

Urdaneta City University

San Vicente West, Urdaneta City

College of Computer Studies

Elective 104 (Mobile Programming II)

FINAL CASE STUDY FORMAT



General Requirements:

- Maximum of 3 members in a group
- Submission is considered complete only when the mobile application is uploaded at [Playstore](https://play.google.com/store/apps) & source codes have been turned in.
- NO CASE STUDY = INCOMPLETE FINAL GRADE

Project Title:

<SEE SUGGESTED TITLES AT THE NEXT PAGE>

Project Design Specification:

The authoring IDE tool that will be used is Eclipse ADT or JetBrains' IntelliJ IDEA. Use an emulator of your choice such as Genymotion, BlueStacks, Native Emulator that is bundled in ADT or a real device.

Project mock-ups should be designed using Fluid UI (<http://www.fluidui.com>) or Balsamiq (<http://webdemo.balsamiq.com/>). Final submission of mock-ups/UI design should be on or before August 17, 2014. App should have a unique name and icon design.

Project Requirements:

- ✓ CD containing the complete project files with the format .zip or .tar. The mobile application will be developed using Native Android Java. The Project must also include the APK file that is already signed and zip aligned.
- ✓ Include program description

```
/* Author: Group's Name followed by members in alphabetical order, First Name first
   Subject: (Subject Code) Mobile Programming II
   Course/Year: BSIT - IV
```

```
*/
```

```
e.g.:
```

```
/*
```

```
Author: MobiliTEAM
```

```
Aljohn L. De Guzman
```

```
Girlye Mae T. Laguerta
```

```
Richard C. Bautista
```

```
Subject: (ELECTIVE 104) Mobile Programming II
```

```
Course: BSIT - IV
```

```
*/
```

Reminders:

- Align/indent your codes properly
 - Add comments if needed
 - Use meaningful identifiers to improve readability
- ✓ Use the package name format `edu.ucuccs.app_name` (e.g. `edu.ucuccs.urdanetacrimemap`) in naming your application package.
 - ✓ The mobile application must be uploaded at Google Play. (CCS Department will provide a single account for the student projects. No need to pay the Developer Fee).

Reminders

- Document deadline: 1 week before the FINAL EXAMINATION day. Failure to submit on the said date will have an automatic grade of INCOMPLETE (INC).
- The project should be presented to your instructor two (2) days before the submission. If the project is not presented two days before the day of submission, there will be a deduction on the total grade.
- Ask the assistance of your instructor if the requirements are not well understood.

Prepared by:

Aljohn L. De Guzman

Instructor

Urdaneta Crime Maps

Description

A mobile mapping application that will show number of crimes, such as robbery, kidnapping, carnapping and the like. This will help people of Urdaneta locate the places where are the most or least crimes. Crime mapping will be managed by the Urdaneta City Police Station where they can add crimes on a specific date.

Related Apps & Sites:

- <http://crimemaps.pnp.gov.ph/> (National Capital Region)
- <http://procor.pnp.gov.ph/crimemap/> (Cordillera Administrative Region)

ID	Sub #	Functional Requirements
1		User Type
	1.1	Users can only view the maps while the PNP-Urdaneta can add and view crimes.
2		Look and Feel
	2.1	The user is able to select whether to show individual or all types of crimes. Also, the user can filter dates of when the crime happened. Aside from crimes, include the location of Police Stations.
	2.2	Have an icon for the markers on each crime. Icon must be related to the crime type. References: https://code.google.com/p/google-maps-icons/ http://mapicons.nicolasmollet.com/ Each marker must have a balloon description for each crime.
	2.3	Allow user to search for a specific barangay and view crimes happened.
3		Location-Aware
	3.1	Use maps and GPS to determine location of the crime. This will only focus on Urdaneta Map.
4		Analytics
	4.1	Show number of clustered map markers when map was zoomed-out.

Urdaneta Look4Rent

Description

A mobile app that will allow people to add properties such as apartments, boarding houses, and commercial spaces that offers for sale or for rent. Users can look for a list of these establishments, especially for students who are looking for boarding house/transient stay place. This will include the details regarding the place and the establishment, the price, the address etc. A map also will be included for the address

Related Apps & Sites:

- <http://www.zipmatch.com/>
- <http://www.trueproperty.ph/>
- <http://www.propertyfinderph.com/>

ID	Sub #	Functional Requirements
1		User Type
	1.1	Users can add properties and view lists of advertisements
2		Look and Feel
	2.1	The user is able to view the following: Property Specification – Type (For rent/sale), Lot Area, Floor Area, No of Beds and the like, Location, Price (per month/year)
3		Location-Aware
	3.1	The user is able to view the location of the property via map.
4		Analytics
	4.1	Show number of clustered map markers when map was zoomed-out.

Where in Urdaneta?

Description

A mobile app that will focus on helping people find nearest establishments such as hotels, malls, restaurants, transportation terminals, schools etc.

ID	Sub #	Functional Requirements
1		User Type
	1.1	The user is able to search from a range of categories such as malls, place for recreational activities, terminals, schools, hotels etc.
2		Look and Feel
	2.1	The user is able to view the location of the entered place via map. The app will determine the current location of the user and return the distance from the current location to the target place.

UCU – MPAC (Mobile Public Access Catalog)

Description

An app that will help students and faculties find books quickly available at Orata Library. Book information will include Title, Author, Book Section, ISBN Number and the like.

Related Apps and Sites:
<http://www.opac.cdd.edu.ph>

ID	Sub #	Functional Requirements
1		User Type
	1.1	The librarian is able to add book details and students are able to search them.
2		Look and Feel
	2.1	The user is able to search books via categories such as title, author's name, accession number etc.
	2.2	Results should be populated on List View where user can click an item and view specific details.
	2.3	Include rules and regulations of the University library and other services if applicable.
3		Alert and Notification
	3.1	Push Notification in the device to alert user when books are added.

Ilocano-English Dictionary (with Voice Search feature)

Description

A mobile app that will provide quick definition of words from Ilocano language to English and vice-versa. It will also allow user to search by speaking the word.

ID	Sub #	Functional Requirements
1		Look and Feel
	1.1	The user is able to enter keyword to search in Ilocano or vice versa.
	1.2	Ability to reverse the translation
	1.3	Option to save favorite words. Include History of Activities
2		Nice to have
	2.1	It will be great if each word will have a high-quality audio pronunciation whenever it is clicked.

Ilocano Phrasebook

Description

An easy to use Ilocano mobile phrasebook where it allow users to learn the language via Phrase Categories such as Ilocano Greetings, Numbers, Conversations etc.

Related Apps & Sites:
<http://goo.gl/lxGwX>

ID	Sub #	Functional Requirements
1		Look and Feel
	1.1	The user is able to browse phrase by categories. Must have at least 10 categories such as: Greetings, numbers, directions and places, time and date, colors etc.
	1.2	Ability to change font size, color (if applicable)
	1.3	Option to save favorite phrases.
2		Nice to have
	2.1	It will be great if each word will have a high-quality audio pronunciation whenever it is clicked.

UCU Student Planner

Description

A mobile app that will help student manages school tasks such as classes' information, school events, homework reminders etc.

ID	Sub #	Functional Requirements
1		Look and Feel
	1.1	The student is able to add classes and its schedule
2		
	2.1	Ability to add homework to-dos referencing what class from the list of added classes.
	2.2	Separate homework that were done from upcoming.
	2.3	Ability to add events in the calendar

UCU myCampus

Description

This is a simple application for helping a student locate room or a building by searching room number or nearby building.

ID	Sub #	Functional Requirements
1		Look and Feel
	1.1	The app will help a student find a certain classroom or building by suggesting routes and directions towards the target classroom. A picture of the building will be shown to student as a hint.
	1.2	Allow student to save favorite maps or location.
2		Location-Aware
	2.1	Use maps and GPS to determine location of the building.

Voice Calculator

Description

The idea is simple. User will input numbers via voice command. e.g. Speaking “One plus One” will return a result of 2 in a Text view or say the result by speaking it. If opted to enter the number manually, it will pronounce what is entered.

Related Apps & Sites:

<http://goo.gl/rvGXZT>

ID	Sub #	Functional Requirements
1		Look and Feel
	1.1	The layout will mimic the built-in android basic calculator application.
	1.2	The app will handle multiple operations. e.g. 5 x 2 + 6 = 16

UCU Freshmen Guide

Description

This is an app that will help UCU students, especially freshmen, to become familiar with the University.

ID	Sub #	Functional Requirements
1		Look and Feel
	1.1	Give student an overview of the University Student's Handbook (in PDF Format)
	1.2	Able to view map of UCU
	1.3	Show Courses Offered in the University on each College Department. For each course, show checklist
	1.4	Familiarize students with the University Hymn (Play a video)
	1.5	List Campus Organization.
2		Nice to have
	2.1	Add To-Do list feature

Japanese-English Dictionary

Description

A mobile app that will provide quick definition of words from Japanese language to English and vice-versa.

ID	Sub #	Functional Requirements
1		Look and Feel
	1.1	The user is able to enter keyword to search in Japanese or vice versa.
	1.2	Ability to reverse the translation
	1.3	Option to save favorite words. Include Activity Logs
2		Nice to have
	2.1	It will be great if the words will have a high-quality audio pronunciation whenever it is clicked.

CCS MyQuiz Up

Description

A simple Quiz App with large range of categories related to information technologies to test student's skills.

ID	Sub #	Functional Requirements
1		Look and Feel
	1.1	Have at least 5 categories such as Programming, Internet Technologies, Logos, Acronyms, Current Events
2		Social
	2.1	Users will be having an account using Facebook or Google Plus. It should have scoring and ranking features.

The Voice Math Challenge

Description

This is the same as the traditional flash card math quiz for kids but with a twist where you will answer the flashcard via voice/speech. The app will recognize the answer and validate it.

Related Apps & Sites:

<http://goo.gl/y7r2AA>

ID	Sub #	Functional Requirements
1		User Type
	1.1	The user is able to add flash card questions and answers
2		Look and Feel
	2.1	Answers will be done through voice
	2.2	Difficulties will be by minimizing the length of time the user will answer
3		Analytics
	3.1	Must have a score ranking.

UCU Exam Reviewer

Description

A mobile app that will provide students of UCU an Exam Reviewer such as in LET, CPA, RN or NCLEX-RN Exams.

ID	Sub #	Functional Requirements
1		User Type
	1.1	Students will be able to sign-up for an account
2		Look and Feel
	2.1	On each reviewer, there will be categories in every areas of the exam
	2.2	Assess student's performance via test (consider scoring, timer implementation)
	2.3	Give students some tips on how to review, how to answer and on preparing in general

Pangasinan Disaster Map

Description

This is a location-based emergency preparedness app designed to help first responders and victims in the event of natural disasters in Pangasinan. It allows people to report any incident of earthquake, flood, damaged facilities or people who need help.

ID	Sub #	Functional Requirements
1		Look and Feel
	1.1	Ability to report incident of flood, damaged facilities in the location of the user.
	1.2	Plot in the map that has greater damaged or most flooded area.
	1.3	Give users the needed contact information in case of disasters.
	1.4	Provide users some basic survival tips in case of flood, earthquake and the like
2		Location-Aware
	2.1	Ability to report incident of flood, damaged facilities in the location of the user.

CCS Mobile Thesis Archive

Description

A simple app that will help students quickly search and refine Theses Projects. This will allow students to have an overview of what theses are already done and to be improved.

ID	Sub #	Functional Requirements
1		Look and Feel
	1.1	The user will be able to quickly search theses by title, author or keyword related to the project
	1.2	Listed on a list view where user can click an item and will show details of the thesis including the abstract
2		Nice to have
	2.1	Upon searching, when no results found, try suggesting some related theses locally and on the web

Doctor on Mobile

Description

This is a simple app which contains diseases and medical orders definitions, symptoms, causes and treatment information.

ID	Sub #	Functional Requirements
1		Look and Feel
	1.1	The app must work offline.
	1.2	Must have prescription drug info along with pill description provided in the treatment section.
	1.3	There must be a tip of the day/trivias where user can select the frequency of its appearance.
2		Social
	2.1	User can share contents to social media such as Facebook and Twitter

Pangasinan/Urdaneta Food Spot

Description

Find dishes in the nearby restaurants and food house at Pangasinan/or specific place like Urdaneta City. This app is a visual guide to good food and where to find it. Instead of reviewing restaurants, you can recommend great dishes and see what others recommend.

Related Sites & Apps:

<http://goo.gl/7yIH9g>

ID	Sub #	Functional Requirements
1		User Type
	1.1	Users can sign up/sign-in and can add photos including their current location. They can also view foods nearby.
2		Look and Feel
	2.1	Have an account for each user. They can use Facebook/Twitter in Signing up inside the app
	2.2	Users can browse photos of nearby dishes via Map or by suggesting what the best foods are.
3		Social
	3.1	Users can rate and share food photos in Social Networking Site such as Twitter and Facebook

iLabCCS (UCU Computer Lab Management)

Description

An app that will aid Computer Lab Administrator to manage the Computer Laboratory of UCU wherein the app can manage individual PC, list down schedule of Instructors etc.

ID	Sub #	Functional Requirements
1		User Type
	1.1	The Computer Lab Administrator will be the only one who will manage and use the app.
2		Look and Feel
	2.1	Have a menu where the user can add several numbers of laboratories.
	2.2	Each laboratory has an assigned schedule of instructors and can add Personal Computers and other equipment (e.g. speakers)
	2.3	Each PC must have a description and specification where user can add annotation/comments in a specific time and date and name of instructor using it.
3		Analytics
	3.1	Show the number of equipment per laboratory, how many are not functioning etc.

Calculator for UCU-IT Students

Description

An app that will be helpful for IT and CS students of UCU with an extensive list of features such as transferring numbers into different number systems.

Related Sites and Apps:
<http://www.speedcrunch.org/>

ID	Sub #	Functional Requirements
1		Look and Feel
	1.1	It must have a number of functions where user can do: <ul style="list-style-type: none">• Convert different number systems (octal, binary, decimal etc)• Algebraic Expressions: Square root, Cube root, percentage, nth power etc• Logic Operations: AND, OR, NOT, XOR
	1.2	It must have a customizable appearance

UCU myCourseNotes

Description

A simple note-taking app where students can do several types of note-taking such as adding of notes, option through recording the discussions, by scribbling, and via voice recognition.

ID	Sub #	Functional Requirements
1		Look and Feel
	1.1	Able to add notes by recording, typing and scribbling.
	1.2	Option of having a reminder on each note (e.g. Note for homework)

UCU-BSA Calculator

Description

An app that will help Accountancy students solves problems by providing an easy to access formulas and references.

ID	Sub #	Functional Requirements
1		Look and Feel
	1.1	Have at least 5 categories for formulas (e.g. Cost Accounting, Finance). Each category will be having a calculator for a given topic. (e.g. Cost of Sales Calculator, Loan Calculator, Interest Calculator)
	1.2	It must have a customizable appearance