Objectives of this Test Case

The main objective of this test case is to gain an understanding of your approach to a relevant software development problem. The test case should take approximately **2-3 hours,** but you will be **given one day** to complete the test case. The test case may serve as a discussion point as we proceed through the interviewing process.

Test Case Description

You will be provided with two web API addresses containing REST JSON data.

- BuildingInfos
- AnalyticsData

The BuildingInfos provides information regarding different buildings (e.g., building_id, country, state, city).
The AnalyticsData provides information regarding user purchase history (e.g., device used, building, items purchased).

The data can be fetched from the following URLs:
http://positioning-test.mapsted.com/api/Values/GetBuildingData/
http://positioning-test.mapsted.com/api/Values/GetAnalyticData/

You will be required to write the appropriate network calls and store the results in the appropriate classes/objects/models that you will be required to create. You will then need to process the data and populate appropriate views, which you are also required to create.

Requirements:

The UI design is shown on the next page. When the user selects one of the drop-down elements, they should be provided with a list of potential options (do not worry about the UI for the item selection, any UI is fine). Once an item is selected from the drop down, the corresponding number on the right should re-calculate accordingly.

UI Category Title	UI Category item	What to calculate
Purchase Costs	Manufacturer	Total purchase costs for Samsung manufacture devices (e.g., **Samsung**)
	Category	Total purchase costs for item's in the category (e.g., **item_category_id = 7**)
	Country	Total purchase costs in the selected country (e.g., **United States**)
	State	Total purchase costs in the selected state/province (e.g., **Ontario**)
Number of Purchases	Item	Total number of times the selected item was purchased (e.g., **item_id = 47**)
Most Total Purchases	Building	The building which had the most total purchase costs (e.g., **building name**)

Please be sure to structure your code as though this was a much larger project following best practices.
Be sure to comment your code to ensure it can be easily followed.

You will be expected to submit your code along with image(s)/screenshot(s) of your final view/UI.
Note: please attach an image/screenshot with the above examples selected (bold/underlined).
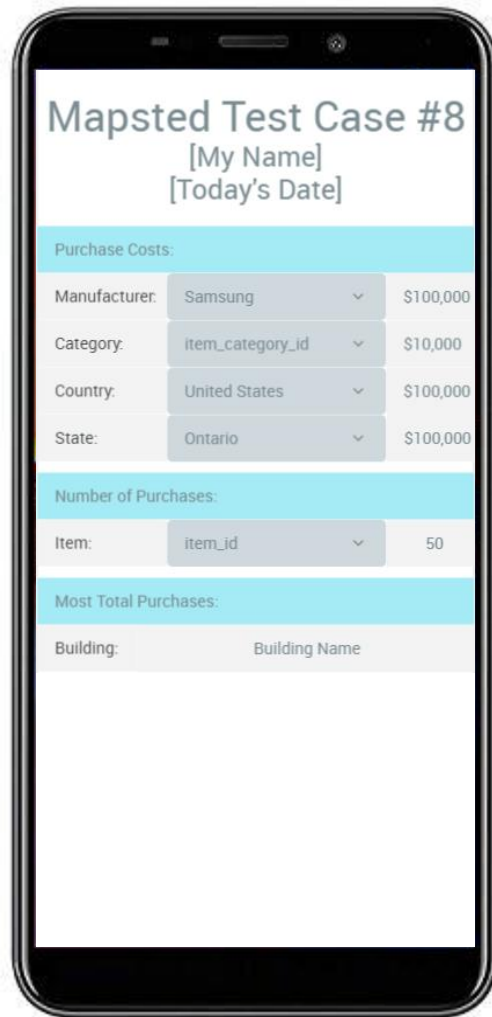
The use of third-party libraries is permitted while considering and adhering to best practices regarding the usage of third-party libraries.

Assessment Criteria:

- Class/Model/Object definitions
- Implementation of UI
- Code organization/file structure
- Code clarity (e.g., layout, comments, coding structure)
- Correctness of values displayed in UI

Mapsted Test Case #8
[My Name]
[Today's Date]

Purchase Costs:

Manufacturer:	Samsung	$100,000
Category:	item_category_id	$10,000
Country:	United States	$100,000
State:	Ontario	$100,000

Number of Purchases:

| Item: | item_id | 50 |

Most Total Purchases:

| Building: | Building Name |

Background colours:

Light blue: #A4EBF5
Light grey: #F3F3F3
Dark grey: #CFD8DC

Text colours:

Light grey: #7B8D93
Dark grey: #43484A