Vanier College

Computer Science Department

420-431-VA Application Development 2 (Mobile)

Final project Instructions and Deliverables

Objectives

The aim is to design and develop an innovative Flutter app that solves a real-world problem. You have to be curious to observe a problem that normal people face in daily day-today life. Though there are millions of apps existing in play store, customers always looking for a unique app that provides the functional features with ease. The domain of the app could be Entertainment, social media, Sports, Finance, Education, Banks, Virtual learning, Cloud service, Business, E commerce, marketing, Games, etc.

A team should be comprised of 2 students and there will be a team leader who divides, assigns and distributes the tasks to individuals. Leader will be responsible to communicate to teacher and also responsible for mentoring his/her team members for completion of app. There will be sprint for the project deliverables and for each sprint, individuals and team are evaluated based upon their input and contributions to the project.

Important tools to be used for the Project

1) Git: A distributed version-control system for tracking changes in source code during software development.

2) GitHub: A web-based interface that uses Git that lets multiple people make separate changes to an app at the same time.

Note: You can use any appropriate tool

Proposal

The project must include some important features that we have learnt in flutter class. There should be minimum of **15 different features such as routes(screens/interfaces) that includes user registration, log in, forget password, various navigations, views such as list view, Grid view etc., Menus such as Navigation drawer, pop up menu, tab bar view etc., accessing SQLite (CRUD), splash screen, multimedia, Location awareness, JSON fetching, Retrofit, REST-based APIs, notifications, firebase, firestore, etc.**

Project ideas

Come up with your own ideas (some of the titles are listed below)

- Covid vaccination Scheduling app
- Sharing Car/ Car Pool (Covoiturage)
- E commerce (online market)
- Gym App
- Online restaurant
- Blood donation
- Food donation

Requirement

When you design an application, discuss with your team members or use mind map to analyze who could be your potential clients. For example, in case of blood donation app, there could be different users such as donor, receiver, and blood bank. Here, you have to create three different portals for various users. Then the options for the users should be sign-up, register/modify the profile, sign-in, landing on home page, etc. User data should be validated and authenticated to provide security. Most importantly, the app should contain minimum of 15 screen flows.

Date of Deliverables

- ➢ ***Build #1:*** Team members should present their app idea (PPT) to the teacher for 5 - 10 minutes and if possible, present the mock application (entire navigation flow) – October 23rd 2024

  The power point should talk about the title of the project, team members, description of the project, number of screen flows, chosen database, github link, mockup that depicts the entire navigation. Use https://www.figma.com/

- ➢ ***Build #2:*** In this build, 40% of features must be implemented and delivered. - 13th November 2024

  Team should demonstrate the app with complete UI interface with 40% of the functional features (user registration, login, sign up, authentication, Database connectivity, CRUD operations, dashboard menu, Listview)

- ➢ ***Build #2:*** The remaining 60% of the tasks must be implemented and delivered. – December 2024

  Demonstration the app on real device and emulator at the same time

Final Demonstration

Team should demonstrate the app to the teachers and each student will be expected to be aware of thorough and deep understanding of project from A to Z. Link will be provided to submit the source code.

Presentation

Each team is required to give an oral presentation at the end of the semester. The oral presentation will last 10 - 12 (including Q&A). All the team members must be present.

Grading Scheme

Group project	25%	**Term Project – Learning Integration Assessment** Deliverable 1: 2% • Project Description (innovation) – 1 % • Mock-up design – 1 %	Week 7

		Deliverable 2: 8% • UI Interface (material design, screen flow) – 2% • Database connection (backend connection with CRUD) – 2% • Landing page (Home screen)– 2% • Menu implementation (displaying the data) – 2 % Deliverable 3: 13 % • Completed UI interface (Entire Navigation flow of minimum 10 screens) – 3% • API calls (JSON, Async calls) – 3% • Notification manager – 3% • Location awareness – 2% • Running on emulator – 2% Final report: 2% • Project Aim and description • Functional and non-functional requirements • User stories • Test cases • Individual's role and responsibilities	Week 11 Week 15 Week 15