

جامعة الأقصى كلية الحاسبات وتكنولوجيا المعلومات قسم علوم الحاسوب والمعلومات

Mobile Applications Development 2 Final Project (20 Marks)

1- Project Selection

The final project of the course is an individual project. Therefore, each student asked to select one of the following projects ideas:

• Shalehat Booking App

The project will let the clients look for the available summer resorts (shalehat) in Gaza Strip. There will be many resorts distributed among various areas over Gaza strip. The client can browse any resort and view photos of it, details, booking prices, etc. there can search by county or city to ease the search for the clients. The client can book any resort he likes with date and time and it to his booking list. After that, he can confirm the booking and check out. The payment methods can be with online gateway or pay on delivery.

• E-Store for Furniture

The project will allow the client check for the accessible furniture in the online store. There will be various furniture models and shapes are registered together. The client can add the furniture they like into the wish list or shopping cart. When they are certain what they need to purchase, they can checkout and submit the order. For payment, the client can pick an appropriate online payment technique or pay on delivery. Also, there will be a search by categories for the merchandise.

Online Voting System

This is an e-voting system that will take the ID number of the voters and match it with the voters in the stored database. Once the voter is confirmed, it will generate the One Time Password – OTP for registered mobile numbers. After the voter is validated, he/she can do the voting. It is easy and fast verification process of the voters. This will also reduce voter's time to stand in a long queue for the vote. It can be used in companies and organizations where they need to decide something which has options.

• Child Care Nursery

This project specially deals with taking care of children properly. It let the users to look for available kids nursery in their area (set location by GPS or manual). For any nursery the user interested in can view its photos, details, address, and contact information, working hours, their



جامعة الأقصى كلية الحاسبات وتكنولوجيا المعلومات قسم علوم الحاسوب والمعلومات

services prices for each kid range for example 0 month to 1 year and 1 year to 3 years. It also, provides various ways and advices to take care of their children.

Important Notes:

- Students can choose other projects ideas BUT his/her lecturer must agree for his/her selected ideas
- The project should be attractive, and useful. It should include the main elements of any application which are inputs from users, output to the user, processing of input data, database storage, and control panel. Do not choose the Menu Project that was done in Mobile Applications Development 1.
- Bonus marks will be added for students who successfully upload the project to the Google Play Store.
- **Bonus** will be added for students who consider multiple screen and multi-language supports.

2- Project Elements

The project implementation should **at least** include the following elements:

Screens

- ✓ Sign up screens to register a user
- ✓ Sign in screen to log in to the application for valid users
- ✓ Screens to interact with users (Data Input from users to application)
- ✓ Screens to show information for users (Data Output to the users)
- ✓ Screens for control panel to control the application and the users.
- ✓ Others
- UI/UX: You are asked to design at least one screen using design IDE like:
 - ✓ Adobe XD (XD Starter for free):
 - https://www.adobe.com/products/xd/pricing/individual.html
 - ✓ Adobe XD kits (Free UI): https://www.xdguru.com/free-xd-ui-kits/
 - ✓ Figma (can use online or PC): https://www.figma.com/
 - ✓ Other IDE of your choice

Common Functionalities:

- ✓ User Registration with email or mobile number
 - Bonus: There could be email or mobile number verification. (hint: use fake email provider or firebase)
- ✓ User Login to the app for validated users only.



جامعة الأقصى كلية الحاسبات وتكنولوجيا المعلومات قسم علوم الحاسوب والمعلومات

✓ Options menu contains these items logout, user profile, exit and any other items of your choice if needed.

3- Used Techniques:

It is preferred to use most techniques discussed during the course to cover the functionalities of your selected project like:

- Intent
- Fragments
- Shared Preferences
- Menus
- Alert Dialog
- Recycler View
- SQLite
- Broadcast Receiver
- Services
- Web Service
- Firebase
- Others

Note: for data storage, you can use cloud storage as firebase or web service (fake API generator). *Do not use only SQLite as your main data storage.*

4- Submission

- Provide Google Drive Link that should include:
 - ✓ Report including detailed technical documentation and flowchart of project
 - ✓ Android Project Source

5- Report Outline

Each student should write the report in **English Language Only**. The report should cover the following outlines:

- Introduction: that present your project idea
- **Project Modules and Functionalities:** it includes the flowcharts, algorithms, modules and all issues related to the project workflow. It is preferred to use visualization and drawing such as figures, framework, block diagram, ER diagram, charts, etc.
- Screenshots: list and describe main screenshots of your project.



جامعة الأقصى كلية الحاسبات وتكنولوجيا المعلومات قسم علوم الحاسوب والمعلومات

- Challenges: write the challenges you have faced during the development of your project.
- Future Work: Your future work and extension for the project should be added.

6- Deadline

The Last submission will be one week after the last day of the final exams.

7- Evaluation

The student will present his/her project to a discussion committee and the evaluation will be based on the following criteria:

#	Criteria	Marks
1	UI/UX	5
2	Documentation and Report	10
3	Data Storage (shared preferences, SQLite, Web Service, firebase)	15
4	UI Design	30
5	Java Implementation (well-structured and code documented)	40
Total Marks		100
Final Mark		100/5 = 20

Good Luck