Missing person Finder Documentation

Android Missing Person Finder System

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Final year project

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1. Introduction

1.1.1 Overview

South African police services has faced with difficult time special now since we are in pandemic due to covid-19 where people are not allow to travel in order for them to report cases in their local police station and even if they did they take a lot of time and process to get help in police stations. There was case opened for missing the female child at the age of 13 at Silverton police station in Pretoria and the report file went missing and that case are not yet resolved. This application could help on that case since it will keep the report case file in the database for future purposes if it not yet resolved. This application has the advantage of giving back the feedback by status to the user to update the user about the progress of the case.

User can report the missing people on missing person finder application by providing the required information (picture of that missing person and description part where the user is expected to describe the person who is missing) about the missing person and wait for the changes of the status from the admin which will be police officers, to report that the user has reported and that status will tell the user the progress of the report.

1.1.2 Background statement

Missing person finder application is designed to support or help the police services to get missing people report and give the feedback to users on how the case is going and missing people increases day by day nowadays. Sometimes report files get missing since most police

services use report paper file to obtain the crime documents .This application is useful to obtain the report cases in the database. However they have their own police service system to get report cases. This application could be access both by users and administrators, where admins check the report cases and change the status of each report case**.**

1.1.3 Problem Statement.

There has been a lot of number of cases of missing people that are end up not reported or identified. People are getting missed in different scenarios. The conditions that may lead adults and young ones to become the victim of get missed are often complex multi-layered. People experience a lot of challenges with regards re-porting of the missing person because of the long distances to police stations.

Some people consciously choose to leave, most do not leave of their own free will, and others may drift away from family members over time. Some may never have intended to be absent and may not conceptualize their experiences in that sense, while others are distracted by the actions of others. Some of the causes contained herein are natural disasters, mental complications, kidnappings and domestic conflicts.

1.1.4 **Objectives /Goal**

The main objective to develop Android project on Missing Person Finder is to provide the relevant information about the missing person to the police officer and user get the feedback (status) from the administrators which are the police officers.

1.1.5 **Scope of Project**

The missing person finder system is configured on android mobile phones only since it is developed using front end which is android studio, it will be accessible by the users and the admin, which are basically be a police officers. It is developed to minimize the time consuming for reporting missing people, and since it's the covid-19 pandemic it reduces the spread of virus by avoiding the large number of people in the police stations and help the police officers to easily find the cases reported by users and try to resolved them as soon as possible.

The system is accessed by two group of people the users and the admins. When you login as users, the system will have the main page where user can file the missing person case. Under missing person category the user must provide the system with the missing person details. If you login as admin the system will directly take you to the admin categories where you have to check the cases and change the status from the reports.

1.1.6 **Literature Survey**

This part compares the police services paper system related the missing person finder application. Most of the people delay to report their critical cases due to the long process of reporting their cases. It took a while to report the missing person since you have to go to the nearest police facility to report for the instead of using your mobile phone to report everything. Below is the template of the paper reporting system that other police services used to take statements of the case?

OFFICIAL POLICE REPORT

Notes for the Reporting Officer: After exploring the scene of the crime and before speaking with Goldilocks, give complete details of what happened to aide in the investigation.

Who was involved? _____

_____

What happened? _____

_____

Where did the incident occur? _____

_____

When did the incident happen? _____

_____

Why do you think the accused did this? _____

_____

How should he/she be punished? _____

missing person finder application will help the South African Police Services to keep their file for missing report safe not getting missing and allow the administrators to attend the case reports in an minutes and update the changes.

1.2. Methodology

1.2.1 Design

We conducted the research for data collection by using the method interviews and questionnaire. On interview method we able to get how the police officers handle the missing people cases which makes us easy to know how the design of the admin will be look like. On questionnaire we get relevant information from the users on how what they need to express if they report the missing people, which makes us know how the interface of the users should have.

Design a user application interface that is easy to use and can display all the categories as follows.

1.2.1.1 User

User should be registered in order to report the missing person. To get registered, the user is expected to provide these information to a system: user name, last name, gender, email address, identity number and password. If the user failed to provide the correct details the system will toast the message that direct the user to fill in the correct details at that particular space. After the registration the user could able to login in and file the missing person case in the missing person tab and get the feedback from the police officers about the report he/she has filed by status update.

1.2.1.2 Report case tab.

Under this missing person report category there are details that the user have to fill them up first, such as description where user could able to describe the victim and up load image.

If the user want to check the missing person status could go to missing person status tab category.

1.2.1.3 Check status for all reported cases.

Under this category the user able to check the status that is updated by the admins. It consist of all the information that was registered by the user when he/ she was filling the case and they appear in the form of the list.

1.2.1.4 Cart report case

On this section, it will show the report or reports of the individual and it will be seen by that particular user only. The user able to delete the report if the case is resolved or if there are the changes that happened in the report but the report is deleted in the user interface not in the database.

1.2.1.5 Admin:

The admin has to check the cases and update the status of that case. Both user and admin will use the same login page.

1.2.1.6 Firebase server

The firebase server will consist of three tables, the one for admin login details, the next one for report cases to store all the reported case and the last one for users to store information from sign up.

Admin table

- **Fname:**
- **Lname:**
- **Email address:**
- **Password:**

Report cases table

- **Description:**
- **Email_ID:**
- **Status:**
- **User_uri(image):**

Users table (register)

- **Name :**
- **Contact :**
- **Id No:**
- **Email address :**
- **Password :**
- **Confirm password :**

1.3 Implementation

1.3.1 Create the Firebase

The back end is the firebase serve that stores missing person case, admin and users information.

1.3.2 Develop the User Interface

The front end is Android studio as IDE to develop and design application and Java language to implement all the user interface or functionalities of the app.

1.4 Testing

During the development process, unit testing will be done to ensure all modules are developed correctly. I will test the database, the algorithms and the user interface.

1.4.1 Test the User Interface

To test the user interface, firstly is to test the login interface by entering the wrong and right details of login, to see if the system will respond as expected. If the user entered the wrong details the system will declined the request and show the user the cause of it. If the user mistakenly miss upload the image in the report case the system won't proceed with process until all required details is filled.

1.4.2 Test the Database

If the user reported the case it supposed to be store in the report cases table in the database so we report lot of cases to see if they are store in the report cases table in real-time database and image store in storage database. Both admin and the user their login information is store in the database, by providing the wrong credentials that are not in the database the system will decline.

1.5 Evaluation

Evaluate the system to check whether the objectives are fulfils or not.

1. Does the system file missing reports and return status update?
2. Is the missing person finder firebase consistent and reliable?
3. Is the system allow the user and admin to login to the same page of the system?

4. Is the user interfaces display photography and status update as expected?
5. Does the system display reported cases as list to be seen by all the user?
6. Does the system allow the individual user to delete report?

1.6. Project Planning

1.6.1 GANTT Chart

	Mon	Tue	Wed	Thurs.	Fri
introduction					
Methodology					
Project planning					
Required hardware and software					

1.7. Required Hardware & Software

Software Requirements:

- Windows 10

- Android SDK
- Android device
- Firebase to store data

Hardware Components:

- Processor – i5
- Hard disk – 16 GB Memory – 4GB RAM

Chapter 2: Software Requirements Specification

2.0 Introduction.

2.1.1 Purpose

The purpose of this SRS document is to give more specific details and requirements needed for this Missing person Finder System (MPF). It explain more details on how the system interfaces react when they are being used by the clients or users and it explain what the purpose of each interface, and what the application will do. This SRS document is intended for developer of this system, end users, and the administrators which are police officers. It proposed to the police services facilities.

2.1.2 Scope of Project

The missing person finder system is configured on android mobile phones only. The system is access by the users and the admin. It is developed to minimize the time consuming for reporting missing people, and since it's the covid-19 pandemic it reduces the spread of virus by avoiding the large number of people in the police stations to report missing people and help the police officers to easily find the cases reports from the reporter at the short period of time, and get relevant information and attend them immediately.

The application store data in the firebase server, the application contains the storage firebase to store images of missing person and real-time

database to store the list of registered users with their personal information and admin information.

2.1.3 Glossary

Terms	Definition
MPF	Missing person finder
User	Person who report missing person cases.
database	Collection that will be used to store data of the system
Stakeholders	Random person who is interested in the application.
SRS	System Requirement Specification that describe more details about the developed application, how functionalities and constraints will operate.

2.1.4 References

IEEE. IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.

2.1.5 Overview of document

The next part is Overview description section, it give the overview of the functionalities of the system. It explain the informal requirements and can be used to fundamental introduce the technical requirement to the next chapter. The third section consists of the functionalities intended by the system, fourth section is for non-functionalities of the system, firth section provide with the class diagram and sixth section show the use case diagram.

2.2 Overall description

2.2.1 System environment

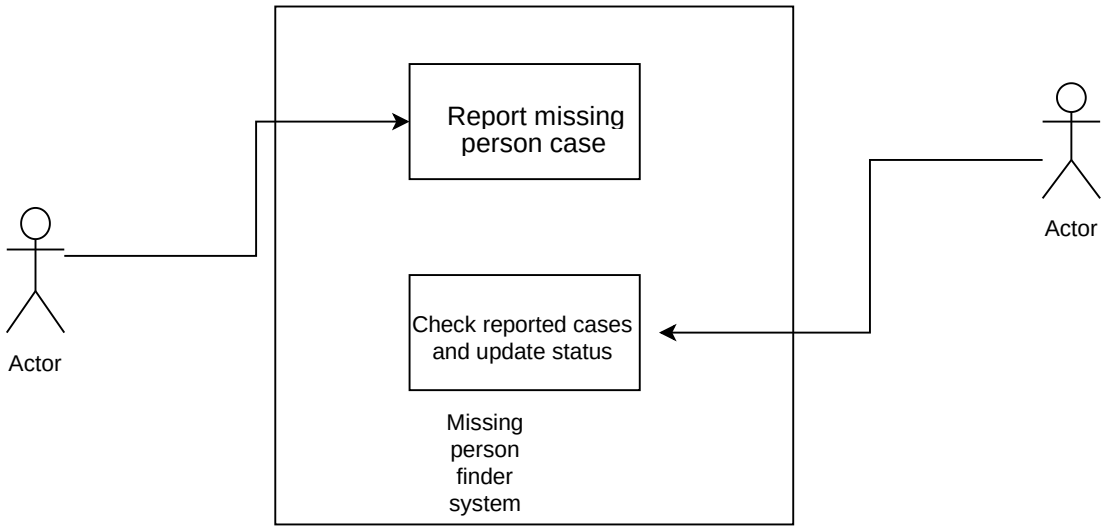


Figure 1 - System Environment

The Missing Person Finder system has two active actors, User who wants to report missing person case and check the progress of the reported case by viewing report status and Administrator who is responsible for checking reported cases and update the status as a feedback to the user.

2.2.2 Functional Requirement Specification

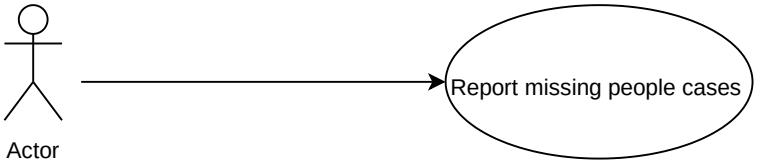
This part show use cases of each two active actors (user and admin) in this application separately. User has three use case while the admin has only one.

Xref: Section 2.2.1, report case

2.2.2.1 User use case

Use case: report case

Diagram:



Brief description

The user will login in the system and go to report missing person category to fill up all the required detail and report the case.

Initial Step-By-Step Description

if user has not have an account to access the system he/she has to sign up first in the system so that can login in the system and report cases.

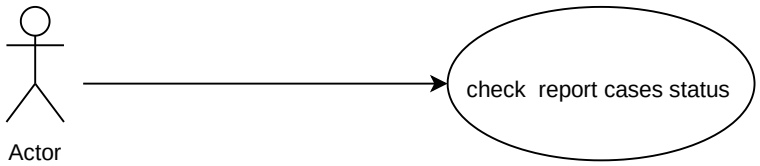
1. User login to the system using email address and password.
2. On reporting missing person case category, user has to fill up all the required information.
3. System will keep them in the database.

Xref: Section 2.2.2.2, check status

2.2.2.2 User use case

Use case: check status.

Diagram:



Brief description

The user will login in the system and go to check missing person report case status category to see any update or progress from the reported case.

Initial Step-By-Step Description

if user has not have an account to access the system he/she has to sign up first in the system so that can login in the system and check status.

1. After the user has login.
2. Go to check status category to see any progress.

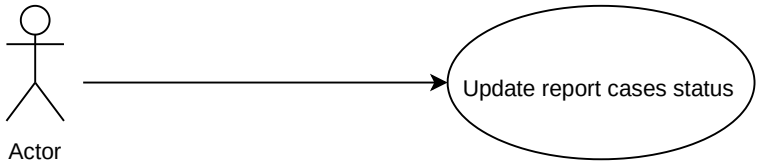
3. System will display information of the reported missing person and its status update.

Xref: Section 2.2.2.3, update status

2.2.2.3 Admin use case

Use case: update check.

Diagram:



Brief description

The user will login to the system and the system will bring him straight to the admin section where he could update the reported case status.

Initial Step-By-Step Description

The admins will login to the system with the details I have provided since I will register the admin manually in the firebase.

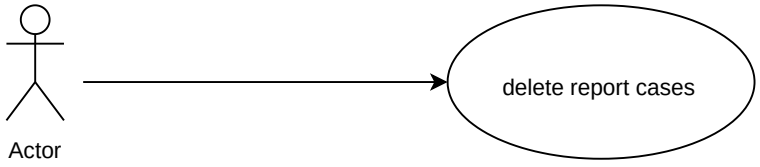
1. Admin will use email address and password to login.
2. Check the reported case and update status by click on the report and dialog show up written" do you want to change status? "That dialog has two status option pending and resolved.
3. The chosen status is appearing in the user report.

Xref: Section 2.2.4, delete report

2.2.2.4 User use case

Use case: delete report.

Diagram:



Brief description

The user will login in the system and go to cart report tab where he's the only one who have the access to see that report, could be deleted if the case that was reported has been solved or there are changes that happened about the report but it will be deleted only in the user interface and admin but not in the database.

Initial Step-By-Step Description

After the case has been resolved that particular user could able to delete the report from its interface and admin interface but not in the database.

1. User click to the report case.
2. The dialog show up written "do you want to delete the report "that dialog has two option ye and no.
3. If he choose yes the report deleted to interface of the user and admin.

2.3 User Characteristics

The users are expected to able to upload picture or images since the main screen where you reported the case has the upload image section. Are also expected to be flexible on scrolling up and down the screen since it is needed on checking report file case. They have to be aware of the system that are existing in this modern time because Missing Person Finder has that kind of functionalities.

2.4 Non-Functional Requirements

The missing person finder application is installed in the android mobile devices only since it is developed using android studio. The reason why decided to using android is because it has Fast And Feature-Rich Emulator, Firebase Support & Integrated Cloud and Perfectly Fitting To Android Devices. This android app will run in all android devices with the ram from 4GB to upwards. The database of this system is firebase server since it has real-time database to store all the personal information and storage database to store images.

2.5. Requirements Specification

2. 5.1 External Interface Requirements.

The external system is only Missing Person Finder database to verity users' membership, and report cases file. Administrators are registered manually in the database so that they can have an access to the system to update status of the report cases. The user should be able to retrieve his/her status information and the report case.

2.5. 2 Functional Requirements

2.5.2.1 Report case

Use case name	Report case
Xref:	Section 2.2.1, report case
Trigger	The users accesses the application
precondition	The system displayed the report section in tabs
Basic path	1. User will fill all the needed details about the case and upload the image. 2. System will display the report case file in status tabs with its status.
Alternative path	
Post condition	The reported case file be displayed to another tabs called status
Exception path	User can leave the app without reporting any case may he/she wants to check the progress of the case.
Other	None.

2.5.2.2 Check status

Use case name	Check status case
Xref:	Section 2.2.2, report case
Trigger	The user selected to check status of the case report that he/she opened it.
precondition	User has access the check status category in the main menu

Basic path	1. System display all the reported file case in the status category. 2. User can see the case he/she reported.
Alternative path	none
Post condition	The reported case file displayed in the tab status
Exception path	User can leave the app without reporting checking the status.
Other	None.

2.5.2.3 Update status case

Admin case name	Update status
Xref:	Section 2.2.5, update status
Trigger	The admin select to change the status and update it
precondition	Admin will access the report case in the admin interface.
Basic path	1. The admin has to click on report to show up dialog so that he/she can choose the status option.
Alternative path	
Post condition	The status updated

Exception path	None
Other	None.

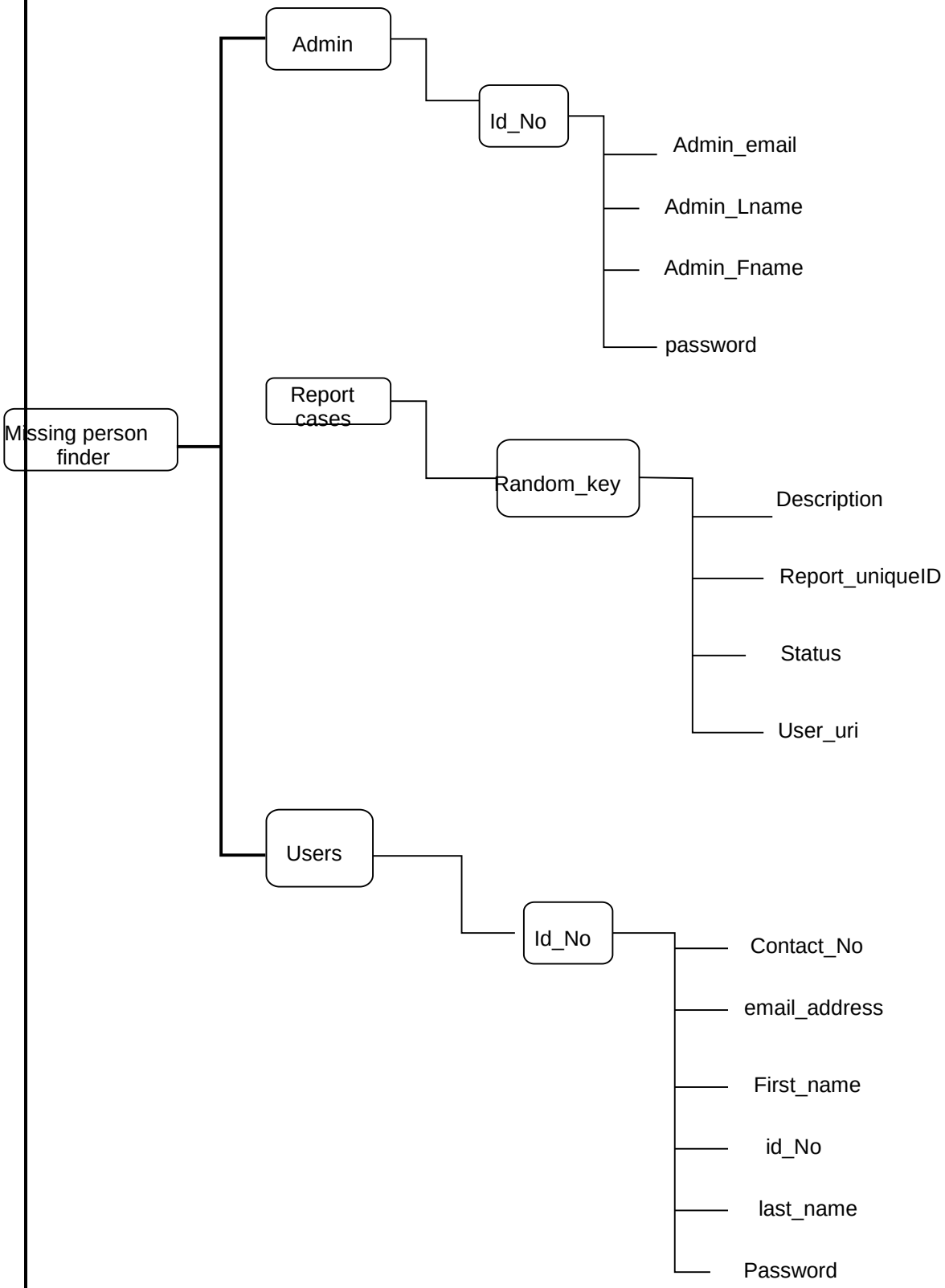
2.5.2.4 Delete report

Admin case name	Delete status
Xref:	Section 2.2.5, delete status
Trigger	After the user has click the report and the dialog shows up the user chooses which delete option he/she desired to perform.
precondition	Once the user has deleted the report it disappear at that moment of time even in the admin part.
Basic path	1 The user has to click on report to show up dialog so that he/she can choose the delete option.
Alternative path	
Post condition	The report deleted
Exception path	None
Other	None.

2.6 Detailed Non-Functional Requirements

2.6.1 Logical Structure of the Firebase

The logical structure of the data to be stored in the internal firebase database is given below.


Missing person finder
Admin
Id_No
Admin_email
Admin_Lname
Admin_Fname
password
Report cases
Random_key
Description
Report_uniqueID
Status
User_uri
Users
Id_No
Contact_No
email_address
First_name
id_No
last_name
Password

User Data Entity

Data Item	Type	Description	Comment
Name	Text	Name of user and its last name	
ID	Integer	ID number of the user	Used as key in App users in firebase
Email Address	Text	Personal address	
password	Text or integer	For security purposes	User has its own password for login

Report Data Entity

Data Item	Type	Description	Comment
description	Text	Message report	Describing the victim
Image	JPED	To identify that person	Victim image
Status	Text	Feedback to the users	Admin update it

Admin Data Entity

Data Item	Type	Description	Comment
Name	Text	Name of Admin	
Email address	text/number	Personal address	Login
password	Text or integer	Security reasons	Admin for login

2.6.2 Security

The online Firebase will be access by the developer of the application to reduce harmful treads that can break in the system. Police station will be provided by the email and password to login to the system and each authorized police man that is responsible for changing and uploading status at that particular police station will be given those details. There is no restriction on reporting missing people cases. After the case is resolved it will be deleted in the database. There is no restriction on *read access*.

2.6.3 Advantage and Disadvantage of Missing Person Finder System.

Advantage of the system

- It provide the users with feedback of status to show the progress of the case.
- Able the users to describe the victim will all details he/she think they are required without restricting them.
- Allow the users to delete their report after they are solved or there are changes that happened about the reports.
- Allow the users to search within the app the reported cases.
- It give the privilege of the users to see their own reported case by themselves.
- It provides will the call icon for the user if he/she wants to call the police officers.

Disadvantage of the system

- It run in the android phones only.
- It uses internet connection.

Chapter 3: Software Design Description

3.0 Introduction

3.1.1 Purpose

This Software Design Document provides more details about the Missing Person Finder Application (MPF) design. The primary purpose of the system is to help the user who have to travel to go police station in order to report the missing person. It shows the design functionalities of the application on how it works and suitable for the user to use it. It show the structure of the firebase that will store information.

3.1.2 Scope

This document have more description of the design of MPF. The architecture is an android studio server to client server. The Front End of the App is done using Android Studio and firebase serves as a backend to store data. The objective of this document is to show how database and user and admin interface designed.

1.3 Glossary

Terms	Definition
MPF	Missing Person Finder
Firebase	Database that store information
Android studio	integrated development environment

3.1.4. References

I. *[IEEE] The applicable IEEE standards are published in "IEEE Standards Collection," 2001 edition.*
II. *[Bruade] The principal source of textbook material is "Software Engineering: An Object-Oriented Perspective" by Eric J. Bruade (Wiley 2001).*

3.1.5. Overview of document

The Section 2 is a Deployment Diagram that shows the physical locations of where the application exist. It explains the design of each entity and where it reside.

Section 3 is the Architectural Design that gives more details about each entity that collaborate to perform all the functions. Every entity has the abstraction description based on the services that it provides to the rest of the system.

Section 4 concerns the Data Structure Design.

Section 5 contains the Use Case Realizations. Each Use Case stated in the SRS Document can be traced by the given design objects.

Section 6 discusses the User Interface Design, and how it can be created with maximum user efficiency and ease of use.

Section 7 covers the help system.

3.2.0. Deployment diagram

Figure 1 Deployment Diagram.

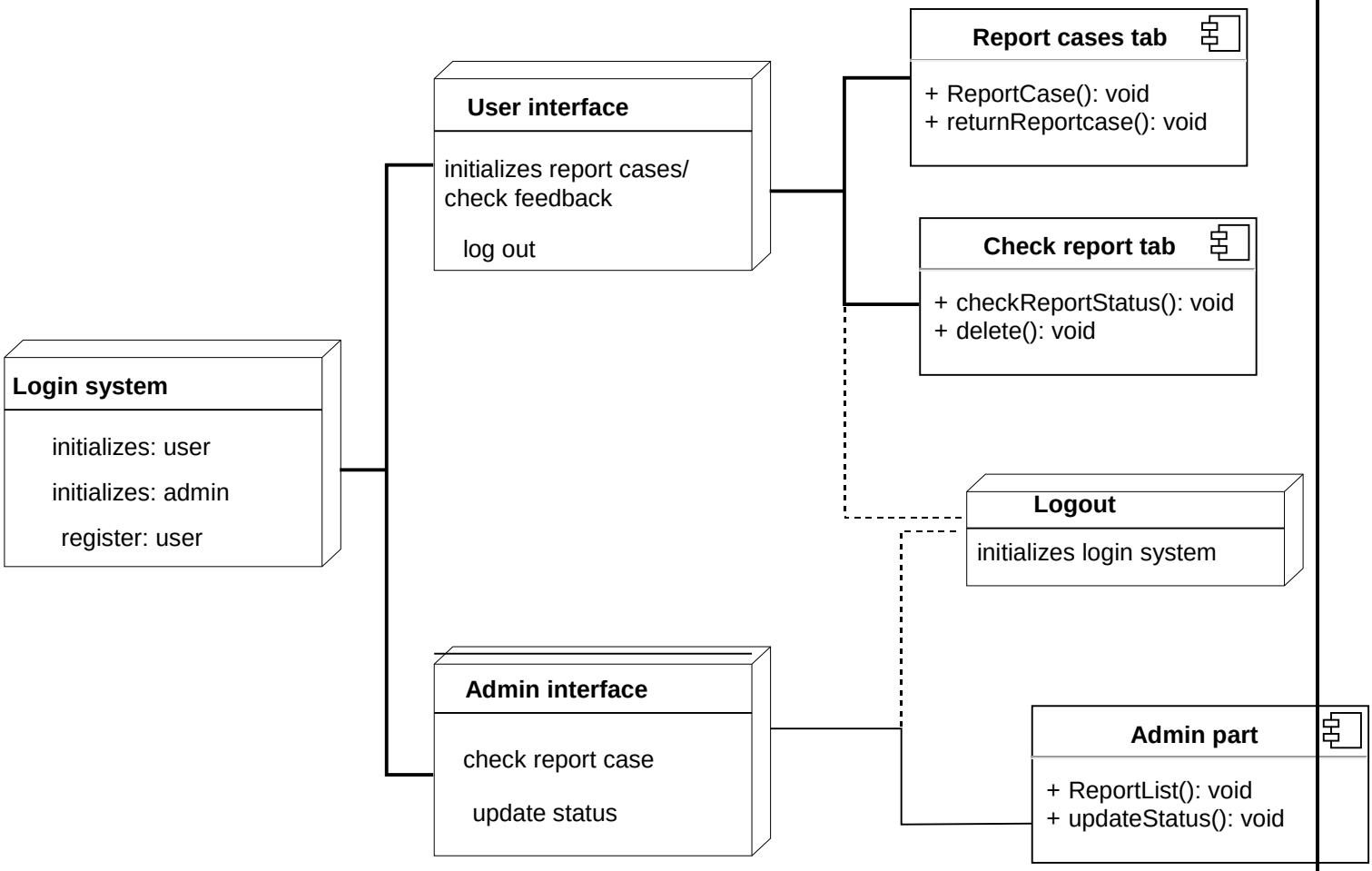


Figure 2 Deployment Diagram

3.3.0. System Architecture design

3.3.1. App System Architecture

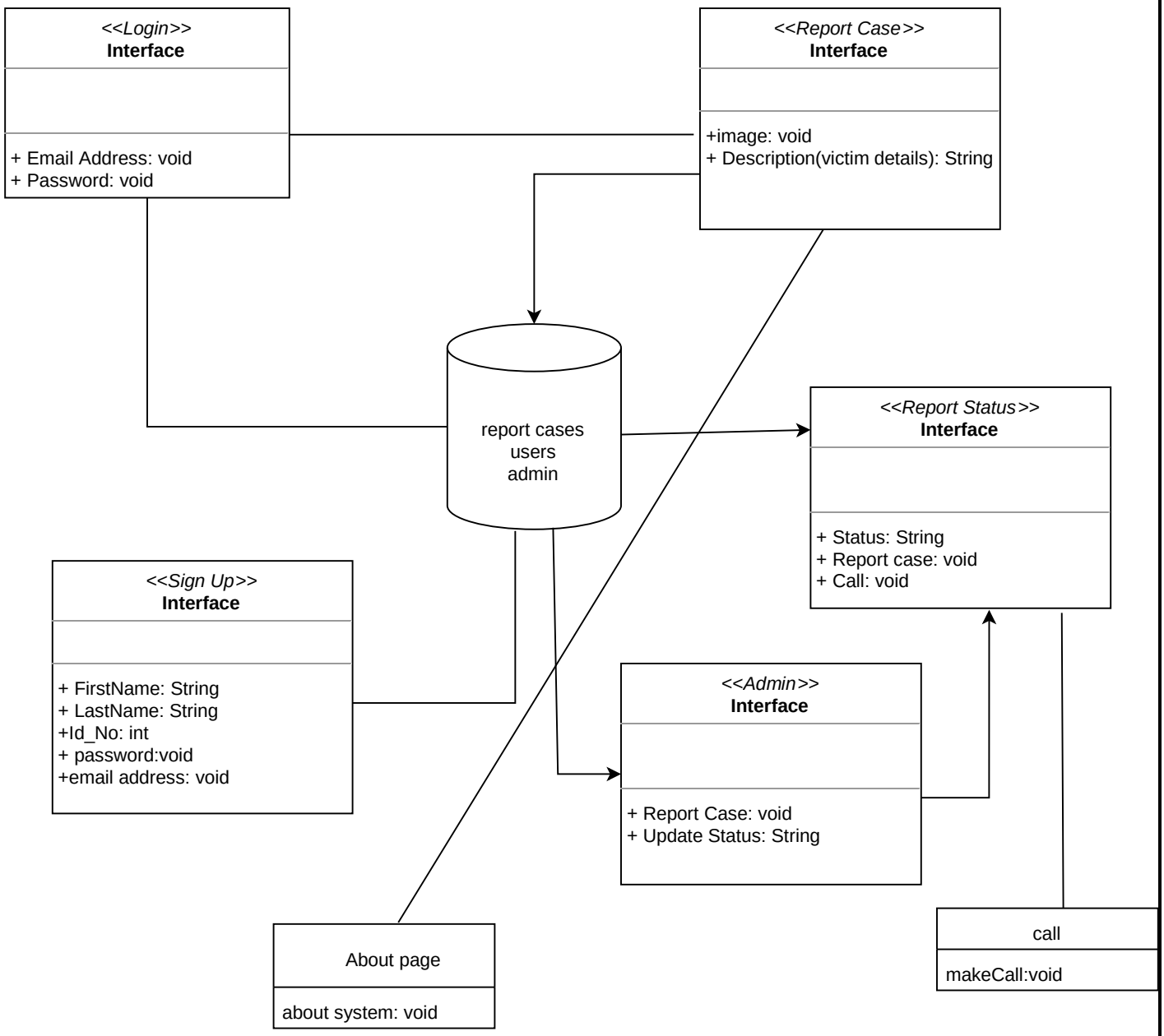


Figure: Architecture design.

Report Status first tab.

Name: Report Status first tab.

Type: report case status

Description: This is the first tab that present all the report cases with their status that the users has reported. There is a call icon that the user can click it to make call with the police officers.

Attributes: none

Resources: None

Operations:

Name: call ()

Arguments: None

Returns: none

Pre-condition: connected to system

Post-condition: none

Exception: none

Flow of Events:

- Search report case

Report cases second tab

Name: report cases

Type: report

Description: This is the second tab where the user can file the missing person report by uploading the victim's image and there is Edit text

below image view, where user could provide all the required details and report the case.

Attribute: image, description section

Operations:

Name: submit ()

Arguments: none

Return: none

Precondition: connected to system

Post condition: to admin section

Exception: none

Flow events:

- Click on report button
- Report case will be sent to the database

Admin

Name: Admin

Type: update status

Description: This is the admin part where the admin will get all the reported cases and update their status.

Attribute: report list

Operations:

Name: update ()

Arguments: none

Return: none

Precondition: connected to system

Post condition: to admin section

Exception: none

Flow events:

- Click on report case
- Update status

Missing person finder database

1. Report case

Name: Report case database

Type: database

Description: This database will store report cases, admin information.

Attributes: Description: String

User_uri: image

Status: “ ”

Operation:

Name: Submit ()

Argument: none.

Return: none

Pre-condition: connected to system

Post-condition: none

Exception: none

Flow events:

- The report cases data will be in report case table in the firebase (real-time) but images will be store in storage database.

2. Users

Name: user's database

Type: database

Description: This database will store user's data after they have registered.

Attributes: FirstName: String

LastName: String

Id_No: int

Email: void

Password: void

Operation:

Name: Submit ()

Argument: none.

Return: none

Pre-condition: connected to system

Post-condition: none

Exception: none

Flow events:

- The user's data will be in users table in the firebase (real-time).

3. Admin

Name: admin database

Type: database

Description: This database will store admin data after I have registered him manually in the database.

Attributes: FirstName: String

LastName: String

Email: void

Password: void

Operation:

Name: Update ()

Argument: none.

Return: status

Pre-condition: connected to system

Post-condition: none

Exception: none

Flow events:

- The admin data will be in admin table in the firebase (real-time).

3.4 Discussion of design patterns.

3.4.1 Adapter pattern.

The adapter pattern is a structural pattern that translates an interface for a class into a compatible interface. This turns the interface of a class into another interface that the user expects. The adapter allows classes with incompatible interfaces to work with the database.

Missing Person Finder system: This pattern be used when displaying reports information from the database.

3.4.2 Singleton pattern

This is a creational design pattern and is one of the simplest pattern in the field of software engineering .It involves only one class which is responsible to instantiate itself, so that it useful when access to limited resource needs to be controlled.

System: The design pattern was used for database Missing Person Finder system.

3.5.0. Data structure design

The data is stored in a real-time and storage database using Firebase. The share of data to and from the database are given in the following table.

3.5.1. Data field types and sizes.

Attribute Name	Attribute Type	Attribute Size
LastName	String	30
FirstName	String	30
Id_no	int	30
email	String	50
User_uri	String	50
description	String	30
Status	String	2

3.6.0. Use Cases.

3.6.1. Use case Login page.

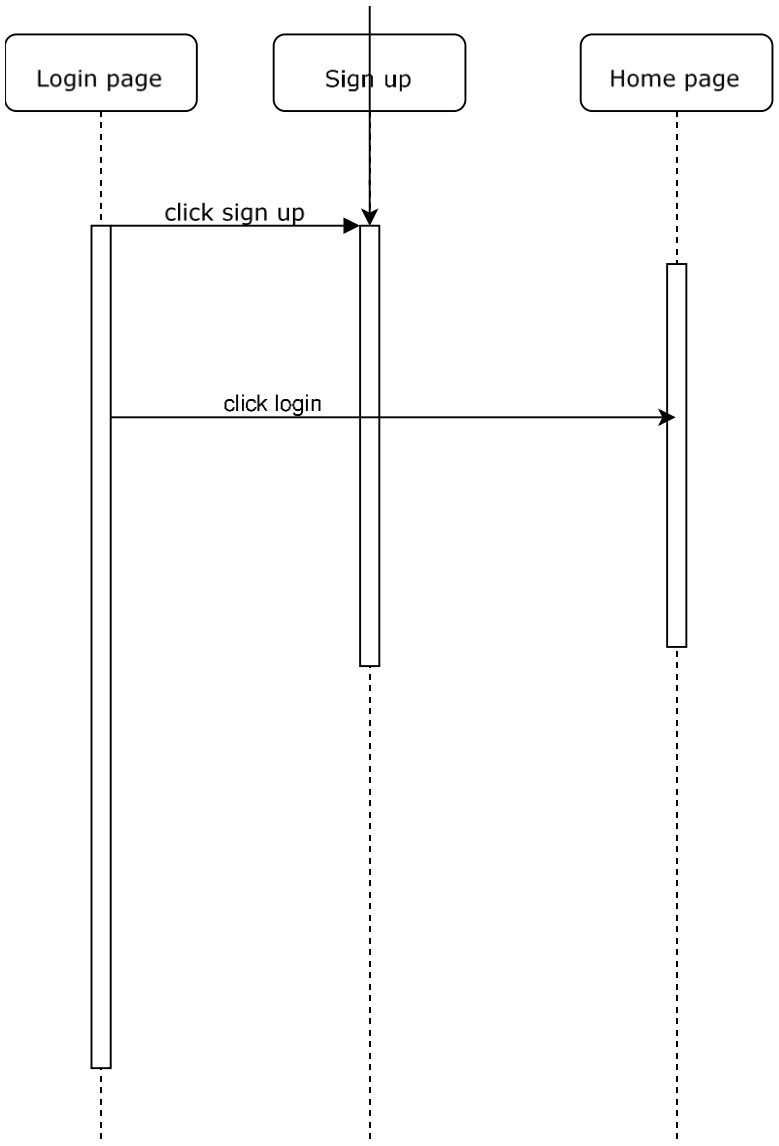


Figure 1 Login Sequence Diagram.

3.6.2 Use case: Report cases.

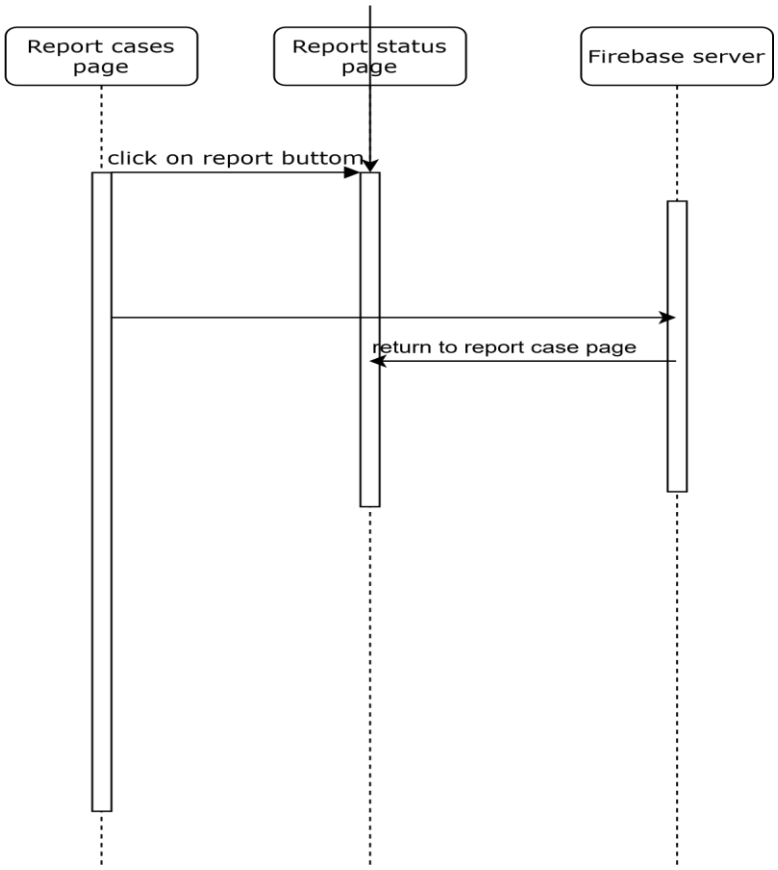


Figure 2 Report case Sequence Diagram

3.6.3 Use case: update status

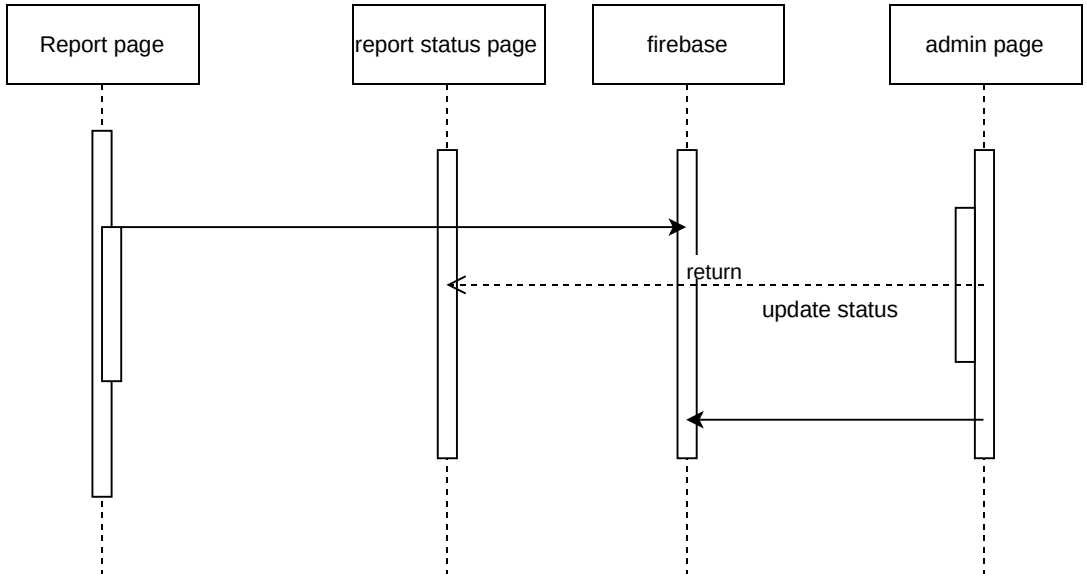


Figure 3 update status Sequence Diagram

3.7.0. Interface design

The interface of Missing person finder application which is designed using Android application and Firebase as backed.

3.7.1.1 Description of the User Interface

Login Screen

User has to provide with the email and password to in order to login to the system after he/ she has registered. If he/she provided with the password/ email that hasn't registered with to the system will toast the message says "enter correct password or email".it depends which one the user failed to fill it correct. The admin will login to the same page as the user but the different is that the admin won't need to register into sign up page as the user, since they are registered manually to the Firebase.

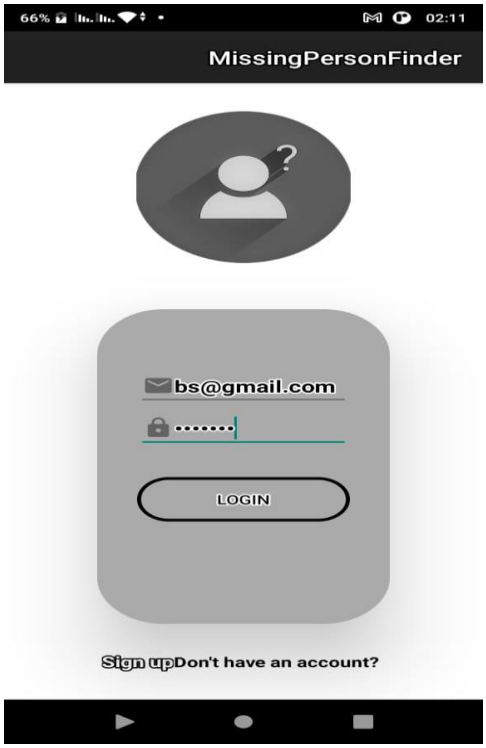


Figure 4: Login screen

Figure 5: Sign up page

User has to sing up to the system in order to login to the system and file the report case or check the progress of the report case he/she has reported.

If the user mistakenly not fill all the information required to the sign up page the system won't allow he/she to proceed with the process of registering into the system.

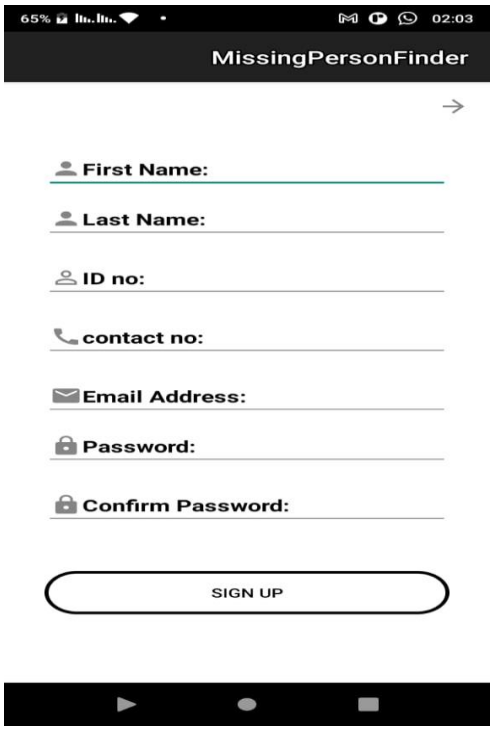


Figure 5: Sign up screen

Figure 6: Report page

This page has two functionalities, the description section where the user has to describe all details that he/she thinks are required about the missing person. The section where user has to upload the image of that missing person. The report button is the one that push of the information to the database and retrieved admin page.

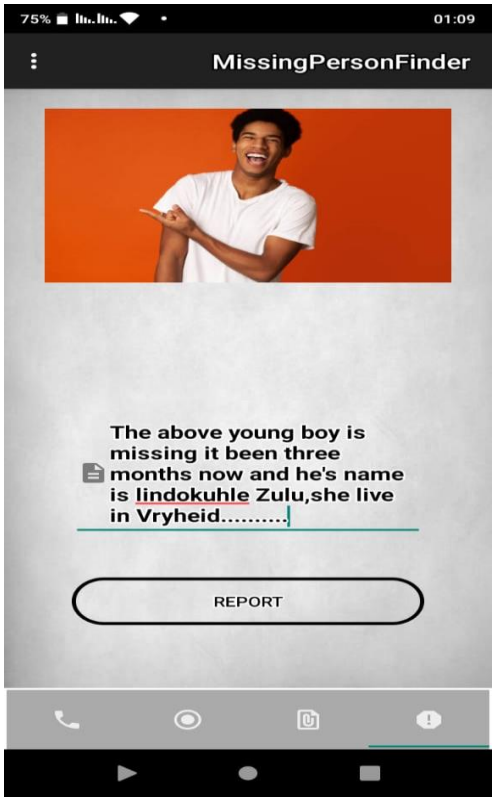


Figure 6: report case screen

Figure 7. Check status

After the user has reported the cases, they will appear as the list in the report status page or tab. If the report has not yet attend by the admin it will remain with no status updated but if the admin has updated the status it will be shown.

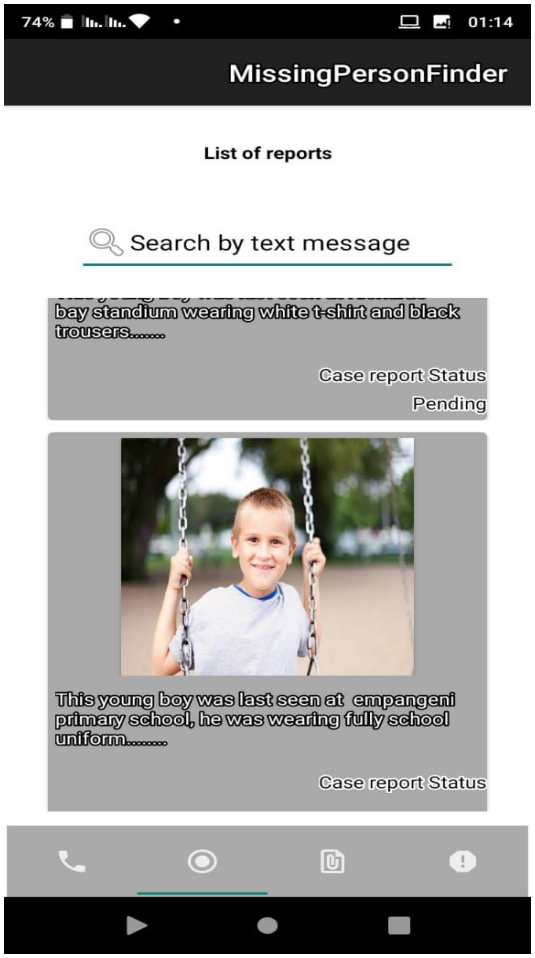


Figure 7: check status report screen

Figure 8: cart reports file.

This page help user to get easy their reported case and be able to delete it if there changes that involve in his report. The report case in this page will be visible only in the reported user no other users that will login to the system.

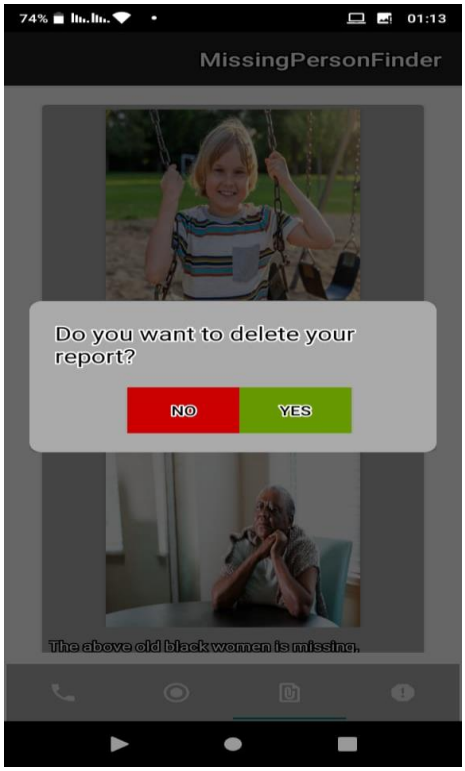


Figure 8: cart report screen

Figure 9: phone call

This page is where any user can make a call to the police station, if the user has the information about any reported cases in the system.

Figure 9: phone call screen.

Figure 10: about page.

This page is where the users have the access to get information about the meaning of the tabs, if they don't understand it. It is found in the toolbar in menu.

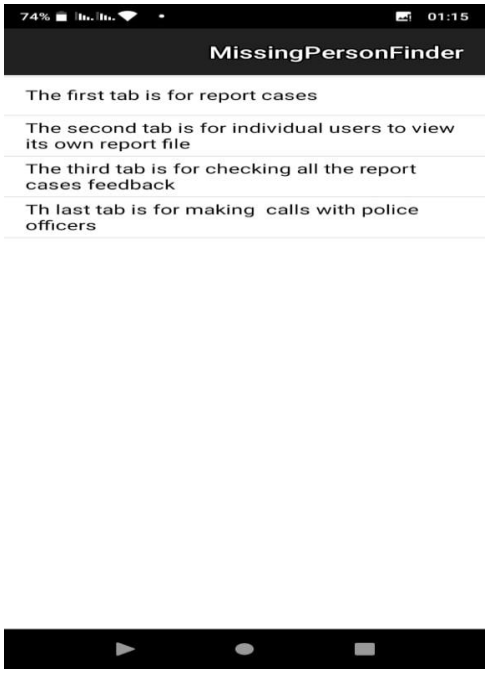


Figure 19: about screen.

Figure 11: admin screen.

This page is where the admin will get the list of reported cases and click on it to pop up the dialog for updating status. The status are resolved and pending only.

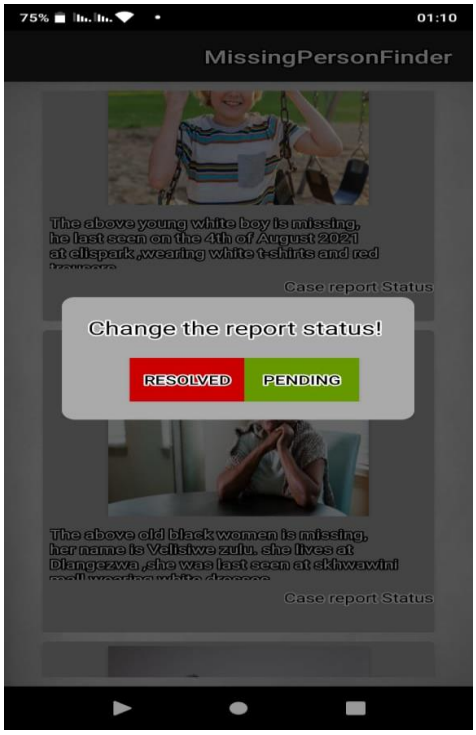


Figure 11: Admin screen.

Database structural.

All the data of the system will be stored in the firebase in the form of tables. There is report case table where all report case information are stored. There is admin table where admin login details will be stored. There is users table where user registration information are stored.

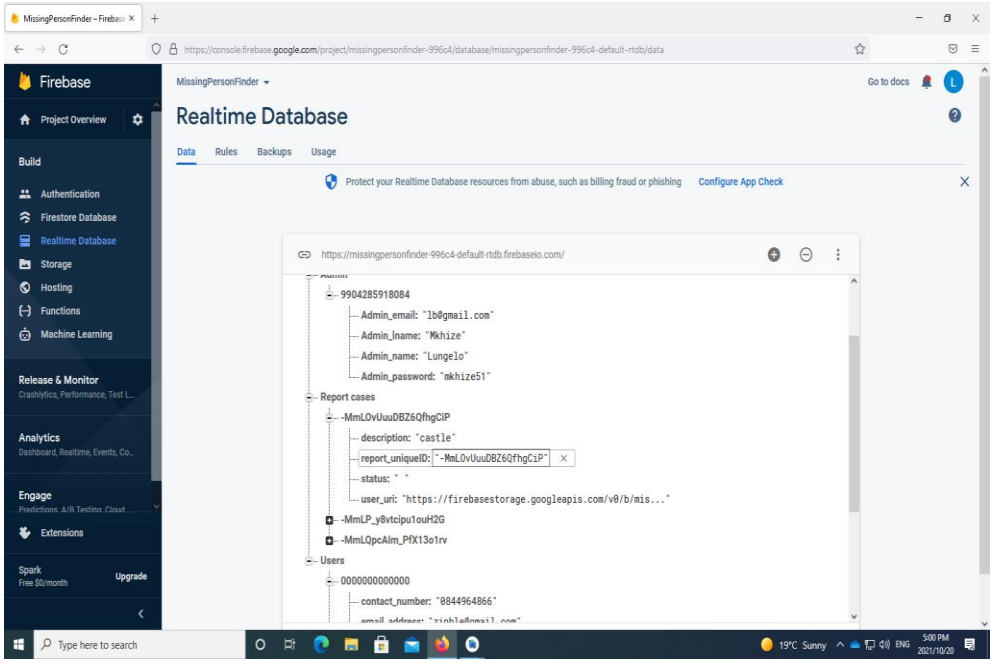


Figure 10: Firebase

Chapter 4: Software Test Plan

4.1. INTRODUCTION.

4.1.1 Purpose.

The objective of this part of documentation is to test the quality and the security of the software and to ensure the success of this software.

4.1.2 Scope.

Testing will be performed at several points in the life cycle as the product is constructed. Testing is a very 'dependent' activity. Thus, test planning is a continuing activity performed throughout the system development life cycle. Test plans must be developed for each level of product testing.

4.1.3 System Overview.

The Software Test Plan (STP) is designed to prescribe the scope, approach, resources, and schedule of all testing activities. The plan must identify the items to be tested, the features to be tested, the types of testing to be performed, the personnel responsible for testing, the resources and schedule required to complete testing, and the risks associated with the plan.

4.1.4 Test Approach.

The approach used to test the system is the unit test approach which allows features of the system to be tested even before the system is fully built. The approach minimizes some failures of the system.

Unit test accepts the input(s) through functions and check those input(s) if the satisfy the required specification and yield pass or fail depending on the input if it after complete the task it does result to the expected output. If it does, then the system is functionally correct and if it doesn't then the system is functionally not doing what is required.

4.2.1 Test Plan

4.2.2 Features to be tested

All the functions of the Missing Person Finder system needs to be tested since the system is built in a manner that there is a separation of concerns. Each function is expected to complete a desired task.

4.2.3 Features not to be tested

Since the system is interacting as whole which demands that all the functions are working properly hence there is no feature that won't be tested. All the features will be tested.

4.2.4Testing Tools and Environment

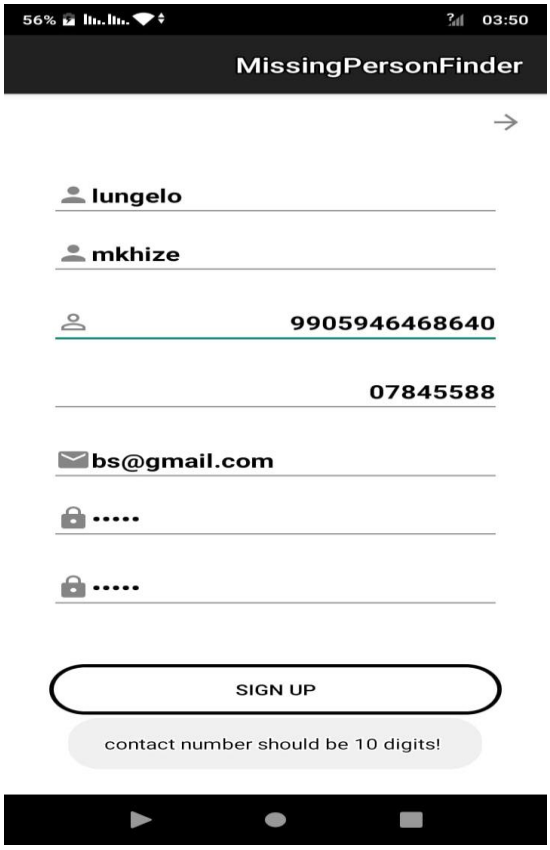
For the Missing Person Finder System software functionalities to be tested we must have an android mobile device with a minimum SDK 25. We also need any computer that has an internet access so that we can connect to firebase and be able to read and the firebase data.

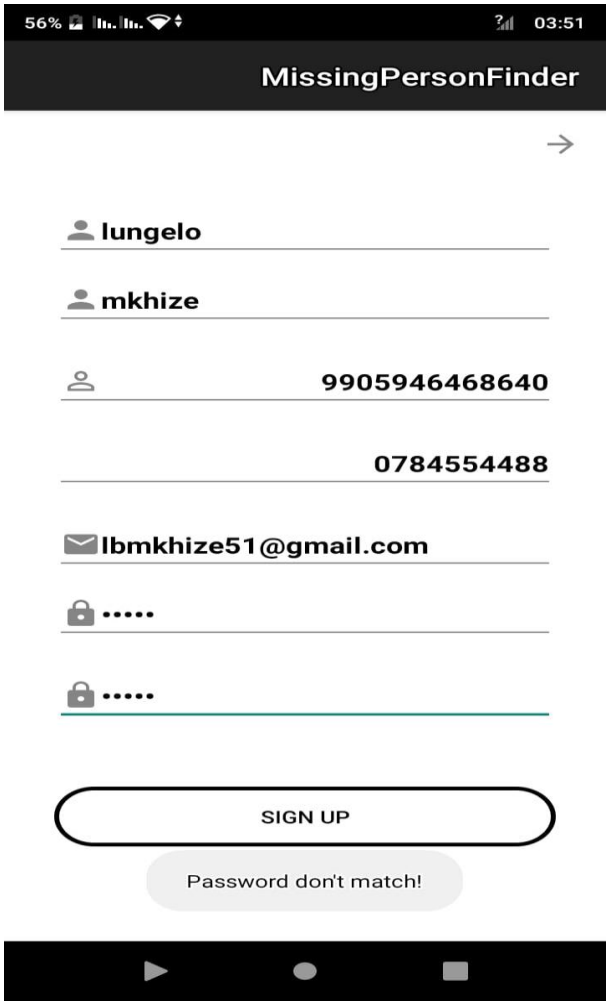
4.2.5 Test Cases

4.2.5.1 Inputs and Expected Outputs & Pass/Fail criteria

Task	Input	Output
1.Login I. Test 1 II. Test 2	“syagmail.com”, “email address” ”sya@gmail.com”,“email address”	invalid valid
2.Upload image I. Test 1 II. Test 2	“image.pdf”, “image path” “image.jpg”, “image path”	invalid valid
3. Sign up I. Test 1 II. Test 2	“Cebo@gmail.com”, “email address” ”sya@gmail.com”,“email address”	Not exist exists
Phone call Test 1 Test 2	“0718448449”, “random number” “10111”, “police emergency number”	Invalid valid

4.3 Test procedures.


56% 03:50
MissingPersonFinder
lungelo
mkhize
9905946468640
07845588
bs@gmail.com
SIGN UP
contact number should be 10 digits!


56%
03:51
MissingPersonFinder
lungelo
mkhize
9905946468640
0784554488
lbmkhize51@gmail.com
SIGN UP
Password don't match!

5. Chapter 5: Conclusion.

Introduction

This chapter is based on the findings on the data analysed in the previous chapters and the findings from the experiences, the upgrading of the system in future and summary.

Experiences

The missing person finder system covers modules reporting missing person, updating status, make phone call, delete report file from the user interface, allow user to view status and search repot file. This application exposed me to different types of dimension. My coding skills is incredible after solving the problem of system. I have experience new skills of coding while I was using android studio as front end, although at first, I was struggling to conduct all the information needed to accomplish the idea of the project. Due to time I could able to make it more advanced and perform different functionalities but achieving the same goal.

Future upgrade of the system.

- The system would able to track the location of that particular person that has been missed.
- The system would allow users that are disappearing in their own will, to report the file that would be sent to police station so that their families, friends and love wants get that report so that they would know that particular person is missing in his/her own willing.
- The system would notify the user by email and text messages if the report is successfully or not.

Summary

These findings make it clear that lot of people are getting missed and others are not even found. These results should be the wakeup call for us to make sure to report immediately, if there is someone missing, so that the police officers would take the case to consideration.

Missing Person Finder System has accomplish all the objectives since the users able to login to the system and report cases as many as he want to and get the feedback from the administrator which are polices. If another user has the information about the reported cases that are listed. He/she could able to use the phone call tab in the system to contact the police officers.

References.

1. *IRE 1700689 ICONIC RESEARCH AND ENGINEERING JOURNALS*
2. http://google.org/personfinder/.
3.