Final Term Project

Even Semester 2021-2022

1604C062
Advanced Native Mobile Programming
Teknik Informatika
Universitas Surabaya

Details

- **Continue from Mid Term Project (or you may create a new app from scratch)**
- Must implement Data Binding
- Must implement Database Internal (Room)
- Bonus:
  - Implements Sensor and Notifications
  - Other

Details

- **Project should be developed in group of max. 3 students**
- Use github as basis of collaboration within group
- The mid-term rules still comply: **minimum of 8 fragments, MVVM, Recycler View, Nav Drawer, and Bottom Nav**

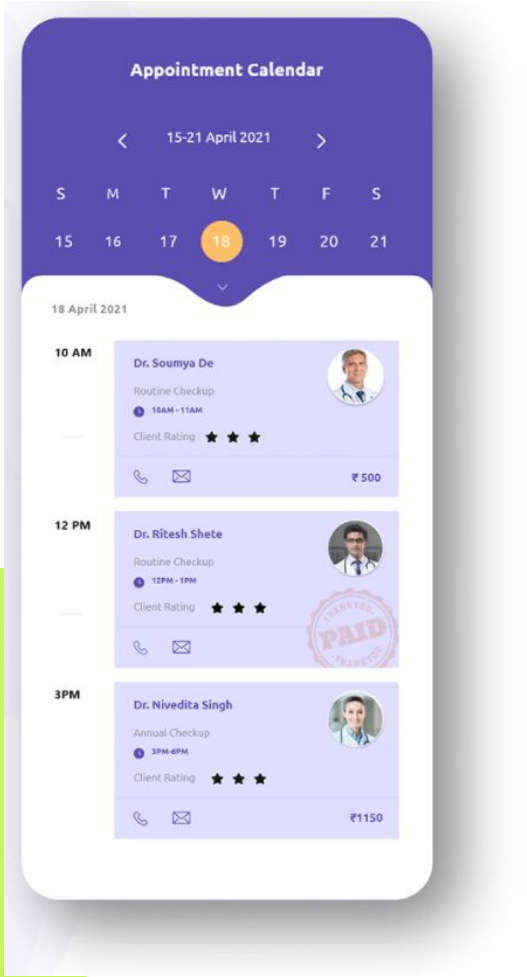
Database Internal Details

- **Must have at least three tables, there is no obligation to create foreign key check**
- Project must implement Room Migration
- Project must implement DAO for **CRUD actions** (although not all are used)
- **All displayed data in app must be stored in internal database**

Data Recycler View

For example, a RecyclerView adapter can consume data from internal database

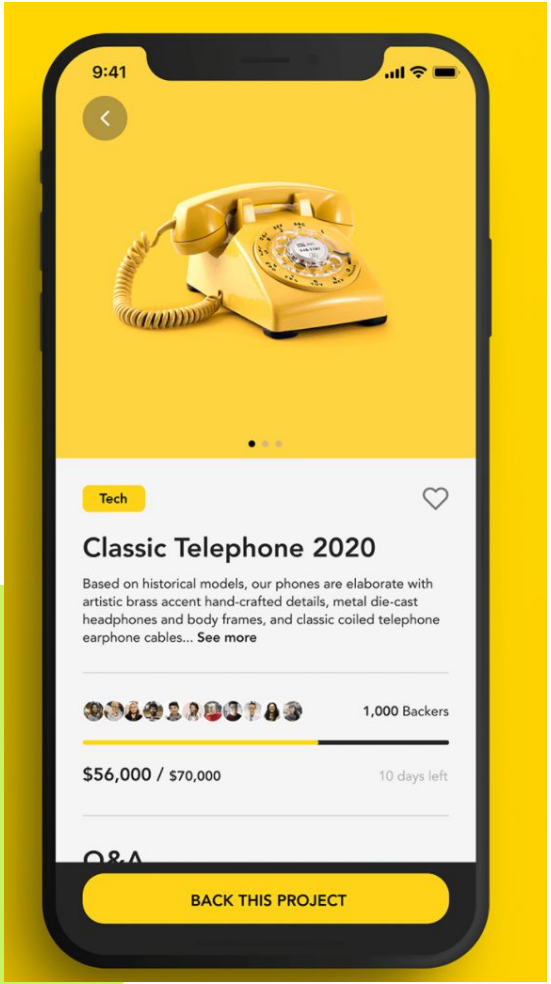
Doctor schedule retrieved from Doctor table and displayed in RecyclerView that ordered based on date



Details

Any information in details page must be retrieved from internal database

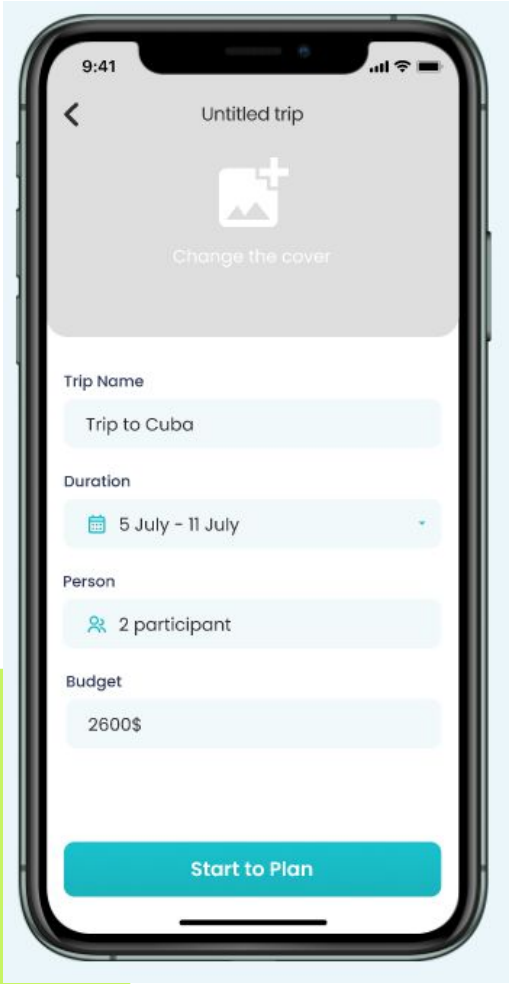
For example: the product name, description, fund requested, etc. are retrieved from internal database



CRUD actions

Create, Read, Update dan Delete. **Create/Insert and Read are mandatory (must be implemented)**.

Data trip input: name, duration, number of person, budget. Data will be created and inserted to DB



Details Data Binding

- Must implement attribute binding, listener binding, dan two-way data binding **on all layouts**
- Common examples:
  - Attribute binding on detail page/RecyclerView/etc.
  - Listener binding on button click
  - Two-way binding on edit page
  - etc.

Requirements (IMPORTANT)

Your project will be **rejected** if one of these requirements is not met:

- Developed with Android Studio using **Kotlin programming language**
- Must use **MVVM Architecture**
- Must use **Navigation Graph**
- Must use **SQLite (Room)** to store database
- Must use **Data Binding**

Details & Due Date

- Project should be developed **in groups**
- Required submissions:
  - Github link of the project (set it as public)
  - Video recording, **max 10 minutes**
- Project Due Date: **Friday, 1st July 2022**
- Project must be presented during the exam date (schedule will be announced later)

Video Recording Mandatory Contents:

- How to use the app
- MVVM implementation
- How the apps UI flow (demonstrate the navigation graph)
- Explanation of the implementation of internal database, DAO, and migration
- Explanation of the implementation of data binding
- Explanation of additional features

Assessment Details

No	Item	Score Max.
1	Internal DB with Room (Migration, DAO CRUD)	15 point
2	DB & table query call and implemented in ViewModel	40 point
3	Data binding (attribute, listener, and two way) implementation in layout	30 point
4	Video presentation	5 point
5	Additional Features (sensor, notif, etc)	10 point
	TOTAL	**100 Point**

Assessment Details

Additional Features

- Develop additional useful features
- Score based on usefulness and complexity
- Range from 0-10 points

Github Activities

- This is a group project, therefore we expect each group member contributes to the project development
- We will check for all github activities to determine student contribution to the project
- Student with **minimum to no contributions** will be disqualified (NAS = 0)

THERE IS NO PLACE FOR CHEATER

All intents and purposes of cheating on this project won't be tolerated at all

Thanks!

Any questions?

You can find me at
andre@staff.ubaya.ac.id

Credits

Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by SlidesCarnival
- Photographs by Unsplash
- UI/UX example: https://www.behance.net/