



Hall Manager

An Android Application to create better communication and understanding between hall-students and administration

Overview

This android application was developed by Project Lover, consisting of two enthusiast programmer Riddhiman(2018331073) and Iftu(2017331104). Main purpose of this application is to create a platform where admin and hall-students can communicate easily and their major work can be done with ease and efficiency. Hall Manager provides many functionalities.



Language and other tools

Everything was done by Java which is an object oriented programming language.

Also Android Studio was the main tool for developing this application.

We need to gather knowledge about UI, database, APIs, activity lifecycle, viewbinding and so on.

For database we used Firebase. It is a great place to store data for android applications.





About Android Studio

Android Studio is the official integrated development environment (IDE) for Google's Android operating system, built on JetBrains' IntelliJ IDEA software and designed specifically for Android development. It is available for download on Windows, macOS and Linux based operating systems. Android Studio was announced on May 16, 2013 at the Google I/O conference. It was in early access preview stage starting from version 0.1 in May 2013, then entered beta stage starting from version 0.8 which was released in June 2014. The first stable build was released in December 2014, starting from version 1.0.

About Firebase

Firebase is a platform developed by Google for creating mobile and web applications. It is mostly used for some specific reasons

1. Reliable & Extensive Databases

Realtime database enables you to work without internet connectivity. Even data is still being cached in the memory of your device when you are offline and start synchronizing after the internet connectivity.

2. Fast & Safe Hosting

Firebase hosting supports all content types, including web applications, dynamic and static content. Moreover, either you want to host your Express.js microservices, HTML, CSS, or APIs, the hosting support of Firebase is always there. It means Firebase hosts a diverse variety of content.

3. Provides A Free Start to Newbies

Firebase allows coders to develop their applications without investing a single penny.

4. Free Multi-Platform Firebase Authentication

User identity has vital in maintaining the security of applications. In this challenging online security environment, Google-backed Firebase Authentication is one of the most appealing advantages of this platform. It caters easy-to-integrate SDKs, UI libraries and server-side services to verify users before using a particular Firebase application.





Studentside Functionalities

1. Providing admin info from the app. One can see the name and email address of admins who have accounts in the app to contact.
2. Sending complaints to the admin about any trouble using any mal-functionalities like hall, food or application related issues and so on.
3. Providing class updates and they can also add class updates and remove them if the class is canceled.
4. Ordering food from hall dining. Each item with the price is given in the menu. After selecting food items and giving room no and reg no food will be delivered to the room and payment will be shown below.
5. Visiting the university webpage to get extra information.
6. Giving information about their interest in thesis field.
7. Paying hall-fee using bkaash or any other payment method.

Student Registration

If u have no account register and necessary information about you. Browse to select picture of student from gallery

After registering user will receive an authentication mail to verify his/her email address

If you forget password click on "forgot password" and provide email address. Thus you will receive an email to restore password


To login, provide email address and password



Hall Manager

STUDENT-LOGIN

ADMIN-LOGIN



BROWSE

Full Name

Reg no

Email

Password

Contact no

Dept

SIGN UP


Hello there, Welcome to Hall Manager
Sign In To Continue

Email Address

Password

LOGIN

Forgot Password ? Register



200 x 200

Hall Manager

Email Address

RESET PASSWORD

Order Food From Hall-dinning

You can also order food from hall-dinning. This will help students to get food easily if he/she is sick.

- Here you will see a list of food in the menu and add specific item to order
- Provide reg no and room no to deliver food to your room
- click on "Place order" and you will see your order and cost

Orders

ভাত
মুরগি
ডাল

70.0

Menu

ভাত(20 tk)

ADD

ডাল(10 tk)

ADD

মাছ(30 tk)

ADD

মুরগি(40 tk)

ADD

ডিম(15 tk)

ADD

Reg no

Room No

PLACE ORDER

Thesis Interest

- Student can share their personal interest in thesis field. This feature will help research oriented teachers to find their suitable student for research
- Provide information about you including your thesis interest in the particular field
- Save your information

A UI mockup of a 'Thesis Interest' form. The form is set against a light blue background with a decorative graphic of overlapping teal circles in the top-left corner. The title 'Thesis Interest' is centered at the top in a bold, black font. Below the title are four white input fields with rounded corners, each containing a placeholder label: 'Name', 'Thesis Interest', 'Dept', and 'Reg no'. At the bottom of the form is a solid teal button with the word 'SAVE' in white, uppercase letters.

Thesis Interest

SAVE

PHY101D at 12am



CSE250 at 2pm



EEE102D at 5pm



SWE202 at 12am



BUS202 at 12am



Add Class



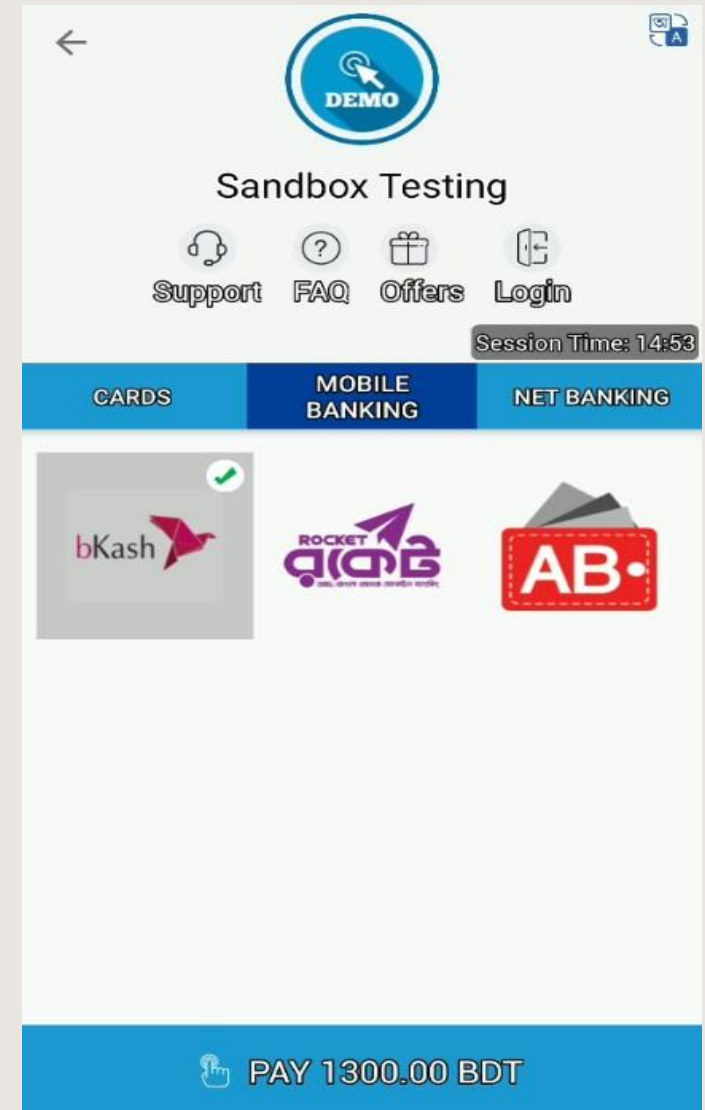
Class Update

This will help students to find class update. Class updates are usually posted on social media like Facebook which is a cause of distraction. As a result, student can be distracted to see class update. Hall Manager gives solution providing the feature.

You can also add new class time and remove it if this class is canceled. You have the freedom to delete any class if canceled

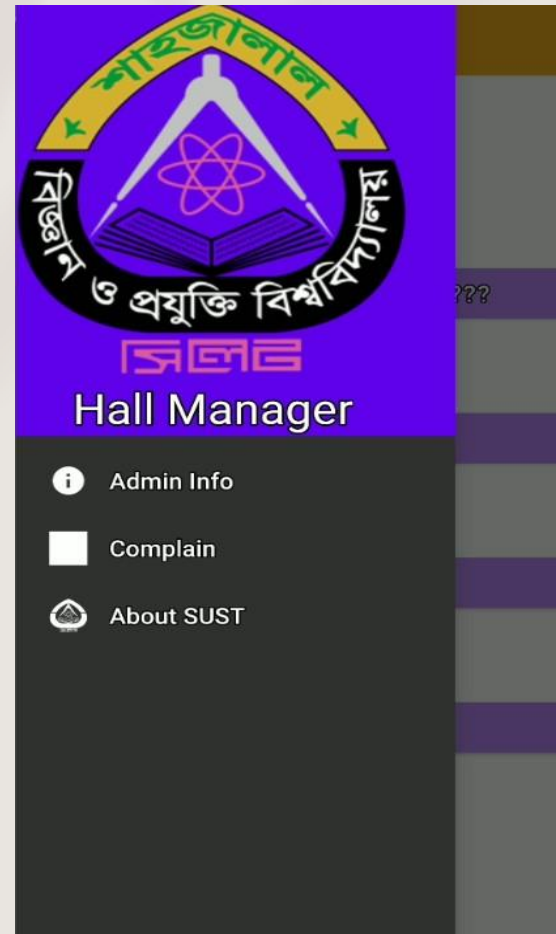
Hall-Fee Payment

- Hall-students can pay hall-fee using this app. This will be helpful for students to pay the fee while not hassle to pay standing in a long line in the bank as it is done online.
- You can pay your hall-fee with any payment option like mobile banking(bKash,nagad,rocket),card or net banking
- But issue is as the library is outdated feature stops running or crushes.



Admin info

- This feature provides name and email address of admin who have registered in the app.
- This will help students to communicate with admin



Fullname : Riddhi
Email : riddhimandebn
ath4260@gmail
com

Fullname : RIDDHIMAN DEBNATH
Email : riddhimandebn
ath4260@gmail
com

Fullname : RIDDHIMAN DEBNATH
Email : riswn5037@gmail.com

Fullname : RIDDHIMAN DEBNATH
Email : riddhimandebn
ath4260@gmail
com

Fullname : RIDDHIMAN DEBNATH
Email : riddhimandebn
ath4260@gmail
com

Complain

Title

Complain

SEND COMPLAIN

- Using this feature student can send complain or notify admin about certain topic. This will help create better communication
- User has to provide title and complain



About SUST

- Students will be redirected to webpage of SUST and get update regarding any issue
- This will help students to find website without googling it which is time efficient

Adminside Functionalities

1. Allocating hall-students to new hall and room.
2. Checking out hall-student profile(email, name, room, hall-name, reg no, dept).
3. Sending updates or feedback to hall students about different issues.
4. Gathering info about interested students in particular thesis field.
5. Checking weekly meal status from pie chart





Hall Management

Full Name

Email

Password

Register User

Admin SignUp

It is same as student signup. User must be verified before login

Room Allocation

Name

Reg no

Dept

Hall name

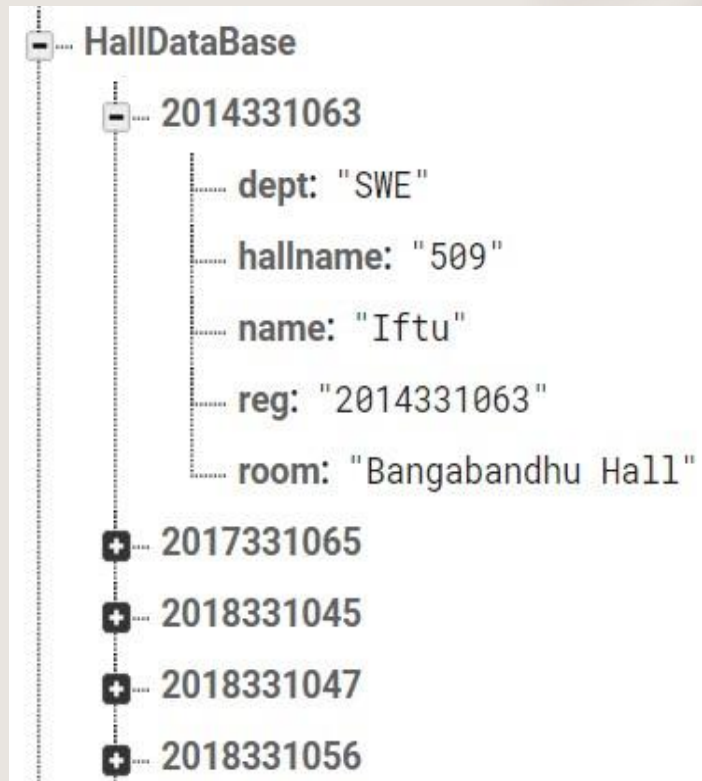
Room no

SAVE DATA

Admin can allocate room and notify student about it

Admin just need to provide necessary info to use this feature

Everything will be saved in the database



Hall info

- This feature will help admin to see hall-room related info which will be fetched from database.
- It will be helpful for admin to remain updated with hall-data

Name : Iftu

Dept : SWE

Reg no : 2014331063

Hall name : 509

Room : Bangabandhu Hall

Name : Riddhi

Dept : GEB

Reg no : 2017331065

Hall name : 607

Room : Hmm

Name : Rafael

Dept : CSE

Reg no : 2018331045

Hall name : 1101

Room : Shahporan

Name : Riddhi

Dept : SWE

Reg no : 2018331047

Hall name : 501

Room : Shahporan Hall



Hall Management

Title

Feedback

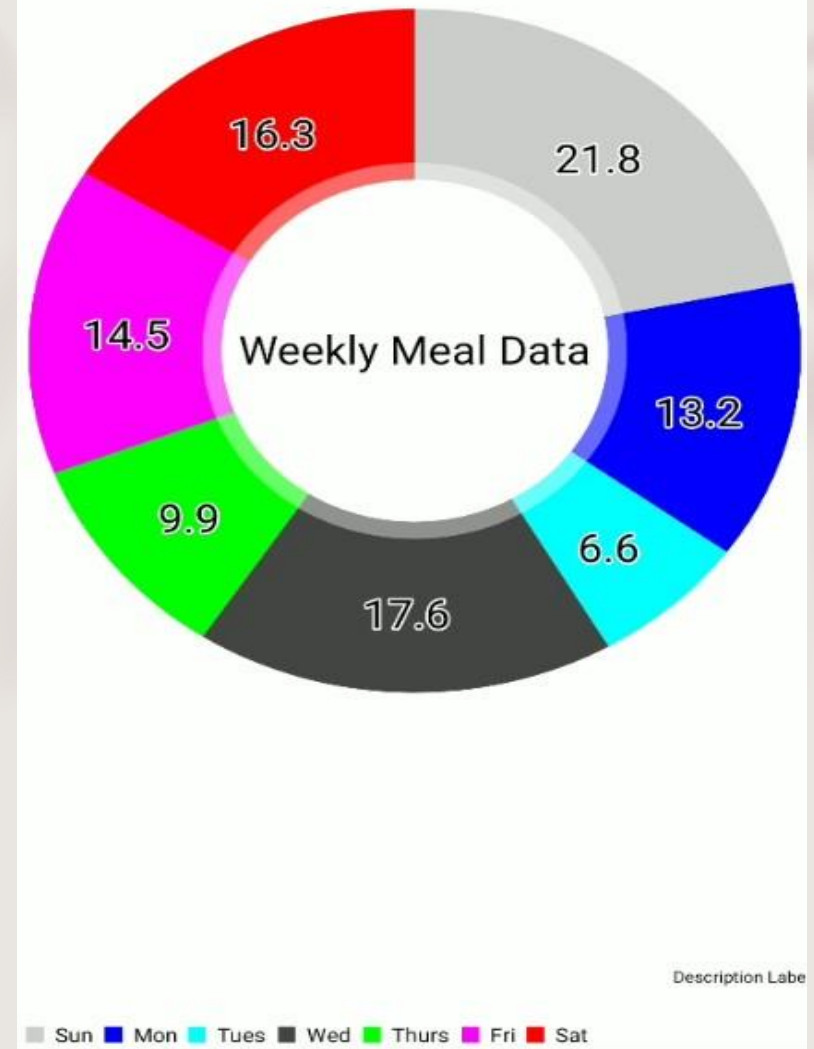
Send To All Students

Send Feedback

- Admin can send feedback regarding any issue that has students complained about

Meal Status

- Here admin can see weekly meal consumption through a pie chart
- So Admin can create budget efficiently regarding food-consumption for every hall
-



Information about Thesis Interest

A mobile application interface for viewing student thesis interest. It features a light teal header with the title 'Thesis Interest' and a search bar containing the student ID '2018331073'. Below the search bar is a teal 'SHOW DATA' button. The data is displayed in a list format with labels in bold: 'NAME: RIDDHIMAN DEBNATH', 'DEPT: CSE', and 'THESIS INTEREST: NLP'.

Thesis Interest

2018331073

SHOW DATA

NAME: RIDDHIMAN DEBNATH

DEPT: CSE

THESIS INTEREST: NLP

Using this feature admin can see student's particular thesis interest



Future Plan Of Hall Manager

- Finding Updated library to implement payment gateway
- Extending Hall Manager not only to hall students but also to the mess students
- Hall students give away their books, used items like T-scale, box and Hall Manager can be handy in this case. It will store various information about used product and students can see those items. They can also post and buy items online.
- Implementing medical emergencies like delivering medicine to sick students
- Creating online library system