



COMP S350F

Software Engineering



Student Academic Record System

The testing plan report



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Table of contents

01	Objectives and Scope
02	System development progress
03	Testing Environment
04	Testing Purpose
05	Test Cases and Data
06	Test Results and Reporting
07	Conclusion



01

Objectives and Scope



Objectives and Scope



Validation Test

The objective of the validation test is to ensure that the Students' Academic Record System meets the specified requirements and functions as intended



Defect Testing

The objective of defect testing is to identify and address any defects or issues in the Students' Academic Record System.



02

System development progress



System development progress

Functional Parts

01	User Authentication	Venus is the second planet from the Sun
02	Student information	Completed, you can upload, delete, and edit
03	Academic Record	Completed, you can upload, delete, and edit
04	Document upload and download	Completed, Document can be uploaded, downloaded, and deleted
05	Notification	Jupiter is the biggest planet of them all

System development progress

Non-Functional Parts

01 Support Both Android and IOS Platforms

Currently only supports android system

02 Security

Account application is opened by admin. Login requires account and password authentication.



03

Testing Environment



Testing Environment

Android App

Android Simulator-Pixel 6 pro API 30

IOS App

Incomplete

Database

Window 11-
Google Chrome



04

Testing Purpose



Validation Test – System Requirement

Test whether the system can handle the following requirement

- ❖ User Authentication
- ❖ Student information
- ❖ Academic Record
- ❖ Document upload and download
- ❖ Notification
- ❖ Support Both Android and IOS Platforms
- ❖ Security



Defect Testing

Test the following items for the system

- ❖ Functional Testing
- ❖ Interface Testing
- ❖ Compatibility Testing
- ❖ Boundary Testing





05

Test Cases and Data

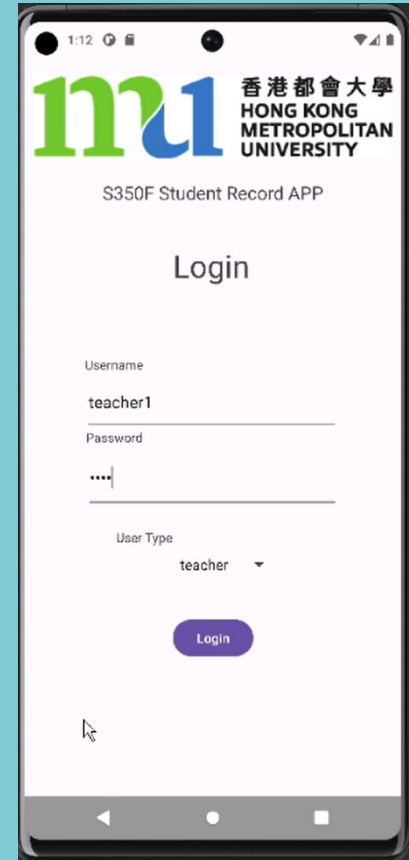
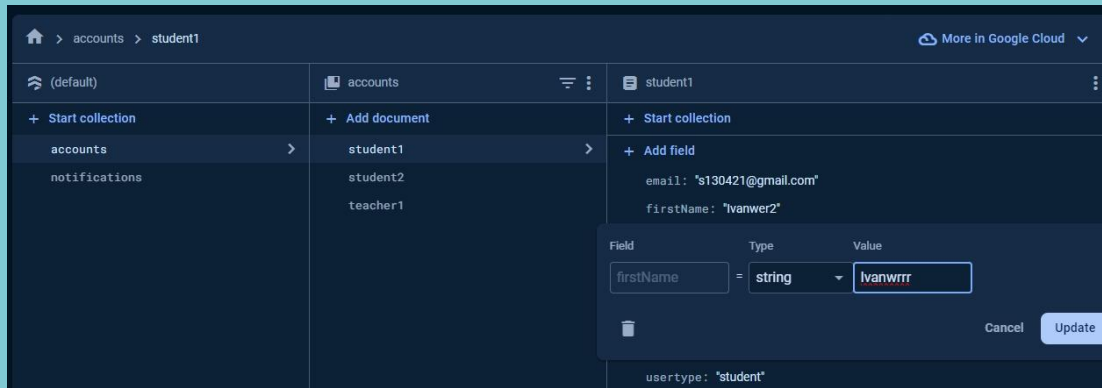


Validation Test

User Authentication

Support different user Type

Can it provide different functions for different users



Validation Test

Student information

Student Level

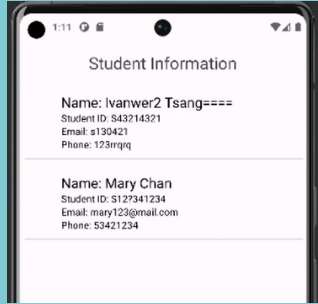
Test whether students can upload and change personal information

Teacher Level

Test whether teachers can view student profiles

Admin Level

Test whether the admin can directly change student personal information in the database

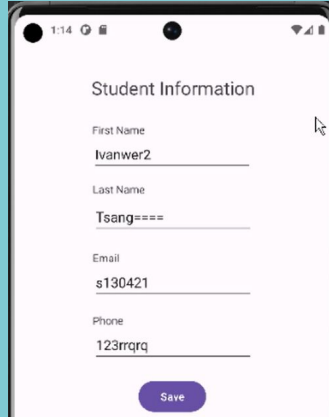


Student Information

Name: Ivanwer2 Tsang====
Student ID: S43214321
Email: s130421
Phone: 123rrrq

Name: Mary Chan
Student ID: S127341234
Email: mary123@gmail.com
Phone: 53421234

Teacher Level



Student Information

First Name
Ivanwer2

Last Name
Tsang====

Email
s130421

Phone
123rrrq

Save

Student Level

Validation Test

Academic record

Student Level

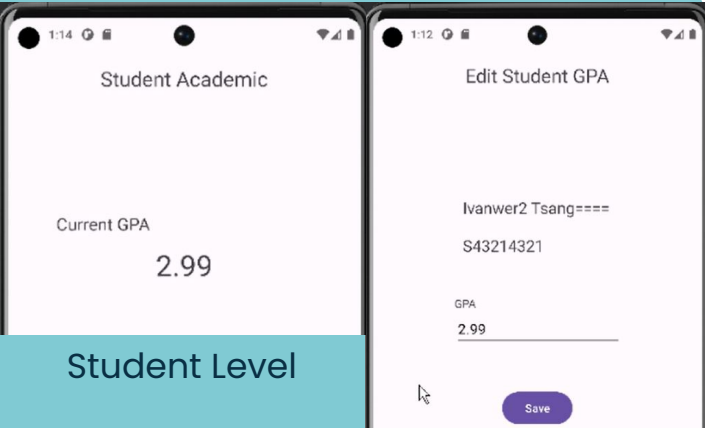
Test whether Student can view Academic record

Teacher Level

Test whether Teacher can upload and edit the Academic record

Admin Level

Test whether the admin can directly change Academic record in the database



Student Level

Teacher Level

Validation Test

Document upload and download

Student Level

Test whether Student can upload and download the Document

Teacher Level

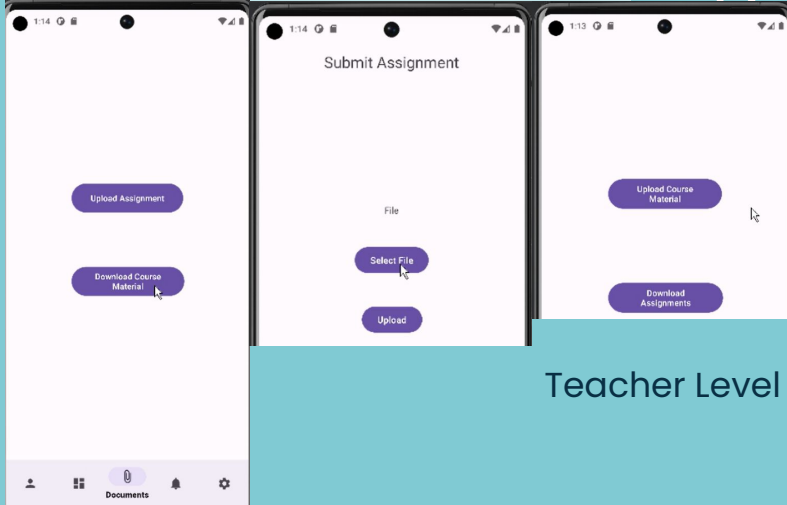
Test whether Teacher can upload and download the Document

Admin Level

Test whether the admin can directly change Academic record in the database

Teacher Level

Student Level



Validation Test

Notification

Student Level

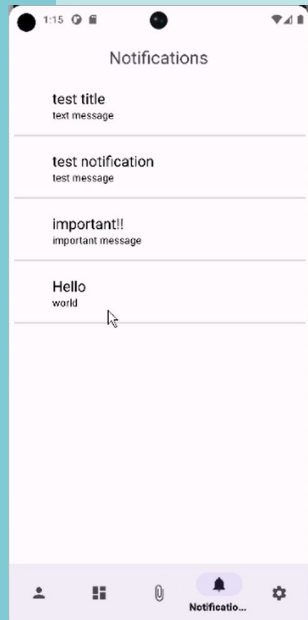
Test whether Student can view the Notification

Teacher Level

Test whether Teacher can create the Notification

Admin Level

Test whether the admin can create the notification in the database



Create Notification

Title

Message

Create

Teacher Level

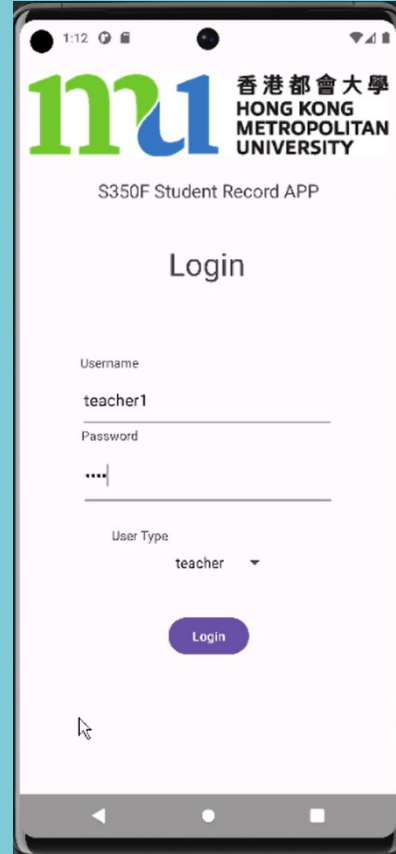
Student Level

Validation Test

**Support both
Android and iOS
platforms**

Android App

Test whether the program
can be opened on an
Android phone

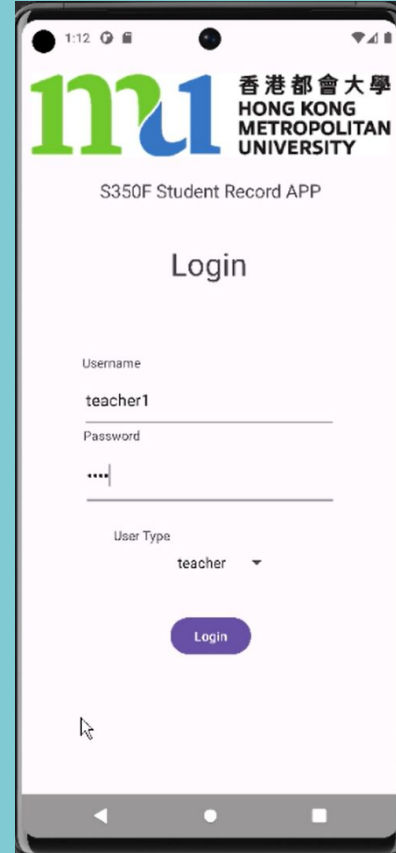


Validation Test

Security

Provide protection for user accounts and data

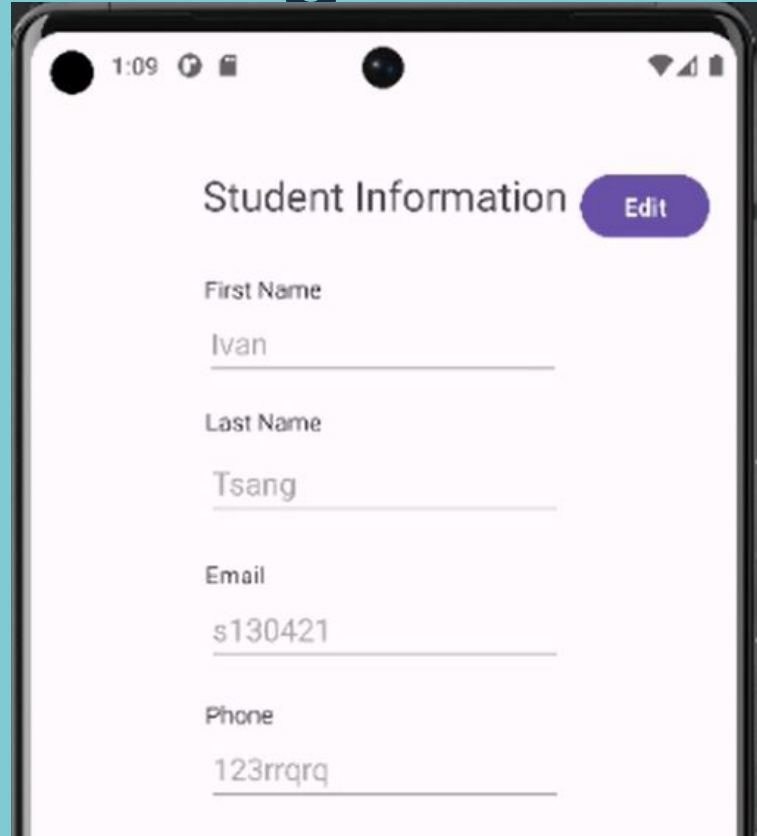
Distinguish whether the login information of different users is correct



Defect Testing

Functional Testing

Can student personal data be handled correctly



Student Information [Edit](#)

First Name
Ivan

Last Name
Tsang

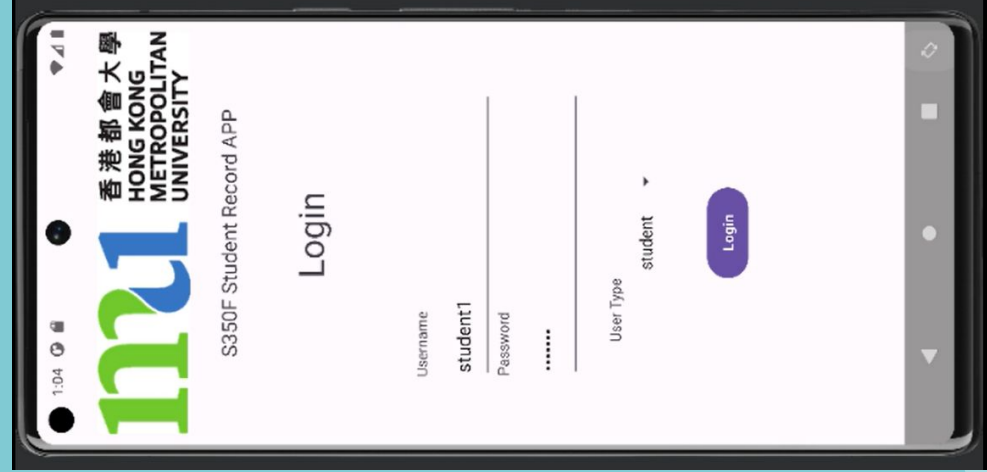
Email
s130421

Phone
123rrqrq

Defect Testing

Interface Testing

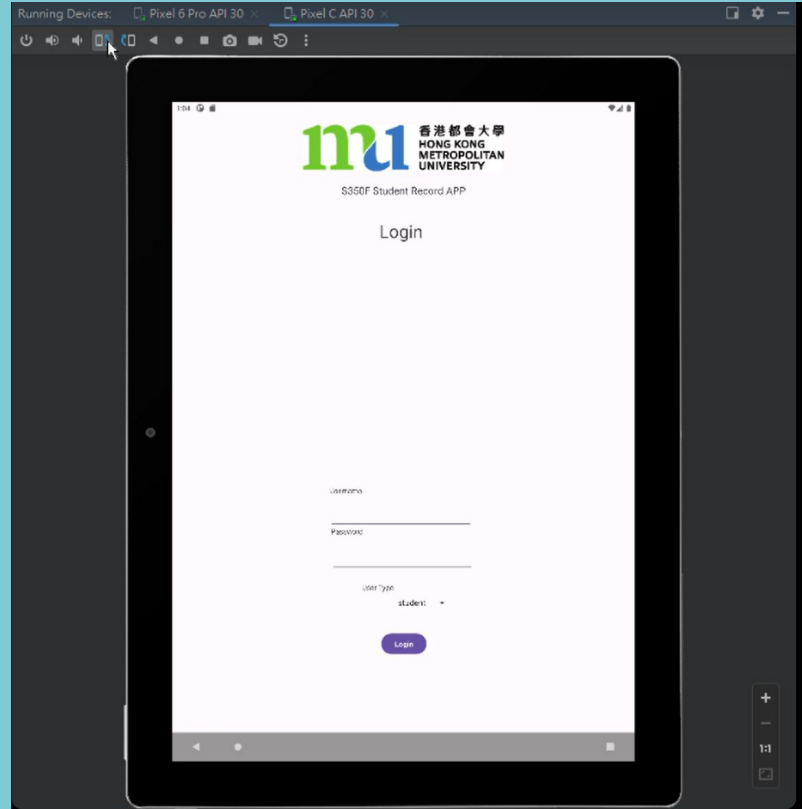
Does the program work properly when the screen is vertical or horizontal



Defect Testing

Compatibility Testing

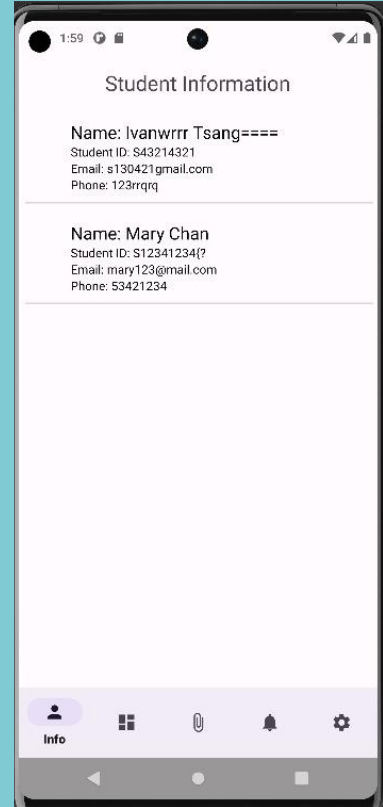
Can the program run normally on an Android tablet Pixel C API 30



Defect Testing

Boundary Testing

Can the correct data
format be stored





06

Test Results and Reporting



Test Results and Reporting

Validation Test

User Authentication

Students and teachers log in through the app, and admin logs in to the database to process data.

Student information

The user can correctly handle relevant content according to his user permissions

Academic Record

Document upload and download

The user can correctly upload or download related files according to his user permissions

Notification

The user can correctly send or receive relevant notifications according to his user permissions.

Support Both Android and IOS Platforms

Can support Android platforms, But Can't support IOS platforms

Security

Users need to log in with the correct account and password, and the account needs to be generated by the admin in the background

Test Results and Reporting

Defect Testing

Functional Testing

The system cannot distinguish the correct text format, and incorrect emails and phone calls received will also be recorded.

Interface Testing

When the phone is placed horizontally, the screen will not respond accordingly

Compatibility Testing

When the app is opened on a tablet, the app will not change proportions according to the size of the tablet.

Boundary Testing

In strings where only numbers or English can appear, punctuation marks can appear without corresponding warnings or prompts.



07

Conclusion



Conclusion

At present, the system has completed most of the basic functions in the Android part, but the UI and functional rules are not yet perfect. In the future, improvements will need to be made based on the data format and system interface.

On the IOS side, the Android program has not yet been successfully converted into an ios program. In terms of database, it can handle most functions, but it may need to be strengthened in terms of security.



Work Division

Handling documents

Cheung Chun Ming

System design

Cheung Chun Ming
Tsang Yiu Chung

Create database

Ng Sing Man

Developing the main body of an Android application

Tsang Yiu Chung

Developing the main body of an iOS application

Hong Ming Yan

Researching program functionalities

Tsang Yiu Chung
Cheung Kwan Lok
Linus

System testing.

Cheung Chun Ming
Tsang Yiu Chung

