

This assignment will challenge you to apply your knowledge of object-oriented design to produce a UML class diagram from a given code base.

Review criteria**less**

You will be graded on the completeness, clarity, and readability of your submitted UML class diagram.

Step-By-Step Assignment Instructions**less****Setup instructions**

Before you begin, you will need to download and extract the following file:

SharingApp_items_only.zip

Here are instructions on how to setup Android Studio for this course:

Android Studio Setup Guide MAC.pdf

Android Studio Setup Guide WINDOWS.pdf

For your reference here an Android Studio Tips guide:

Android Studio Tips.pdf

To give you a better idea of the scope of this version of the app please review the following user stories:

User Stories - Items Only.pdf

You will be expected to upload a PDF of your diagram. A free online tool you may use to make your diagram is [Lucidchart](#).

Guidelines for the assignment

Review these Lectures to aid you on your assignment:

1.2.7 - Abstraction in Java and UML

1.2.8 - Encapsulation in Java and UML

1.2.9 - Decomposition in Java and UML

1.2.10 - Generalization with Inheritance in Java and UML

How to create your assignment

In its current state, a user of the app—the owner—is able to record the items they own and wish to share.

The owner may view all of their items, their “Available” items, or their “Borrowed” items.

The owner may change the status of an item they own from “Available” to “Borrowed” and back.

When an item’s status is changed to “Borrowed”, the owner must enter the username of the borrower.

Review the user stories, then download, examine, and run the code base provided.

After you have become familiar with the code, construct a UML class diagram that captures all the classes and relationships in the code base. For each class you should document all attributes and methods.

These classes are:

- MainActivity
- SectionsPagerAdapter
- ItemsFragment
- AllItemsFragment
- AvailableItemsFragment
- BorrowedItemsFragment
- AddItemActivity
- EditItemActivity
- ItemList
- Item
- ItemAdapter
- Dimensions

You should also include any superclasses that the above classes inherit from. However, you are NOT required to document any methods or variables from these, only their names:

- AppCompatActivity
- FragmentPagerAdapter
- ArrayAdapter<Item>
- Fragment

Style guidelines for UML class diagram

- superclasses should be drawn above subclasses

- whole things should be drawn to the left of the part
- there should be few crossing edges
- boxes should not overlap other boxes or edges
- diagram should flow from top to bottom and left to right