

COIT13234 - Mobile Software Development – Practical Assessment

Due date: Tuesday (19 Apr 2022) 11:45 pm AEST, Week 6

ASSESSMENT

Weighting: 30%

Length: As required

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1. Objective

This assessment item relates to the course learning outcomes

- Build and test a mobile application

2. Introduction

This assessment requires you to design and implement a mobile application called ***PropertyList***. The application will list properties for sale with their location and agent details.

This is an ***individual*** assessment.

3. Specifications

You are to create a mobile application using Kotlin and Android Studio according to the following specifications. Note that you are not to use commands and techniques outside those covered in the textbook and tutorials.

The application will consist of two screens or pages.

1. A list page using a ***RecyclerView*** that displays a list of properties for sale
2. A details page that displays details for an individual property

Clicking on a list item will open the details page for that property.

Property List Page



The property list page will implement a scrollable recycler view of properties for sale as shown in the image above. The recycler view must use a **view holder**, **data adapter** and **custom layout**.

Each list item will be displayed in the format shown above and include:

1. The address
2. The sale price (no decimal places)

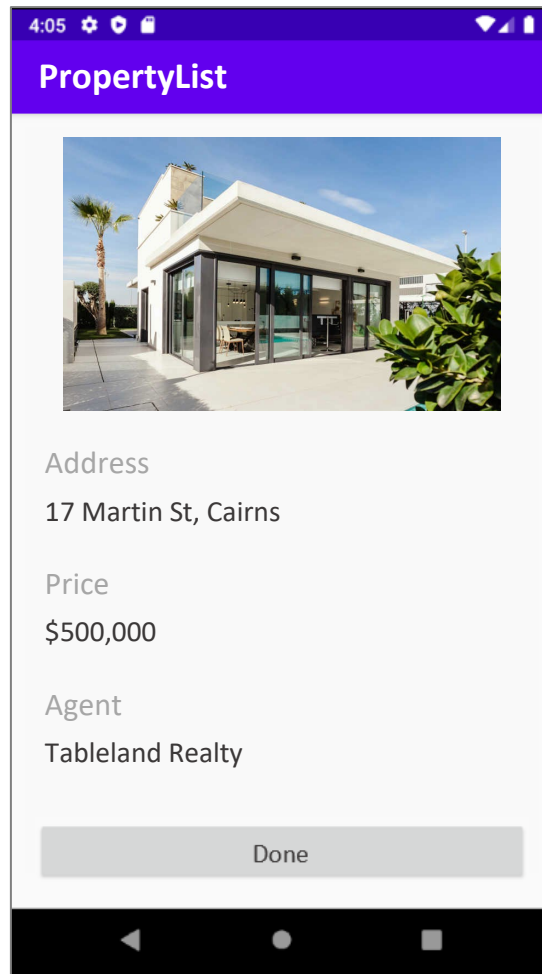
Text must be constructed as shown with the font size and style set appropriately as shown in the image above.

You are to create an initial set of at least 6 properties which must be displayed as a list on startup. You may include the addresses used in the list above or create new ones

A set of 6 property images will be provided to use for the properties

Clicking on a list item will open the corresponding details page containing the details for the selected property as shown in the following image.

Property Details Page



The Details page will be laid out as per the image above with the following fields

1. Property Image
2. Street Address with Suburb
3. Sale Price (no decimal places)
4. Agent Name

Fields are to be editable. Font size, style and margins are to be formatted as per the image above.

Done Button

Pressing the Done button must swap back to the list page and update the list. You must not update the list if the item details have not changed.

Field text must be present and in the correct format when closing the page, otherwise an appropriate error message is to be displayed and the app is to remain on the details page.

Error messages must be displayed using an alert dialog.

The updated list is to be displayed on return to the list page (if the list data has changed).

You may use a ViewModel or fragment args with a callback to pass data between fragments

Back Button

If the back button is pressed on the list page the app is to exit

If the back button is pressed on the details page it must return to the list page with the following conditions. If the house details have changed you must display an alert dialog asking if you wish to discard changes. If Yes is selected, the app is to return to the list without saving the changes. If No is selected, the app is to stay on the details page. If there are no changes the app is to return to the list page without displaying a dialog.

Activities and Fragments

You must use one activity with two fragments: one fragment for the list page and one fragment for the details page.

Coding Style

Code must use clean, efficient, well-structured code. Marks will be deducted for poor programming style and techniques.

You must create your fragments from Empty Kotlin code files and empty layouts as you did in the tutorials. You must not use the New/Fragment wizards.

String resources must be used where possible.

4. Submission

You **MUST** use **File => Manage IDE => Export to zip file** in Android Studio to save your project

- Do **Not** zip your project using anything other than Android Studio

You **MUST** name the zip file: ***lastname-firstname-studentId.zip***

You are required to submit your assignment electronically via the Moodle course website. The submission will be a zip folder as specified which will containing all the code and resources required to run the program.

5. Assessment Criteria

Note

You are not to use any commands or techniques outside of those covered in the lectures, text and tutorials or deductions will be made.

Section	Criteria	Marks
List Page	List Items uses a custom layout and are formatted correctly	2
	Data is loaded into recycler view on startup	2
	List Item click opens the Details page	2
	Item details are correctly passed to the Details page	2
Details Page	Details page layout is formatted correctly	2
	Property information are displayed correctly	2
	Done and back button logic implemented correctly	2
Return to List	Property list is updated on return but only if details have changed	2
	List is displayed with updated data	2
Fragments	Fragments used and implemented correctly for both pages	2
List View	ListView, Adapter and View Holder implemented correctly	3
Error Handling	All errors caught and displayed using a dialog	2
Resources	String resources used wherever possible	1
Code Quality	Informative variable names, code is clean and efficient, no replication	2
	Consistent indenting, max one blank line between blocks of code	1
General	No commands used from outside the subject, submission as specified	1
	Total	30