Meal Deal

Software Engineer
Team: Milestone

CST-2017

Submitted By:

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Introduction:

Meal Deal is an application to provide the information about all the discount and special offers in restaurants. You have to sign up with your email, username, and password. This application will notify when there is new offers, or when any nearby restaurant has something trending, also you can search for the popular restaurants.

Executive Summary:

Meal Deal is an application to provide the information about all the discount and special offers in restaurants. The main point of developing this app is to help the user to find all offers of different restaurants in one place.

Almost all the restaurants provide offer throughout the year. It's very difficult to find desired offers from various place. So, in our app user will get all the offers related information in one place.

User will be able to see all offers with details. They will be able to give rating point on offers. They can search offers according to location, restaurant, offer type and item. They can also compare offers on same food item. User will also be notified when any new offer is added on their favorite item or from their favorite restaurant.

Project goals:

- To develop an app providing information of all the ongoing offers in restaurants
- To provide reviews from users regarding to the particular offer
- To build a platform for the restaurants to promote their offers easily

Project platforms:

- Android Operating System based Mobile
- Android 4.0 or Above

<u>Requirement:</u>

Programming language:
1. Android
2. PHP

Tools:
1. Android Studio

Operating system:
Windows 7 / Windows 8/Windows 10

<u>Operational Feasibility:</u>

The app will be very much user friendly with attractive Interface. Our app will be supported by the most of the versions of android. Approximately 97.4% devices existing in Google Play Store will support our app.

<u>Documentation for users:</u>

<u>How to obtain:</u>

As we mentioned earlier if we launch our app on Google Play Store, it will be our in reach of our customer.

<u>Simple Installation:</u>

Our executable .apk file will be available online and thus installation is only click away. But the perquisite to our app is you have to have your device connected to the internet while searching for offers or your favourite restaurant.
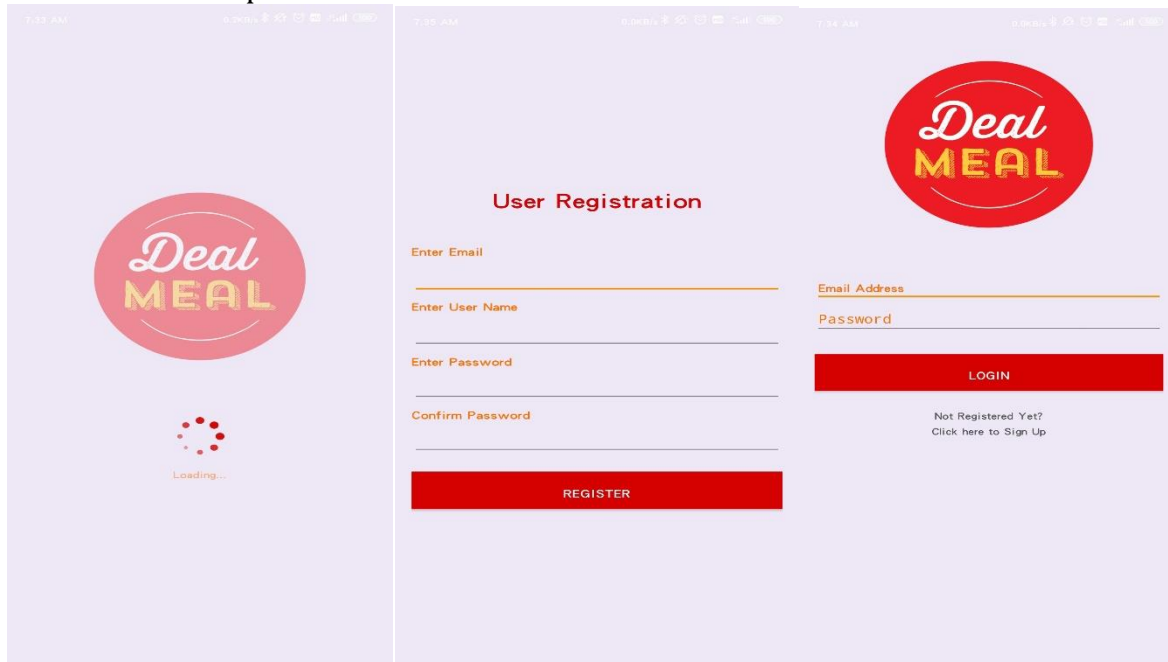
<u>How to run:</u>

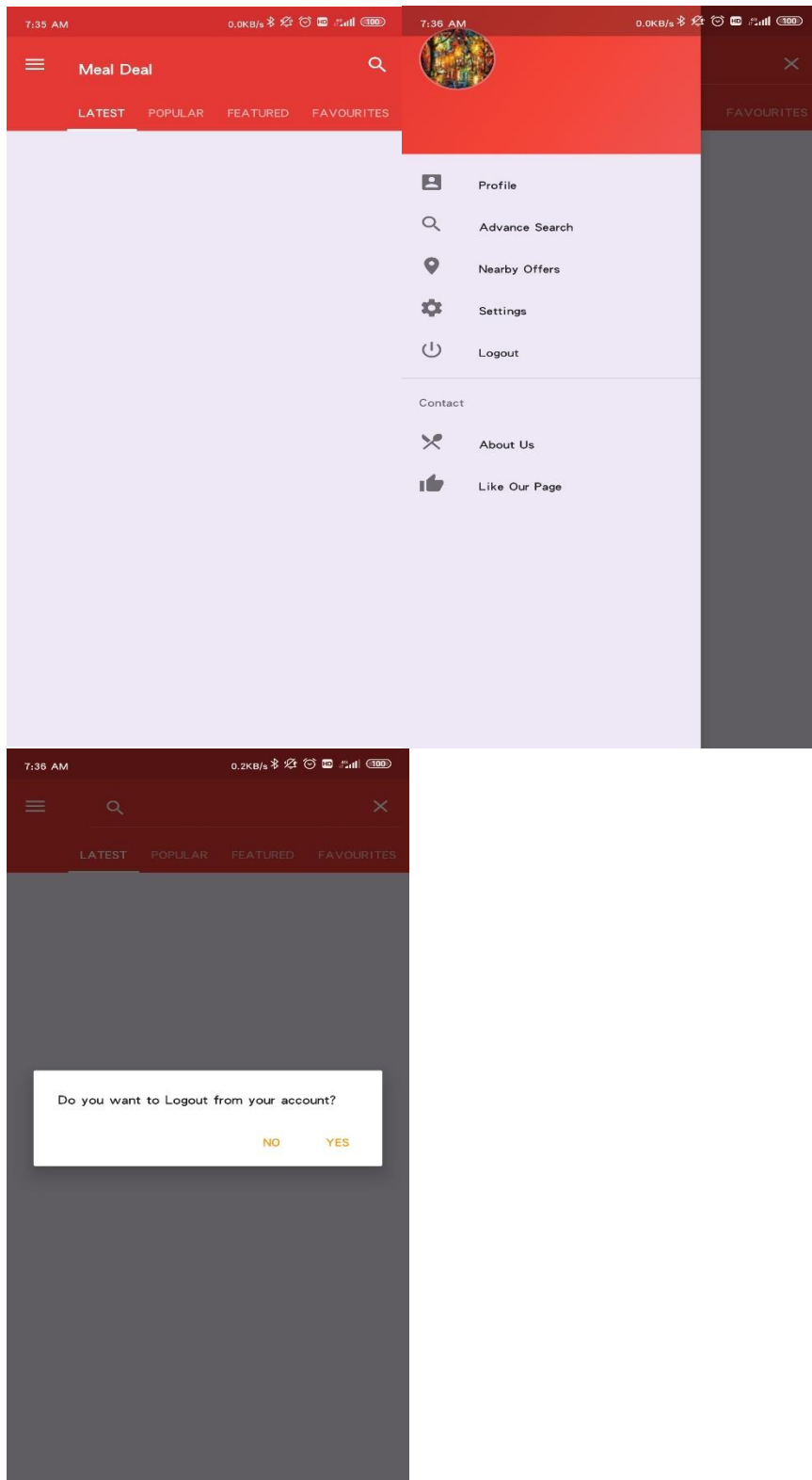Once you have the uploaded executable file available on github(https://github.com/njuptcourses/se-2019-autumn-milestone), you can run it with Android Studio software. To populate the database xampp was supposed to be used(under process)

<u>How to use:</u>

Once you get this app installed, you will be directed to basic login activity. But if you don't have an account, you simply click on register and give your information as required. Your information will be stored in database. So, no need to be worried as we will keep your data secured. So, when you are a registered member of this app, you see simple but attractive UI inside the app. We have prepared Latest restaurant option, Popular, Featured and your favourite restaurants will be found based on your regular search. You will be able to see the the ongoing and nearby offers with notification. You will find your information on the right top corner of the app. Tap on it, you will see your profile, settings, nearby offers which will be shown by analyzing your location. You will see contact us option there to contact us in any need as well as rating option to rate our app. We have logout option for you to get out of the app anytime.

We used an additional phone screen to run the project since, the project was unable to run in AVD for a virtual screen. We have tried to run it multiple times, but was only able to run on the additional phone screen.

7:35 AM   0.0KB/s
Meal Deal
LATEST   POPULAR   FEATURED   FAVOURITES

7:36 AM   0.0KB/s
FAVOURITES

Profile
Advance Search
Nearby Offers
Settings
Logout

Contact

About Us
Like Our Page

7:36 AM   0.2KB/s
LATEST   POPULAR   FEATURED   FAVOURITES

Do you want to Logout from your account?
NO   YES

How to report a bug

If there is any issue with the app, the user can easily contact as through clicking on contact us. Moreover, the comment box of Google Play Store is always open. Any suggestion on modifying or developing any bug is always welcomed. Our developer team will respond accordingly.

Documentation for developers:

Where to find the source code

The source code for the file will be in our Github repository(https://github.com/njuptcourses/se-2019-autumn-milestone) Also we can be contacted through email. All the information will be supplemented in our repository in Github.

Directory structure:

For src_ : Final Project>Demo1>Demo1>app>src>(androidTest,main,test)
For build_: : Final Project>Demo1>Demo1>app>build>(generated,intermediates,outputs,tmp)
For apk _: Project>Demo1>Demo1>app>build>outputs>apk

How to build the software:
After the developer downloads the file from the repository, developer has to open the android studio and go through the directory path of the file downloaded, the source code could be found. There will be the folder named,"(Final Project>Demo1)" so, when the developer executes the file, (if needed) the developer might require the change the sdk version or gradle version or dependencies, etc. according to the time the developer is building the application.

Conclusion:
All of our team members have put enough effort to build this project. Our respected teacher has helped a lot with the instructions, when we were facing trial and errors. This surely was not an easy project, took us months to have proper view and execute. For what is worth, our team needs recognition for a good teamwork because it would not be possible without each member's hard work.

Meal Deal

Torikul Islam Ontu   F17040104

Introduction

Meal Deal is an application to provide the information about all the discount and special offers in restaurants. The main point of developing this app is to help the user to find all offers of different restaurants in one place.

My responsibility was to gather the resources required for our project and analyze the product outcome and value.

Feasibilities of Project

A **feasibility** study is an analysis of the ability to complete a project successfully, It is one of the pillars of a project before going in action to build it. There are three feasibilities we considered before we start building the application-

a) Technical Feasibility:

- All the softwares and hardwares needed for building the app is available in our reach.
- *Hardware Configuration:*

    >Core i7 Processor
    >8 gb Ram
- *Software Configuration:*

    >Latest version of Android Studio
    >MySql Database

b) Economical Feasibility:

- Our main cost will be the transportation cost for collecting offers from various restaurants, which is affordable.
- All hardware and software are available to us.

c) Operational Feasibility:

- The app will be very much user friendly with attractive Interface.
- Our app will be supported by the most of the versions of android

- User will get offers notification from their favorite restaurants through this app.

Meal Deal

Shaoib Ahmed   F17040116

Introduction:

Meal Deal is an application to provide the information about all the discount and special offers in restaurants. In the previous report of our project we have shown data flow diagram (DFD) and use case diagram of our project. I was responsible for the Class Diagram of our Project.
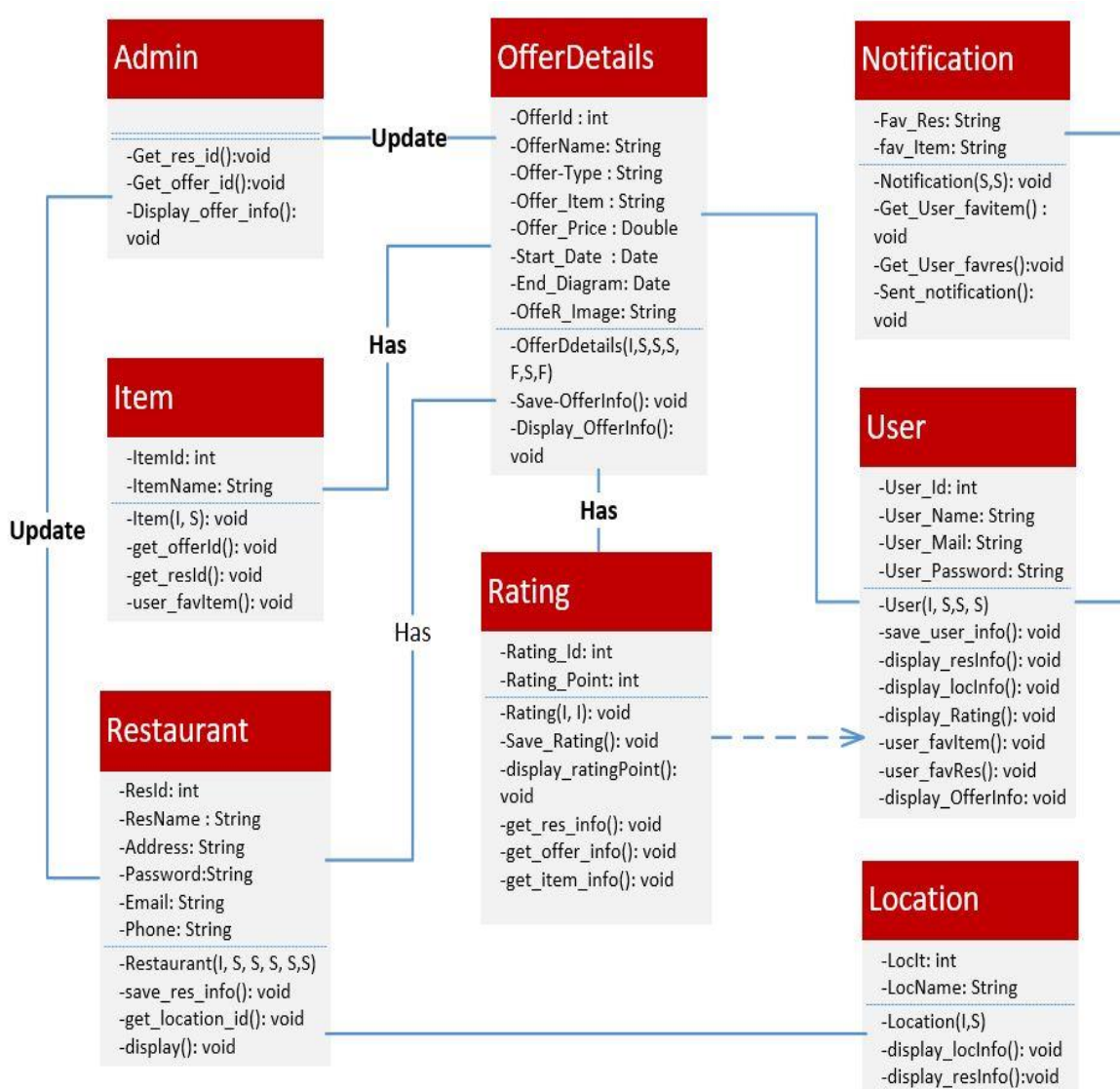
Class Diagram:
A class is the description for a set of objects with the same attributes and operations. It serves as a template for object creation. Each object created from the template contains the attribute values that conform to attribute types defined in the class.

Purpose of Class Diagram:
- Analysis and design of the static view of an application.
- Describe responsibilities of a system.
- Base for component and deployment diagrams.
- Forward and reverse engineering.

Class Diagram:
Due to not having enough page space the class diagram is shown in the next page

Admin

-Get_res_id():void
-Get_offer_id():void
-Display_offer_info(): void

OfferDetails

-OfferId : int
-OfferName: String
-Offer-Type : String
-Offer_Item : String
-Offer_Price : Double
-Start_Date : Date
-End_Diagram: Date
-OffeR_Image: String
-OfferDdetails(I,S,S,S, F,S,F)
-Save-OfferInfo(): void
-Display_OfferInfo(): void

Notification

-Fav_Res: String
-fav_Item: String
-Notification(S,S): void
-Get_User_favitem() : void
-Get_User_favres():void
-Sent_notification(): void

Item

-ItemId: int
-ItemName: String
-Item(I, S): void
-get_offerId(): void
-get_resId(): void
-user_favItem(): void

User

-User_Id: int
-User_Name: String
-User_Mail: String
-User_Password: String
-User(I, S,S, S)
-save_user_info(): void
-display_resInfo(): void
-display_locInfo(): void
-display_Rating(): void
-user_favItem(): void
-user_favRes(): void
-display_OfferInfo: void

Rating

-Rating_Id: int
-Rating_Point: int
-Rating(I, I): void
-Save_Rating(): void
-display_ratingPoint(): void
-get_res_info(): void
-get_offer_info(): void
-get_item_info(): void

Restaurant

-ResId: int
-ResName : String
-Address: String
-Password:String
-Email: String
-Phone: String
-Restaurant(I, S, S, S, S,S)
-save_res_info(): void
-get_location_id(): void
-display(): void

Location

-LocIt: int
-LocName: String
-Location(I,S)
-display_locInfo(): void
-display_resInfo():void

Update   **Has**   **Has**   **Has**   **Update**

Conclusion:

According to the Class Diagram now we will be able to implement our project properly.

Meal Deal

Zafar Iqbal Riyad   F17040119

Introduction:

Meal Deal is an application to provide the information about all the discount and special offers in restaurants. In the previous report of our project we have shown our data collection process, collected data and the findings after analyzing them. In this report we will discuss about data flow diagram (DFD) and use case diagram of our project.
 I was responsiblr for analyzing the logic and use case diagram of the project.

Activities of the project:
- ❖ User will provide their info to Sign Up and they need to Log In to see the offers.
- ❖ User can search offers based on different criteria.
- ❖ User can compare offers and also give review.
- ❖ User will get notification of their favorite items and restaurants.
- ❖ Restaurants can add, update, and delete their own offers.
- ❖ Admin can add, view, delete and update any offers.

Use Case Diagram:
In software and systems engineering, a **use case** is a list of actions or event steps, typically defining the interactions between a role (known in the Unified Modeling Language as an actor) and a system, to achieve a goal. The actor can be a human or other external system. Use Case diagram will give us an idea of system architecture such as how the system will behave between user and admin

Actor:
An actor is a user of the system. This includes both human users and other machine or computers. An actor uses use case to perform some piece of work which is of value to the business. The set of use cases an actor has access to define their overall role in the system and the scope of their action.
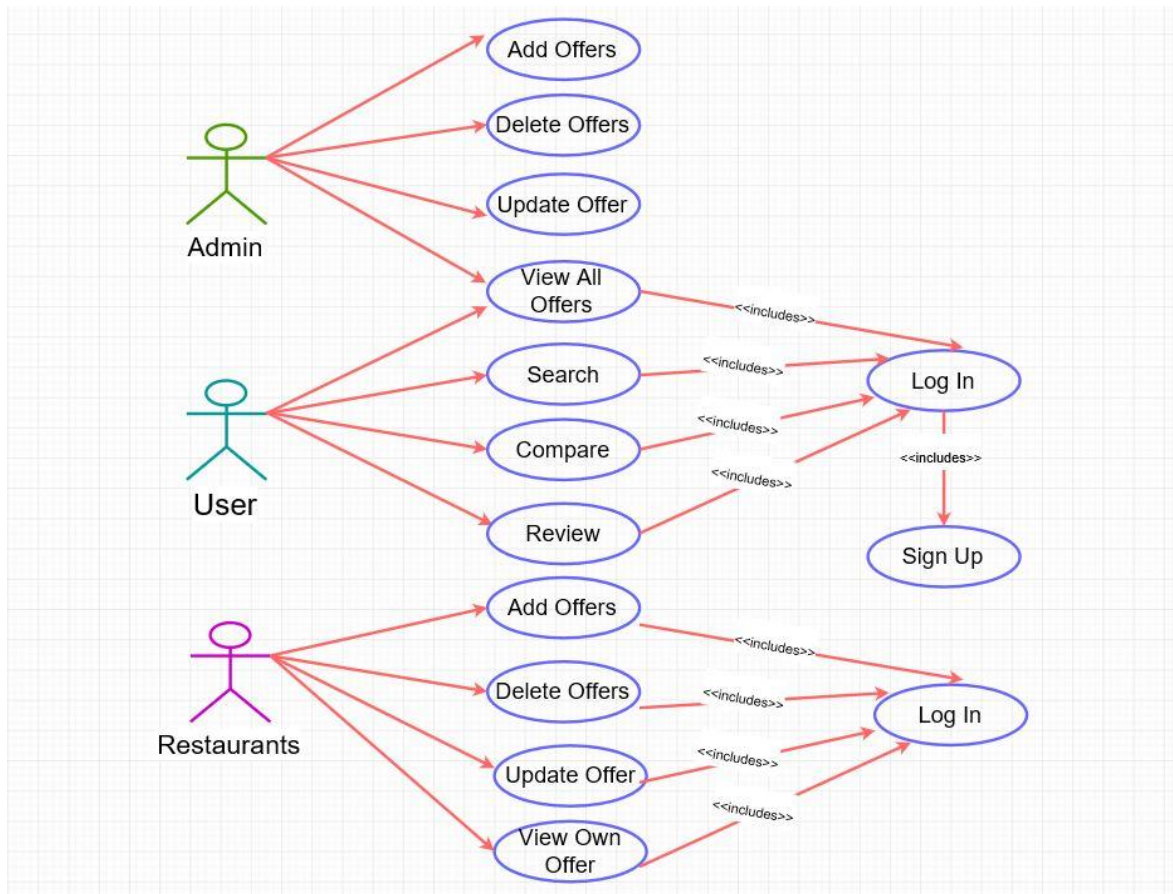The Actors of a system can be defined as anyone or anything that interacts with the system to achieve a particular goal. Keeping this in mind, our system have 3 primary actors:

- **Admin:**
  A person who maintain the whole system.

- **User:**
  General people who will see the offers & give reviews.

- **Restaurant:**
  The registered restaurants will provide their offers in our system.

Use Case:

We've following possible use cases in our project:

User	Restaurants	Admin
Sign Up & Login	Log In	View All Offers
View All Offers	View Own Offers	Add Offers
Search Offers	Add New Offers	Delete Any Offers
Compare Offers	Delete Own Offers	Update Any Offers
Give Review	Update Own Offers	

Use Case Model:

Meal Deal

Saiful Haque Saif   F17040102

Meal Deal is an application to provide the information about all the discount and special offers in restaurants. The main point of developing this app is to help the user to find all offers of different restaurants in one place.

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My part of the project was to go through the algorithm and the rechecking the reports . I had to integrate some of the functions, and give specific instructions to the code. I had to go through lot of trial and errors when it comes to database. I tried my best part to make it dynamic but in the end, it was not that easy for us as we were new to start with a project and database work like this. Though I played an important role with the idea of this application from start. I wanted to do something challenging, hence I came up with a project like this. Yes, of course it wouldn't be possible for me to do this project alone. This was an experience, and yes I hope I can learn more, and create a positive feedback in the world of computer science. There were difficulties that we have face but, our respected teacher assisted all the way, could not be more thankful.

Meal Deal

Hasib Ahmad(F17040108)

I am Hasib Ahmad(F17040108) served my team as the leader to this team. My responsibilities were to decide the topic, design an easy but attractive UI(user interface) and assist my teammates to execute the project, allocate the tasks among them. They worked really hard behind the scene but somehow they failed to accomplish it for the second time.

 We encountered some problems which I had to observe carefully. At first, they extracted the apk file when they executed the project for the first time but in the meanwhile the windows on which we had been working stopped functioning and we had to give it a new windows setup. And then we reinstalled the android studio. These tasks were done under my governance. When I tried to debug the app for the second time it appeared with some issues such as gradle and sdk version update. It suggested us to upgrade the gradle plugin 3.5.3 and gradle wrapper of 5.4.1(latest). I did it myself. After that the IDE asked me to add maven repository which I did in build.gradle. But unfortunately it didn't work. After that I migrated my system to AndroidX(latest). It showed me that the word "compile" was deprecated and no longer used in dependency library. Then I replaced with implementation and set my sdkverison to 29 but still we were having trouble with it which was unsolved.
 I didn't discourage my teammates to move forward with this project. Discouragement can cause lack of interest in accepting real life challenges like this project. So, I am thankful to them as they were by my side. As the teamleader of this team, I hope my team should get it's reward for their effort throughout the journey. I on behalf of my team want to express our gratitude to you for your guidance. Without your direction and support, we might have not taken this project as a challenge. Thank you once again Laoshi.