College of Engineering, Construction and Living Sciences
Bachelor of Information Technology
IN721: Mobile Application Development
Level 7, Credits 15

Practical 05: Companies

Assessment Overview

In this assessment, you will research & refactor the provided application's code so that you can switch between two **Google map** styles using a **menu** item. This assessment contributes **2%** towards your final mark in **IN721: Mobile Application Development**.

Learning Outcomes

At the successful completion of this course, learners will be able to:

1. Implement & publish complete, non-trivial, industry-standard mobile applications following sound architectural & code-quality standards.
2. Identify relevant use cases for a mobile computing scenario & incorporate them into an effective user experience design.
3. Follow industry standard software engineering practice in the design of mobile applications.

Assessment Table

Assessment Activity	Weighting	Learning Outcomes	Assessment Grading Scheme	Completion Requirements
Practical	20%	2, 3	CRA	Cumulative
Project	80%	1, 2, 3	CRA	Cumulative

Conditions of Assessment

You will complete this individual assessment inside & outside timetabled class time. This assessment will need to be completed by **Friday, 07 May 2021** at **5:00 PM**.

Pass Criteria

This assessment is criterion-referenced (CRA) with a cumulative pass mark of **50%** over all assessments in **IN721: Mobile Application Development**.

Authenticity

All parts of your submitted assessment must be completely your work & any references must be cited appropriately including, externally-sourced graphic elements. Provide your references in a **README.md** file. All media must be royalty free (or legally purchased) for educational use. Failure to do this will result in a mark of **zero** for this assessment.

Policy on Submissions, Extensions, Resubmissions & Resits

The school's process concerning submissions, extensions, resubmissions & resits complies with **Otago Polytechnic** policies. Learners can view policies on the **Otago Polytechnic** website located at https://www.op.ac.nz/about-us/governance-and-management/policies.

Submissions

You must submit all program files via **GitHub Classroom**. Here is the URL to the repository you will use for your submission – https://classroom.github.com/a/VJIq7Ae0. Create a new branch called **05-companies** from the **main** branch by running the command - **git checkout -b 05-companies**. This branch will be your development branch for this assessment. Once you have completed this assessment, create a pull request & assign the **GitHub** user **grayson-orr** to a reviewer. **Do not** merge your own pull request. Late submissions will incur a **10% penalty per day**, rolling over at **5:00 PM**.

Extensions

Familiarise yourself with the assessment due date. If you need an extension, contact the course lecturer before the due date. If you require more than a week's extension, a medical certificate or support letter from your manager may be needed.

Resubmissions

Learners may be requested to resubmit an assessment following a rework of part/s of the original assessment. Resubmissions are to be completed within a negotiable short time frame & usually must be completed within the timing of the course to which the assessment relates. Resubmissions will be available to learners who have made a genuine attempt at the first assessment opportunity & achieved a **D grade (40-49%)**. The maximum grade awarded for resubmission will be **C-**.

Resits

Resits & reassessments are not applicable in **IN721: Mobile Application Development**.

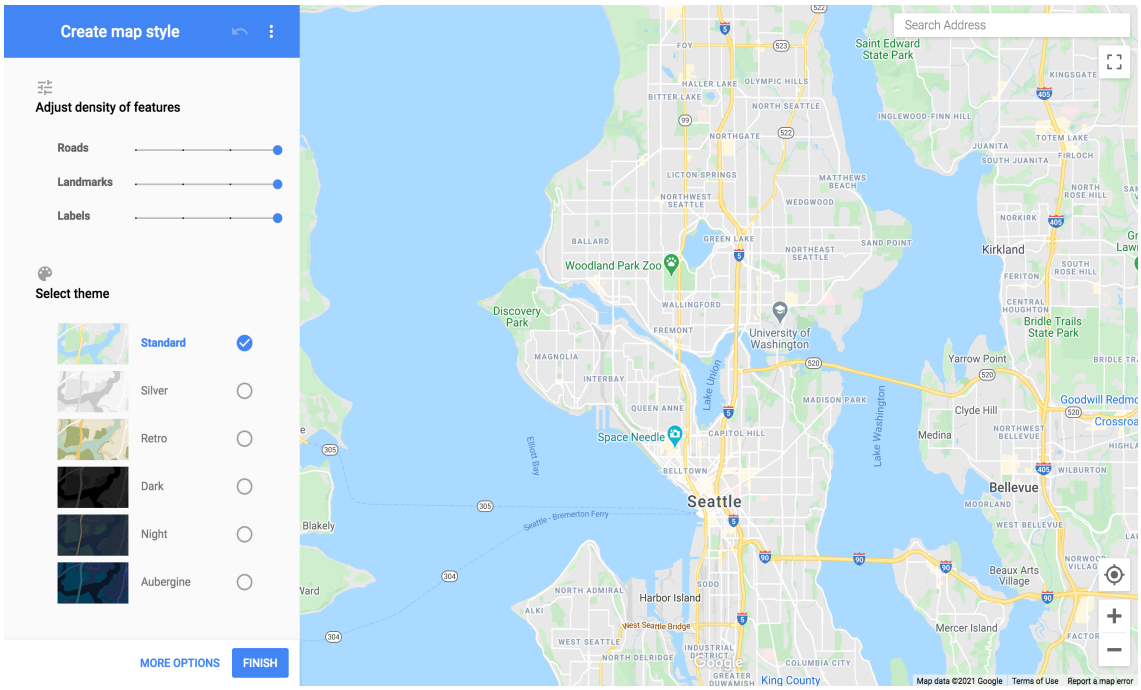
Instructions - Learning Outcomes 2, 3

Task One (2%):

Use & rename the **google-maps-companies** directory from the **15-google-maps** teaching session to **05-companies**.

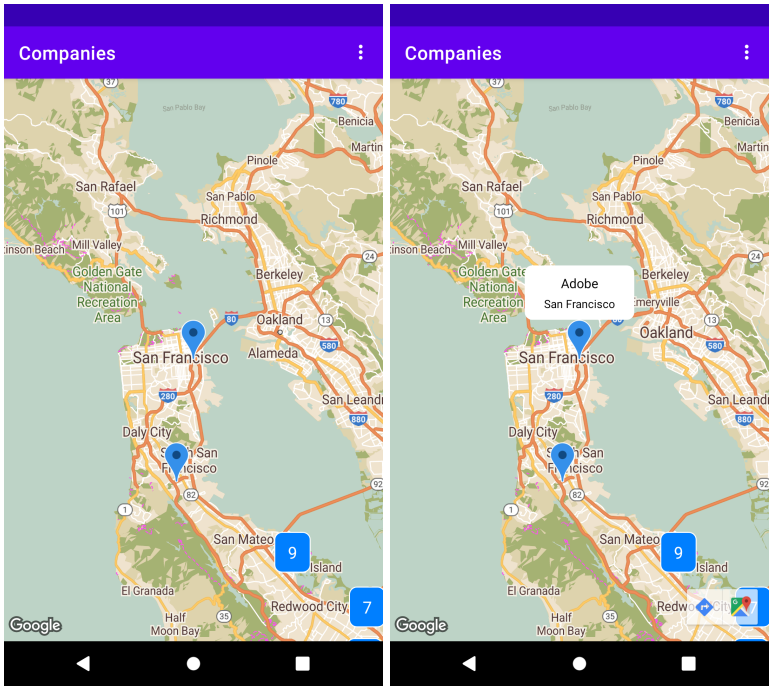
In **res** > **raw**, you have been provided two **JSON** files called **map_style_dark.json** & **map_style_retro.json**. These files contain feature, element & styling data that you can apply to your **Google map**. If you wish to create your own style, refer to this link - https://mapstyle.withgoogle.com

You may be prompt with a window asking you to try the cloud-based maps style wizard. For this assessment, the old style wizard is sufficient.



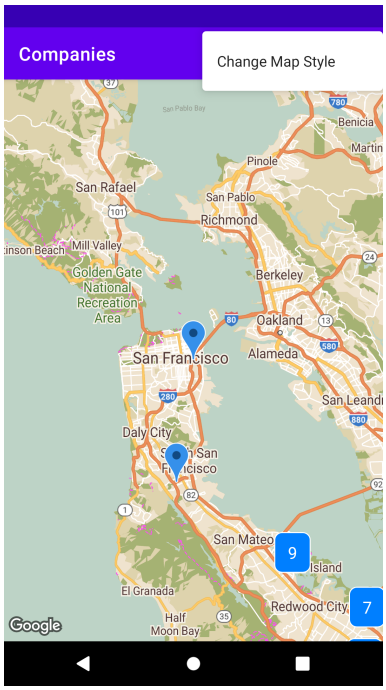
In the **onMapReady()** method, set the **Google map** style to **map_style_retro.json**.

Run your application on either an **Android Emulator** or **connect device**.



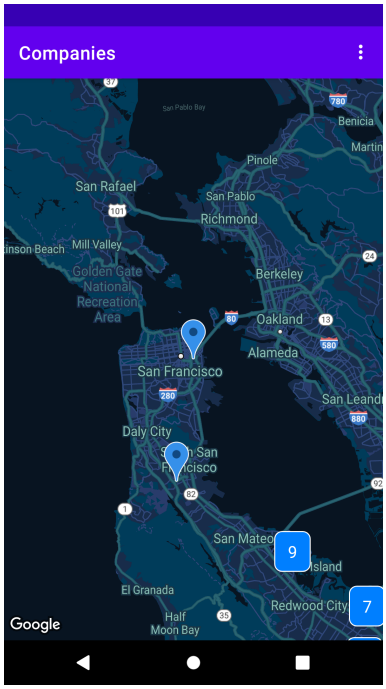
In **MapsActivity.kt**, override the **onCreateOptionsMenu()** method. In this method, inflate your menu resource defined in **menu_map_style.xml** into the **Menu** provided in the callback.

Restart your application on either an **Android Emulator** or **connect device**. Click on the **vertical ellipsis** in the top-right hand corner of your screen.



Override the **onOptionsItemSelected()** method so that when you click on a menu item, i.e., **Change Map Style**, it switches between the retro & dark **Google map** styles.

Restart your application on either an **Android Emulator** or **connect device**. Again, click on the **vertical ellipsis**, then **Change Map Style**.


Companies
Benicia
Pinole
San Rafael
San Pablo
Richmond
Mill Valley
Golden Gate National Recreation Area
Berkeley
Oakland
Alameda
San Francisco
Daly City
San Mateo
9
El Granada
Redwood City
7
Half Moon Bay
Google