

**HONG KONG INSTITUTE OF VOCATIONAL EDUCATION
DEPARTMENT OF INFORMATION TECHNOLOGY (SHATIN)**

**ITP4203 Object Oriented Mobile Programming
PROJECT GUIDE**

Due date

21 April 2016

Requirements

The project requires each group to design and build an Android Application to show that members are able to creatively apply the Android development techniques covered in the **OOMP** module.

Students must demonstrate that they are able to

- Create, build and test an Android App
- Use suitable layouts and views to create the UI of the App
- Contain **at least three screen layouts**
- Use different *widgets* in the App such as **Textview, Button, EditText, Image, CheckBox, RadioButton**
- Create and handle **menu** items
- Start other activities from the main activity
- ***Database design and storage are not the core requirement in this stage***, you can simulate the data flow by using **in-line array or list**

Extra marks will be given if students can suitably use techniques not covered in the module.

Suggested Proposals

You can select a topic from the following proposals (with suggested features and functions). *Or your implementation can be different from the given suggestion.*

1. App for e-Learning

Build an e-Learning App to achieve learning objectives. It can facilitate the communication between ***school*** and ***student***.

Suggested feature and functions:

- Provide a depository of learning resources such as learning subjects.
- View after-school collaborative-learning activities.
- Do exercise, test, and quiz.
- Manage/update the status of the activities.

2. Apps for Stock Trader

Build an Android mobile application for monitoring the stock market. It can provide stock information for the user. The application can offer advice and tools for you to *manage stock trading*.

Suggested feature and functions:

- View stock price and historical data
- Provide market news
- Trade virtual portfolios
- Draw on stock charts

3. Poll System

Build a mobile application for collecting questions and feedback from people. The system can *analyze* the return data to *display* the result instantly in different presentation format, for example **bar chart**.

Suggested feature and functions:

- Create survey through a mobile device, and add questions in the survey form.
- Provide different question types that are more than just multiple choices, can be full-text comments etc.
- Fill survey form.
- Collect and analyses return data.
- Display statistical result in different presentation forms.

Other possible titles:

1. **Digital Hostel (Preliminary Stage)** – An app that can control the furniture and electronic devices (simulation). The app can also store the statistics information that can view the usage of the devices.
2. **Health Lifestyle** – Diet Meal An app that can calculate daily diet value and display on the screen.
3. **Elderly Health Care (Preliminary Stage)** – An app that can monitor the health of elderly (simulation) and record in the app for further information for the doctor and/or their family.

Project report (within 4 pages)

Prepare a report to show your **screen design** and describe **basic functions** inside your app.

Presentation

The members come out to present their **Android App**, explain all the [functions](#), [features](#) and perform [demonstrations](#) to the lecturer and the classmates. Time allocated for each group is **15** minutes, including demonstration and [Q & A](#). You will **risk getting a ZERO mark** if you don't show up in the specific **prototype** and **demonstration** sessions.

Deadline

Presentations will be done in the last lesson.

Submit the finished project and report through Moodle.

No mark will be given to any late submission.

Marking Scheme

1. Technology (50%)

- the project should be complete and bug free
- able to apply programming techniques covered in the module
- **extra marks** for using programming techniques not covered in the module

2. Aesthetics and Usability (20%)

- the App is visually attractive with suitable use of colors and images
- user-friendly interface and navigation

3. Creativity (15%)

- creativity or new idea to be applied in the project

4. Presentation (15%)

- well prepared presentation slides and good presentation skills