**Homework 8**

* Due Jul 28 by 11:59pm
* Points 20
* Submitting a text entry box or a file upload

**Objective:** Currency Converter. You are going to design an app in Android Studio that converts between USD to YEN, CAD and EUR currencies. The app will use two activities. The first will choose a currency, the other will perform the calculation.

**Details:** As of writing the solution the exchange rate for 1 USD was the following: 109.94 YEN, 1.26 CAD and 0.85 EUR. Use these fixed values in your calculations.

**Main Activity:** will contain a radio group and a set of radio buttons to pick which currency you are going to exchange. The Radio Group box functions as a container such that all radio buttons within it are controlled so that only one can be selected at a time. The **getCheckedRadioButtonId**() function will return the ID of the radio button currently selected. As with finding other GUI components you can use **findViewById**() then type cast it from the View class to the exact class you expect it to be. When the user presses the NEXT button you will load the other activity and use the Intent to pass a string about which radio button is selected.

**Second Activity:** will take an input into an edit text for USD and output the currency results into a second edit text. The user may also enter text into the conversion text box to see the result in USD. If you find it difficult to create a listener for text changes, then feel free to use buttons (two buttons then, one for USD to the other currency and one from the other currency to USD). There should also be a "Return" button that finishes this activity and returns the main one.

The equation from USD to the other currency will be input \* **exchangeRate**, the equation from the other currency to USD would be input / exchangeRate.

Do not worry about error checking the input nor formatting the output string. The goal is to get a feel for developing an app (one with real usability).

You will have extra time on this assignment, but do not delay as the due date falls close to the final project, which is even larger than this one.

**Note:** Feel free to have fun with the GUI design. You do not have to look like my screenshots and if you want to add more details or options feel free.

**Submission**

I want you to submit TWO screenshots of your code running on the emulator. The first will be of the first activity with a currency selected, the second will be of the second activity converting 500 USD to the chosen currency.

You will also submit your .java files for me to review. Not the full project, just the .java files so that I can see the code you wrote.

So, to go over the four files I would expect:

1. Screenshot of the **mainActivity**
2. Code for the mainActivity
3. XML file for the mainActivity GUI (in res/layout)
4. Screenshot of the second activity
5. Code for the second activity
6. XML file for the second activity GUI (in res/layout)

**Screenshots**

**Note:**You may use edit text listeners or buttons in your code. I chose the buttons method as it is simpler.

 