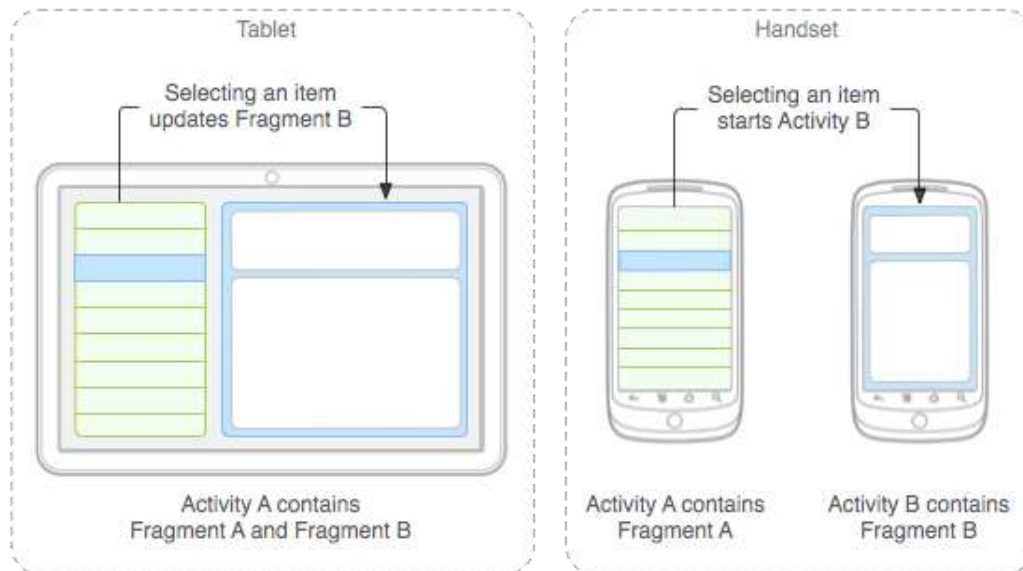# Homework 2

In this assignment, each student is required to develop a list-detail type of Android application that uses Fragment. We have learned how to use Fragments to compose flexible UI that is adaptive based on the dimension of the device. The following figure illustrates how Fragment will be used in the app to be developed.

The app should be adaptive to both tablet (minimum width 600dp) and phone. The app should have both list pane and detail pane when it runs on a tablet (as shown in the left figure) and both panes are implemented as Fragments in the same Activity. The app will present as two Activities each containing one Fragment when it runs on a phone (as shown in the right figure). The list fragment should use RecyclerView for rendering the list. The list has to show undergraduate courses offered by UALR Computer Science Department. The information of the courses is provided in the companion file "CPSC-Undergrad-Courses.pdf," in which each course has a course name (in **bold**) and brief description. Each item in the list fragment shows a course name, e.g., CPSC 1105 First Year Experience for CPSC/IFSC Majors. So the list will appear as follow:

> CPSC 1105 First Year Experience for CPSC/IFSC Majors
> CPSC 1175 Introduction to Computer Science Laboratory
> CPSC 1310 Internet Technologies
> ……
> CPSC 4100, 4200, 4300, 4400, 4500 Independent Study

When a list item is clicked, the description of that course will be displayed in the detail fragment. For example, if "CPSC 4399 Special Topics" is clicked, then its description will be shown as follows "Prerequisite: consent of instructor. Advanced topics in areas of current interest in computer science. Refer to the semester schedule for specific topics offered. Dual-listed in the UALR Graduate Catalog as CPSC 5399. Three hours lecture. Three credit hours."

You may use the sample apps 7, 8, 9, 10, and 17 at https://github.com/mengjunxie/Android-Sample-Apps as reference.

Settings:

Use the following setting in your **app/build.gradle**.

- compileSdkVersion 22
- buildToolsVersion "22.0.1"
- minSdkVersion "15"
- targetSdkVersion "22"
- compile 'com.android.support:appcompat-v7:22.1.1'

Package name: edu.ualr.cpsc4399.{your_email_id}.hw2

  o   E.g.: My app package name is "edu.ualr.cpsc4399.mxxie.hw2".

Submission:

Compress the whole project directory into **a single .zip** file and name it as **{your_email_id}-hw2.zip**. Submit that zip file onto BlackBoard.

Due date and time:

This homework assignment will be due **3 PM, Oct. 19th (Wednesday)**.

Late submission and grading:

Refer to the syllabus for the homework assignment regulations.