Phase 3 Deadline 1 – Flounders (Sequence)

Members -

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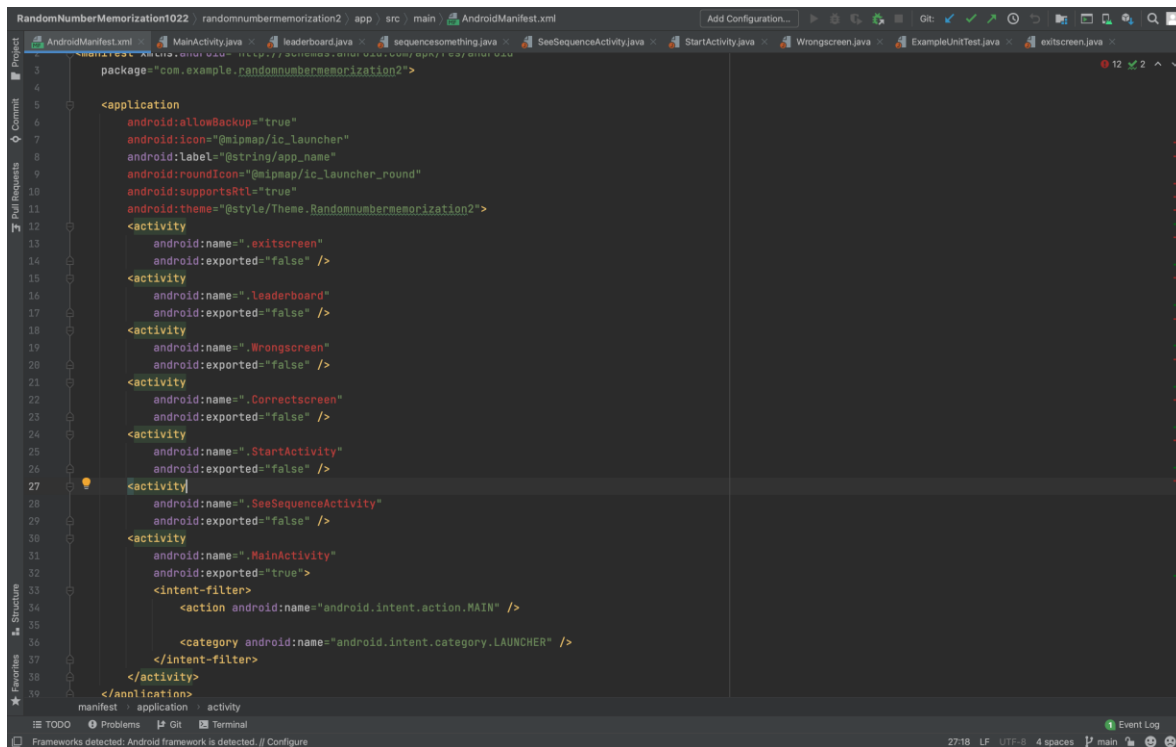- Tabassum Rahman – maureen4@my.yorku.ca - Section M Lab02

Project Title - Random Number Memorization (App name: Sequence)

Phase 2 Document - (I had to screenshot it as Microsoft Word wasn't letting me upload the Phase 2 file
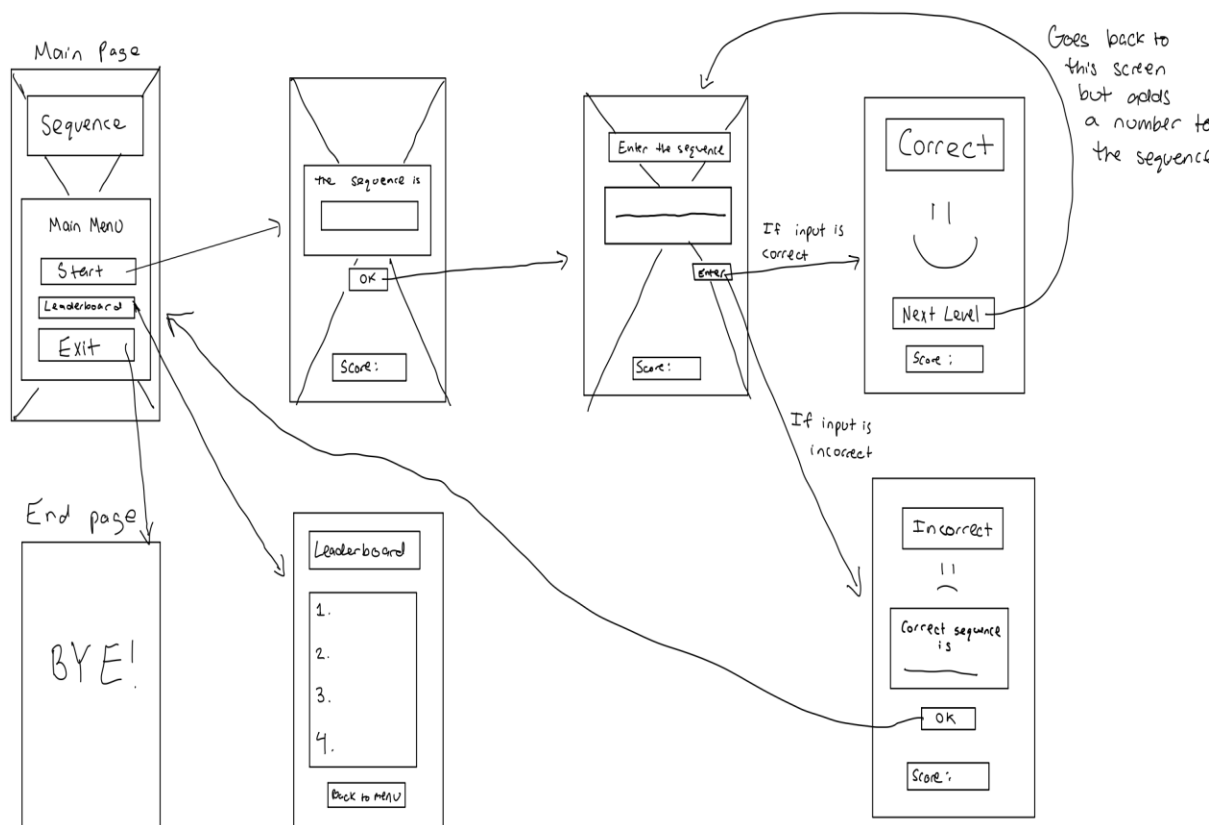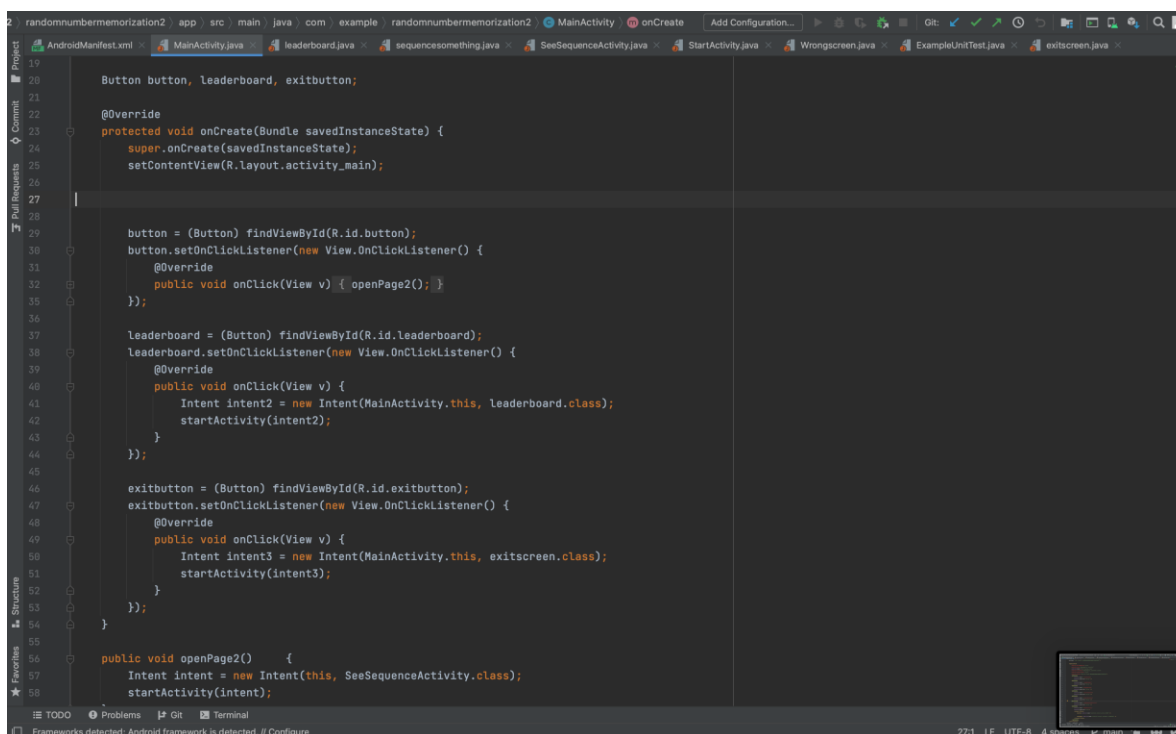
Phase 3 Deadline 1 - (Here are **some** pictures of our code written in Java on Android Studio.
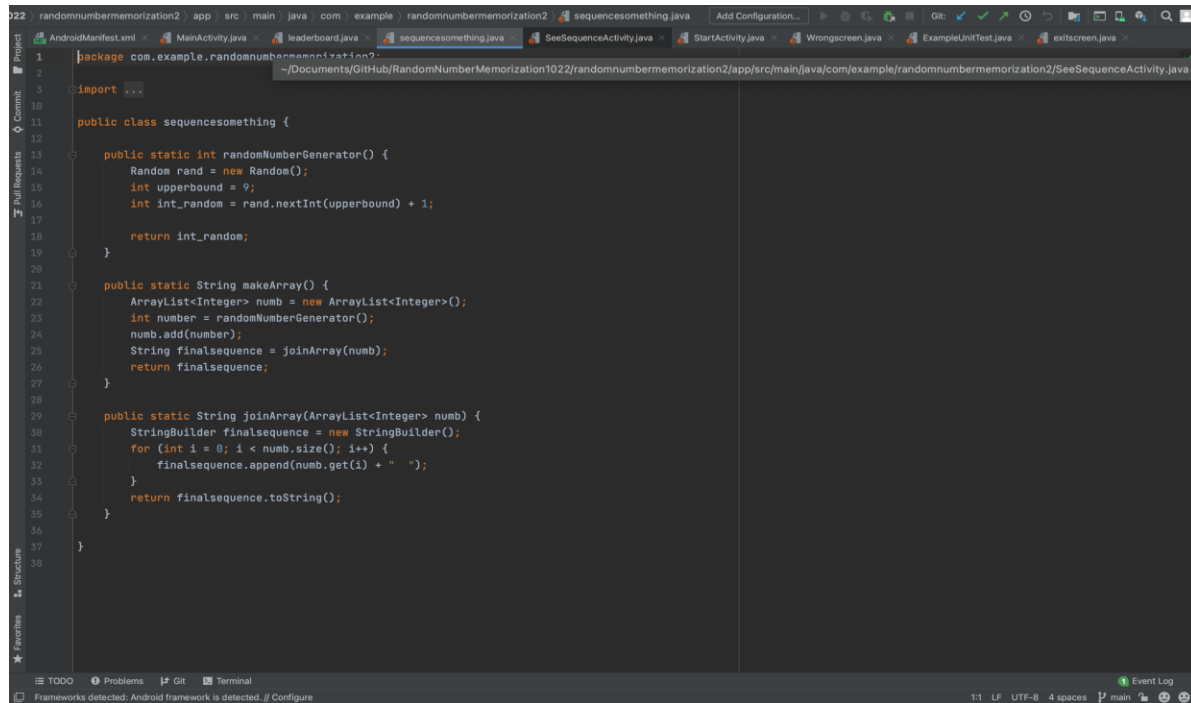

```xml
    package="com.example.randomnumbermemorization2">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.Randomnumbermemorization2">
        <activity
            android:name=".exitscreen"
            android:exported="false" />
        <activity
            android:name=".leaderboard"
            android:exported="false" />
        <activity
            android:name=".Wrongscreen"
            android:exported="false" />
        <activity
            android:name=".Correctscreen"
            android:exported="false" />
        <activity
            android:name=".StartActivity"
            android:exported="false" />
        <activity
            android:name=".SeeSequenceActivity"
            android:exported="false" />
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>
```
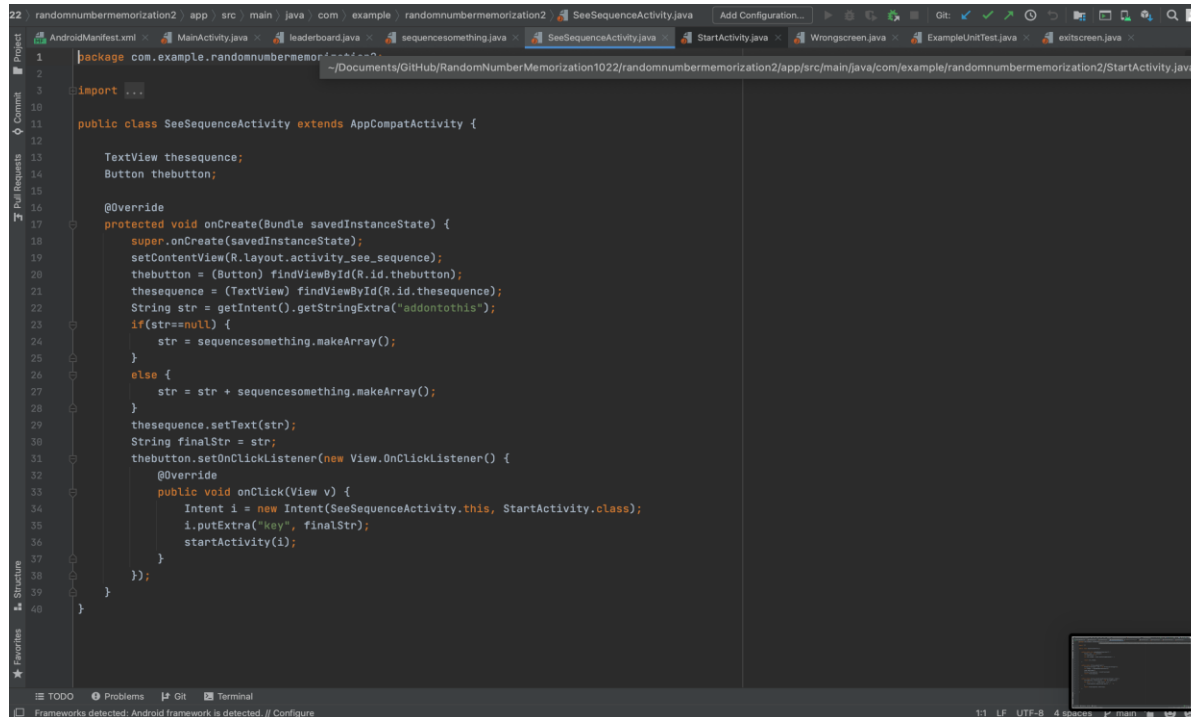


```java
        Button button, leaderboard, exitbutton;

        @Override
        protected void onCreate(Bundle savedInstanceState) {
            super.onCreate(savedInstanceState);
            setContentView(R.layout.activity_main);


            button = (Button) findViewById(R.id.button);
            button.setOnClickListener(new View.OnClickListener() {
                @Override
                public void onClick(View v) { openPage2(); }
            });

            leaderboard = (Button) findViewById(R.id.leaderboard);
            leaderboard.setOnClickListener(new View.OnClickListener() {
                @Override
                public void onClick(View v) {
                    Intent intent2 = new Intent(MainActivity.this, leaderboard.class);
                    startActivity(intent2);
                }
            });

            exitbutton = (Button) findViewById(R.id.exitbutton);
            exitbutton.setOnClickListener(new View.OnClickListener() {
                @Override
                public void onClick(View v) {
                    Intent intent3 = new Intent(MainActivity.this, exitscreen.class);
                    startActivity(intent3);
                }
            });
        }

        public void openPage2()     {
            Intent intent = new Intent(this, SeeSequenceActivity.class);
            startActivity(intent);
```

```java
package com.example.randomnumbermemorization2;

import ...

public class sequencesomething {

    public static int randomNumberGenerator() {
        Random rand = new Random();
        int upperbound = 9;
        int int_random = rand.nextInt(upperbound) + 1;

        return int_random;
    }

    public static String makeArray() {
        ArrayList<Integer> numb = new ArrayList<Integer>();
        int number = randomNumberGenerator();
        numb.add(number);
        String finalsequence = joinArray(numb);
        return finalsequence;
    }

    public static String joinArray(ArrayList<Integer> numb) {
        StringBuilder finalsequence = new StringBuilder();
        for (int i = 0; i < numb.size(); i++) {
            finalsequence.append(numb.get(i) + "  ");
        }
        return finalsequence.toString();
    }

}
```

```java
package com.example.randomnumbermemorization2;

import ...

public class SeeSequenceActivity extends AppCompatActivity {

    TextView thesequence;
    Button thebutton;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_see_sequence);
        thebutton = (Button) findViewById(R.id.thebutton);
        thesequence = (TextView) findViewById(R.id.thesequence);
        String str = getIntent().getStringExtra("addontothis");
        if(str==null) {
            str = sequencesomething.makeArray();
        }
        else {
            str = str + sequencesomething.makeArray();
        }
        thesequence.setText(str);
        String finalStr = str;
        thebutton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent i = new Intent(SeeSequenceActivity.this, StartActivity.class);
                i.putExtra("key", finalStr);
                startActivity(i);
            }
        });
    }
}
```

GitHub Repo Link - https://github.com/hiba924/RandomNumberMemorization1022.git

(Also included a zip file in submission)

Some key takeaways – We learnt how to understand Android Studio's app building process. We've implemented knowledge learnt from labs that we have done with IntelliJ to create working functions for our app. Another key tool which was present throughout constructing our project was the textbook. It assisted us with a lot of important points we needed clearance on or some new additional information we were not aware of. We are continuing to intergrade some more features and the corresponding functions to perfect our application. Also, another thing we have learnt that is new to us is creating a lot of the features that the app houses. Features such as a homepage, leaderboard of past and present score(s), game screen, etc. Some new tools that are going to be added are some testing tools/functions which will be needed to eliminate any defects and fix them.