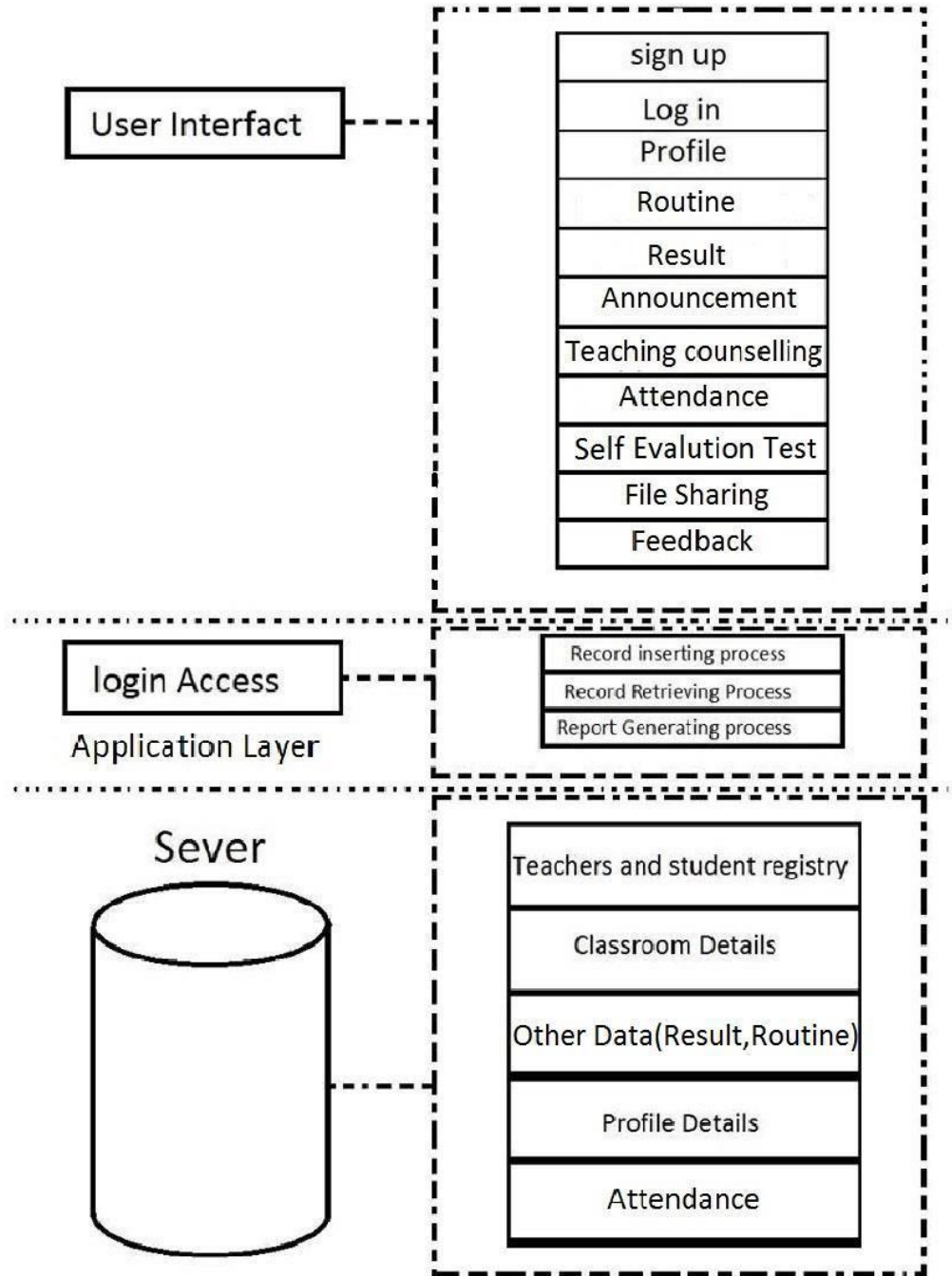


Figure 4.3: System Architecture.

CHAPTER 5

IMPLEMENTATION AND TESTING

It is obligatory to make it clear that this project was premeditated and developed utterly based on collecting information from existing systems, perceptions and make-believe scenarios. To prompt the readers of this report there are many developers who are still disagreeing about the core concept of dissimilar components of the android based police verification system. Their opinion is that we are trying to contrivance the new system.

5.1 Implementation of Front-End Design

The screenshots below show the main project view captured and image of what you see on your mobile screen and how to use this online police verification system Android application.

Splash Activity: When user open the app at first they can view a splash activity. It will help to bring data from the application database.

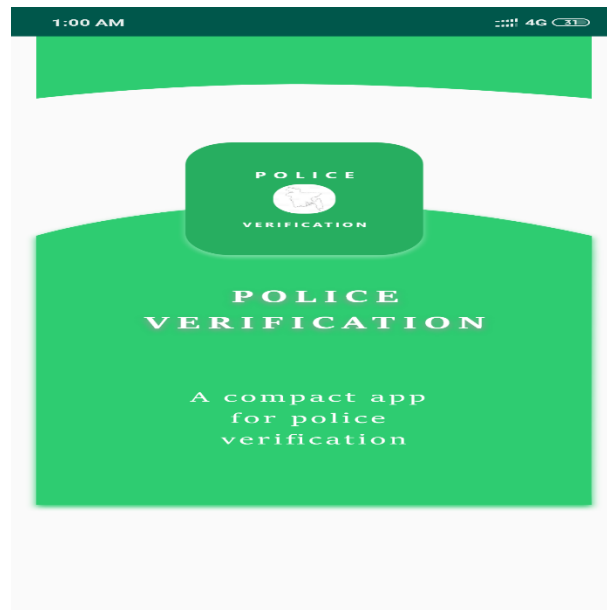


Figure 5.1: Online Police Verification Apps Splash Activity

Sign in Activity: In the police verification system there are two option are available

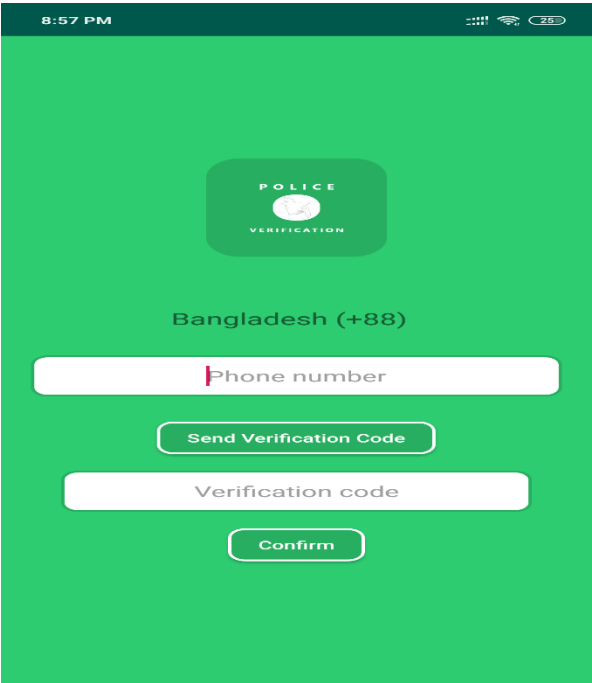
A screenshot of a mobile application interface for "Police Verification". The background is a solid green color. At the top, there is a status bar showing the time as 8:57 PM and battery level at 25%. Below the status bar, there is a dark green header with a white circular logo containing a police cap icon and the text "POLICE VERIFICATION". The main content area is green and contains the following elements: the text "Bangladesh (+88)" in white, a white input field with a red cursor and the placeholder text "Phone number", a green button with white text "Send Verification Code", another white input field with the placeholder text "Verification code", and a green button with white text "Confirm".

Figure 5.2: Sign in Activity

Sign Up: IF user already have and accounts then they can sign up

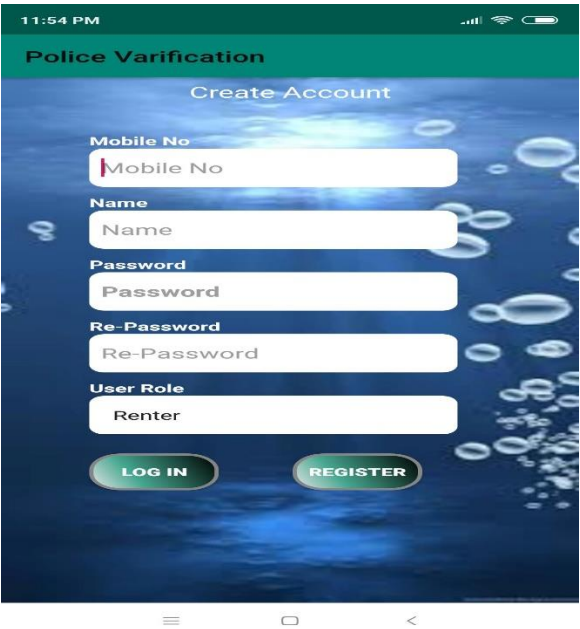
A screenshot of a mobile application interface for "Police Verification" showing the "Create Account" screen. The background is a dark blue gradient with a pattern of white bubbles. At the top, there is a status bar showing the time as 11:54 PM and battery level at 25%. Below the status bar, there is a dark green header with the text "Police Varification" (note the typo) and "Create Account" in white. The main content area is dark blue and contains the following elements: a white input field with a red cursor and the placeholder text "Mobile No", a white input field with the placeholder text "Name", a white input field with the placeholder text "Password", a white input field with the placeholder text "Re-Password", a white input field with the placeholder text "User Role", and a green button with white text "LOG IN" and a green button with white text "REGISTER".

Figure: 5.3 Sign Up Fields

Dashboard: Every User have their own profile dashboard

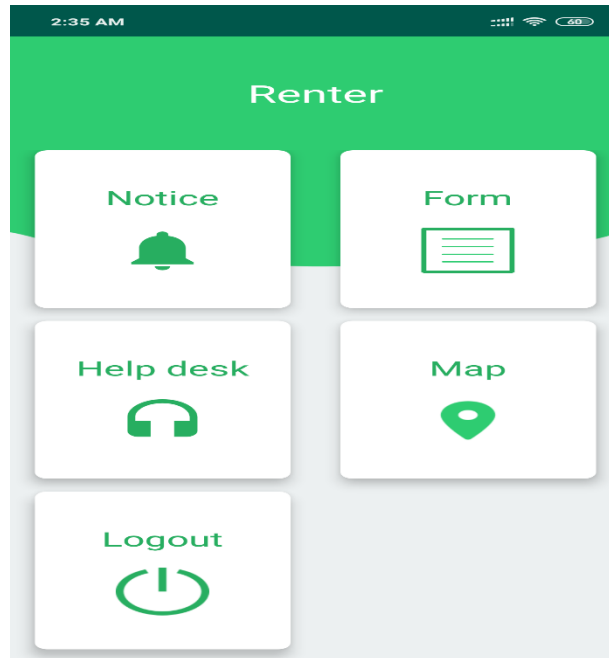


Figure 5.4 Dashboard Activity

Hotline and Location: If user need any kinds of emergency help they can get Emergency hotline number and can find the exact location of the services and of their own.

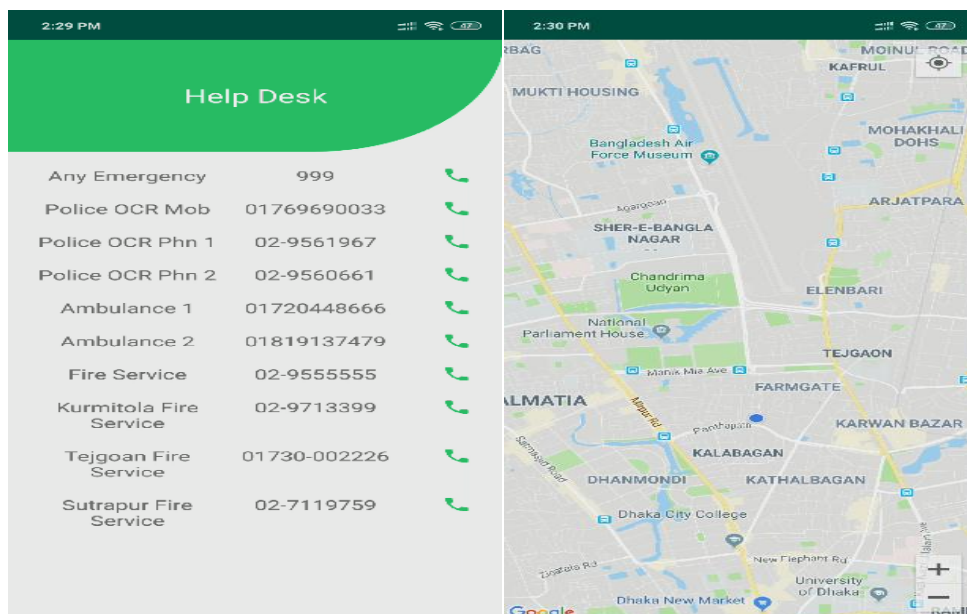


Figure 5.5 Hotline and Location Activity

Police Form: Police will fill the form when they register their police station first time

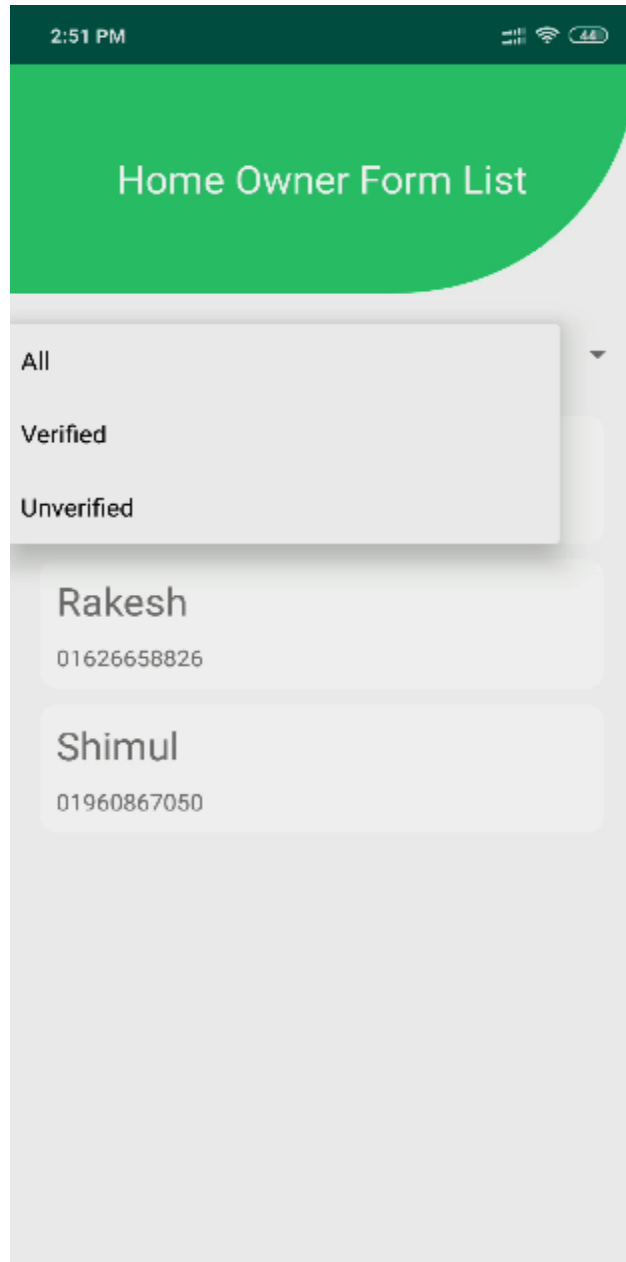


Figure 5.6 Police Form Activity

Homeowner and Renter form: To verified themselves they fill their verification form and send to the nearest police station

The image displays two side-by-side screenshots of a mobile application interface. The left screenshot, titled 'Home Owner Form', shows a form with fields for Name, Father's name, Mother Name, NID Card No, Occupation, Permanent Address, Present Address, and Emergency No. The right screenshot, titled 'Renter Form', shows a form with fields for Name, Father's name, Mother Name, NID Card No, Occupation, Permanent Address, Emergency No, and Phone Number. Both forms have a green header and a light gray background with green borders for the input fields.

Figure:5.7 Homeowner and Renter Form Activity

5.2 Implementation of Back-End Design

All The following design for the online police verification database is nominated to system application and database design is the process of producing a detailed data model of a database. This logical data model contains all the required logical and physical design choices and physical storage limitations needed to produce a design in a data definition language, which can then be used to create a database. A completely attributed data model contains detailed attributes for each entity. The term database design can be used to describe many different parts of the design of an overall database system. Predominantly, and most acceptably, it can be thought of as the logical design of the base data structures used to store the data.

However, the term database design could also be used to put on to the overall process of designing, not only just the base data structures, but also the forms and inquiries used as part of the overall database application within the database management system.

5.2.1 Data Table Name

The name of police verification database where all the document of its user and data store, the database table in here

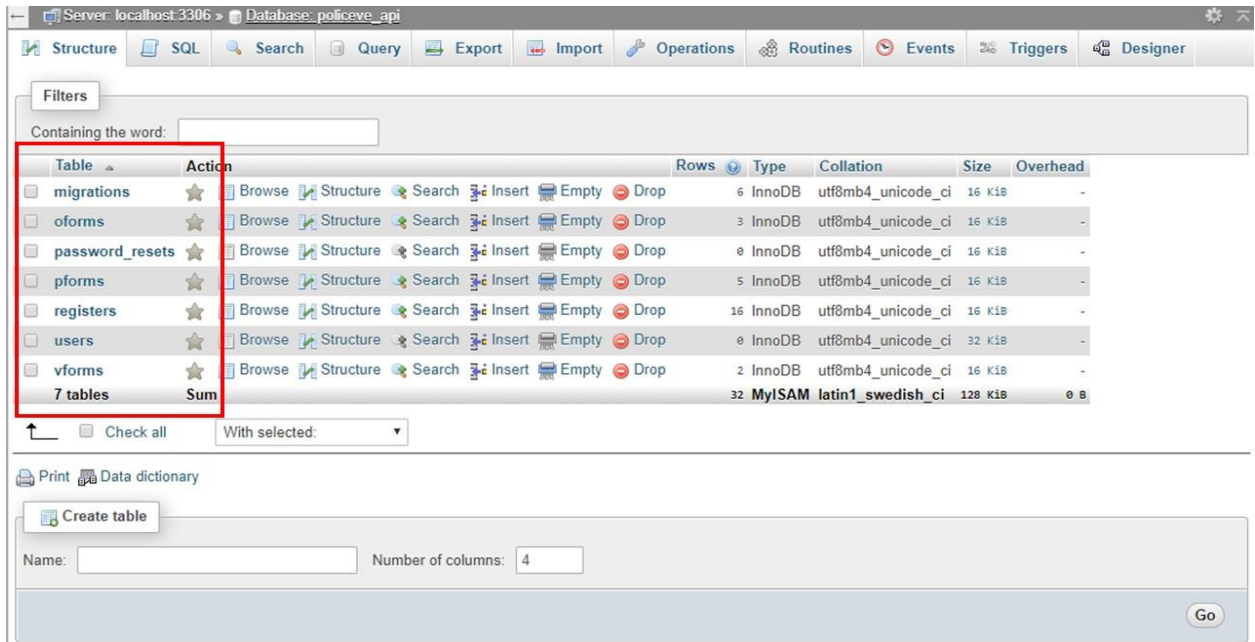


Figure 5.8 Database table Name

5.2.2 Data Type Architecture

Data architecture should neutrality set data standards for all its data systems as a vision or a model of the subsequent interactions between those data systems. Data integration, for example and should be dependent upon data architecture standards since data incorporation requires all data interactions between two or more data systems.

The following data types for its column and parameter declarations

- BOOLEAN
- VARCHAR (length)
- CHARACTER [CHAR [(length)]
- SMALLINT

- REAL
- NUMERIC
- DECIMAL
- INTEGER or INT
- TIMESTAMP
- DATE
- TIME
- FLOAT(p)
- BLOB [BINARY LARGE OBJECT [(length)]]
- DOUBLE PRECISION
- CLOB [CHARACTER LARGE OBJECT (length) or CHAR LARGE OBJECT (length)]

5.2.3 MySQL Database View

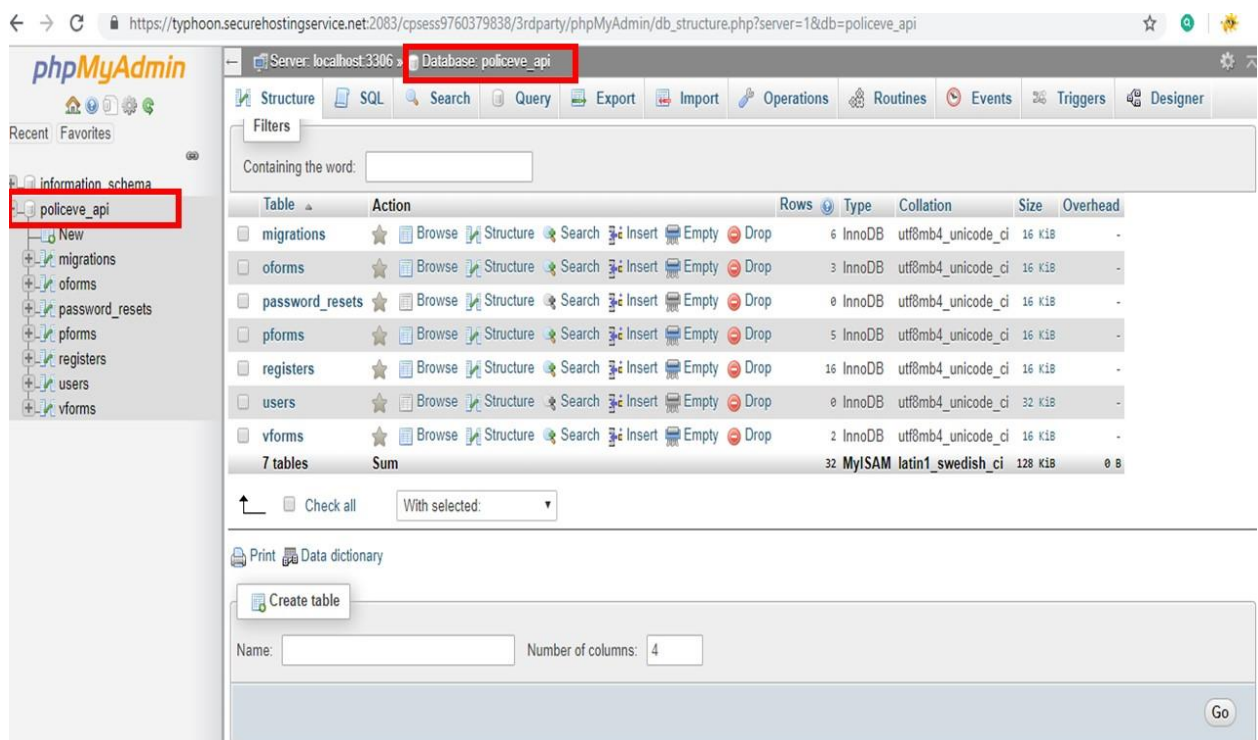
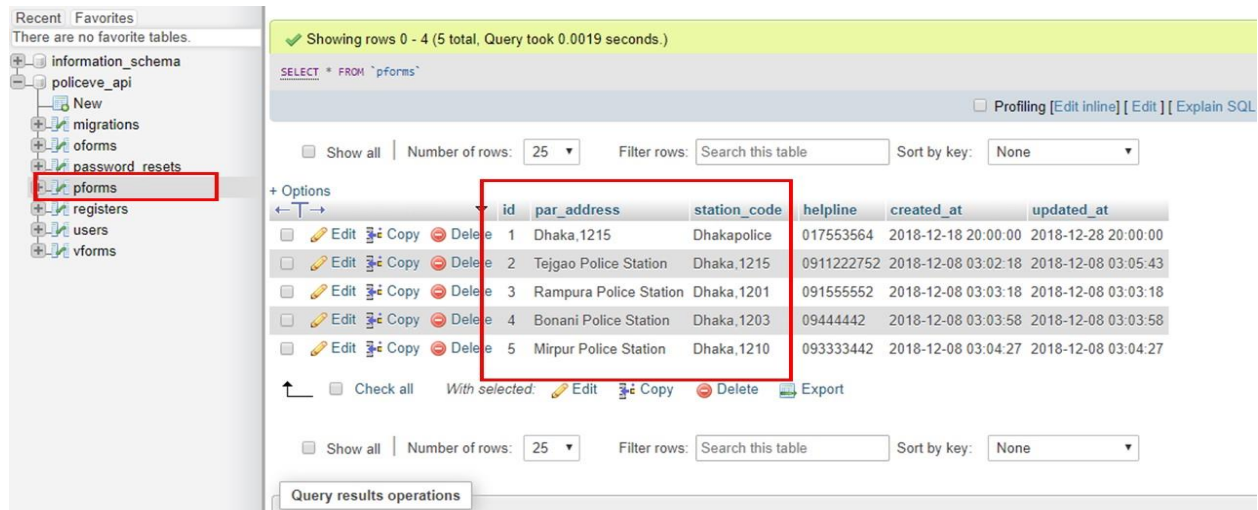


Figure 5.9 MySQL Database View from Admin penal

5.2.4 Database Table Structure

Here table of police information structure show below



Showing rows 0 - 4 (5 total, Query took 0.0019 seconds.)

```
SELECT * FROM `pforms`
```

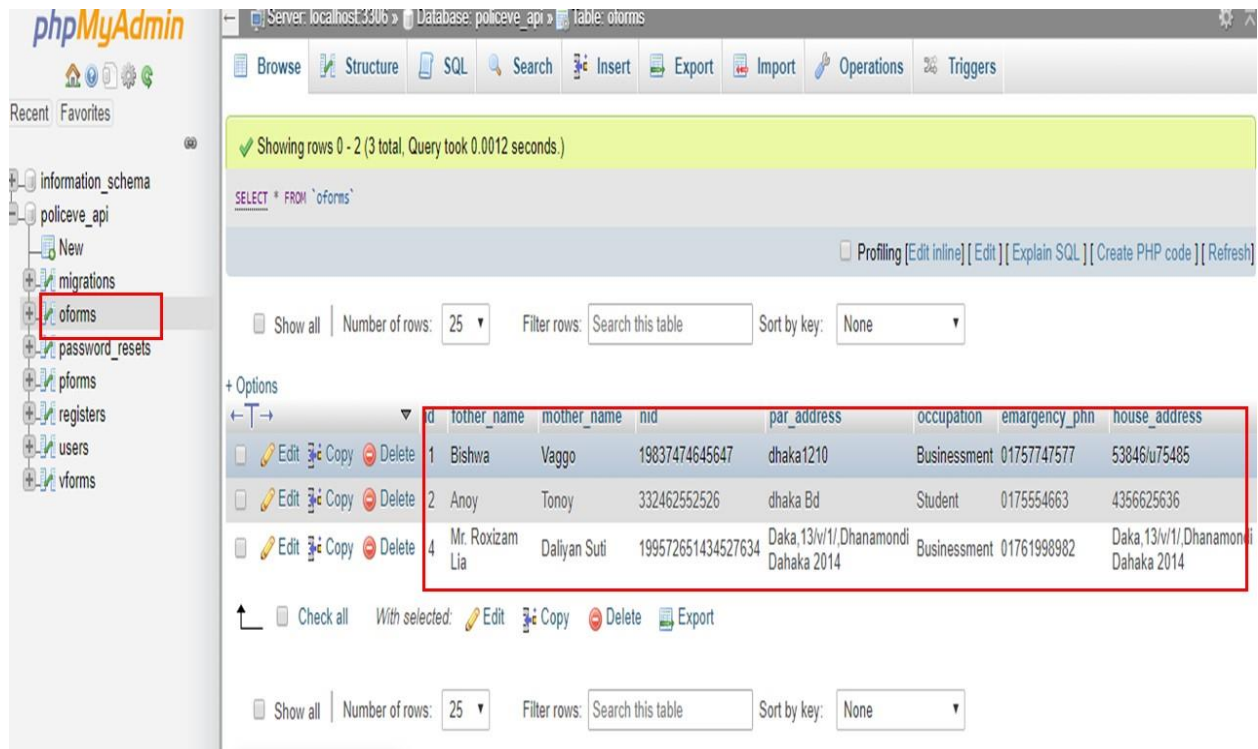
Number of rows: 25 Filter rows: Search this table Sort by key: None

| | id | par_address | station_code | helpline | created_at | updated_at |
|--------------------------|----|------------------------|--------------|------------|---------------------|---------------------|
| <input type="checkbox"/> | 1 | Dhaka,1215 | Dhakapolice | 017553564 | 2018-12-18 20:00:00 | 2018-12-28 20:00:00 |
| <input type="checkbox"/> | 2 | Tejgao Police Station | Dhaka,1215 | 0911222752 | 2018-12-08 03:02:18 | 2018-12-08 03:05:43 |
| <input type="checkbox"/> | 3 | Rampura Police Station | Dhaka,1201 | 091555552 | 2018-12-08 03:03:18 | 2018-12-08 03:03:18 |
| <input type="checkbox"/> | 4 | Bonani Police Station | Dhaka,1203 | 09444442 | 2018-12-08 03:03:58 | 2018-12-08 03:03:58 |
| <input type="checkbox"/> | 5 | Mirpur Police Station | Dhaka,1210 | 093333442 | 2018-12-08 03:04:27 | 2018-12-08 03:04:27 |

Query results operations

Figure 5.10 Database Table (Police information)

Here table of homeowner information structure show below



Showing rows 0 - 2 (3 total, Query took 0.0012 seconds.)

```
SELECT * FROM `oforms`
```

Number of rows: 25 Filter rows: Search this table Sort by key: None

| | id | father_name | mother_name | nid | par_address | occupation | emergency_phn | house_address |
|--------------------------|----|-----------------|--------------|--------------------|-------------------------------------|--------------|---------------|-------------------------------------|
| <input type="checkbox"/> | 1 | Bishwa | Vaggo | 19837474645647 | dhaka1210 | Businessment | 01757747577 | 53846/u75485 |
| <input type="checkbox"/> | 2 | Anoy | Tonoy | 332462552526 | dhaka Bd | Student | 0175554663 | 4356625636 |
| <input type="checkbox"/> | 4 | Mr. Roxizam Lia | Daliyan Suti | 199572651434527634 | Daka,13/v/11,Dhanamondi Dahaka 2014 | Businessment | 01761998982 | Daka,13/v/11,Dhanamondi Dahaka 2014 |

Figure 5.11 Database Table (Homeowner information)

Here table of Renter information structure show below

Showing rows 0 - 2 (3 total, Query took 0.0009 seconds.)

SELECT * FROM `vforms`

Number of rows: 25 Filter rows: Search this table Sort by key: None

| | id | fother_name | mother_name | nid | par_address | occupation | emargency_phn | a_house_owner_id | b_house_owner_id |
|---|----|---------------|-----------------|------------------|---|------------|---------------|------------------|------------------|
| <input type="checkbox"/> Edit Copy Delete | 1 | mohon | rani | 1954556745646 | panchagarh,maidandighi | Teacher | 017566379 | 1721385696 | |
| <input type="checkbox"/> Edit Copy Delete | 2 | roy | rani | 6666556564646 | Maidandighi | Teacher | 08438846379 | 3455 | |
| <input type="checkbox"/> Edit Copy Delete | 3 | Mr.Jon vontua | Kristina Kuttas | 1992423217766742 | Nescaton.road 14/v/1 polapoli,Dhaka1210 | Teacher | 017197856543 | 1723456781 | |

Check all With selected: Edit Copy Delete Export

Number of rows: 25 Filter rows: Search this table Sort by key: None

Figure 5.12 Database Table (Renter information)

5.3 Testing Implementation

All this project was judged on the following set of criteria

Correctness: It is one of the critical necessities of software development. Perfectness is the basic petition for service oriented software. Every part of the application should work properly and correctly.

Real time management: The application is about online police verification. So, it is necessary to maintain the real time and date scenario. The users of this system should have the ability to preserve this.

Satisfying and specifications: The project is said to be successful if it satisfies by all the necessities such as functional and non-functional necessities. Also it should be capable of safeguarding all the obligation specifications.

User friend: Friendliness in any presentations is also a superior criterion to judge the systems. For instance, all the users of this resolution should feel satisfied when they are

using the system. In essence, a system should have the excellence measures properties, such as effectiveness, portability, reusability, flexibility, cohesion and loose coupling among different mechanisms of the designed software.

Integrity and Compatibility: These are two significant conditions to check whether or not the project is successful. Online Police Verification System Android Application was also designed in such a way that it could persuade the virtualization which is considered to be an important factor. Additionally, the evaluation of the system depended on how the application was implemented to the whole system or not.

Reliability and security management: The security is one of the important factors in any service oriented systems. For this reason, the evaluating criteria on the security features that had been taken under account when the system was advanced.

5.3.1 Testing Methodology

Testing in the general, software testing is used to find out system mistakes. A software test can be approved out by exploratory codes, design and performance of the whole system. Testing is unavoidable to improve the quality of the system. Rereading and testing code is alternative basic of software engineering that is often disregarded in project development. Testing is an important part of the system development process and the main Ordinary for software Testing is contained in the ANSI/IEEE standard 829/1983- Standard for software testing Documentation. Some of software testing may also be accomplished by CAST (Computer Aided Software Testing).

5.3.2 Functional Testing

In functional testing tester has to validate the application to see that all specified requirements of the user's whatever we have said in supplemental restraint system have been incorporated or not.

There are two categories of functional testing:

- Positive functional testing: testing the application's functions with valid input and also confirming that the outputs are correct.
- Negative functional testing: IT involves exercising application functionality using a combination of invalid inputs some unanticipated operating conditions and by some other "out-of-bounds" scenarios.

5.3.3 Unit Test

Unit testing is usually used in a detailed designing and executing phase of this project. The foundation of unit test was to find out the defects in this project.

5.3.4 Compatibility Test

Compatibility testing is a part of software non-functional test. It is testing conducted on the application to evaluate the applications with the computing environment software compatibility. Testing can be more appropriately referred to as User experience environment. This project is tested on different types of Android mobile phone and device to ensure the flowing results.

Table 5.1: Compatibility Test Result

| Android Device Name | Screen Size | Test | Result |
|-----------------------------|-----------------|------|--------|
| Sumsung Galaxy S II | 4.5 inch(480p) | yes | okay |
| Sumsung Galaxy S Core prime | 4.3 inch(720p) | yes | okay |
| Xiaomi Redmi Note 6 pro | 6.2 inch(720p) | yes | okay |
| Xiaomi Redmi Note 3 pro | 5.5 inch(720p) | yes | okay |
| Xiaomi Redmi 4x | 5.5 inch(720p) | yes | okay |
| Xiaomi Redmi Note 7 pro | 6.2 inch(720p) | yes | okay |
| Walton primo GH | 5.o inch(720 p) | yes | okay |

CHAPTER 6

CONCLUTION AND FUTURE SCOPE

6.1 Conclusion

Online Police Verification System is an Android base mobile application that allows users an effective environment of homeowner and renter. Both police homeowner and renter can be benefited from this application. I hope this will be a better solution in the field of police verification for present and future generation.

6.2 Goal

My main goal is to solve the police verification system at make a better online Police verification system so that users can get benefit. There is no alternative to digital online police verification to build a modern and contemporary society and modernize a country.

6.3 Limitation:

- hosting bad with 4GB
- MySQL database storage 1GB
- For file sharing we use Google API
- The part of the system can be employed using the current Technology although some modification has to be done at various places.

6.4 Scope for Future Developments

- File share using out API
- Increase domain hosting bandwidth
- Increase MySQL database storage
- Interface design will be updated
- More features and functionalities will be added
- Reality of the application should be increased

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