

## Part 1: Setting up Your Environment

Setup Android Studio with Pixel 3a. Imported project and continued to part 2.

## Part 2: It's all about intent

### Part 2.1: What's the difference?

- 1) What are the two types of Intents? Explicit and implicit intent.
- 2) Which of the two types of Intents are more secure? Explicit intent.
- 3) What type of Intent is shown on lines 69 to 73 of SecondFragment.kt? Explicit intent.
- 4) What type of Intent is shown on lines 68 to 70 of ThirdFragment.kt? Explicit intent.
- 5) Which of these two Intents is the proper way to do an Intent? ThirdFragment.kt

```
65  
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} else {  
    loggedInUser = response.body()  
    Log.d( tag: "Register Success", msg: "Register success. Boo.")  
    Log.d( tag: "Register Success", msg: "Token:" + loggedInUser?.token.toString())  
    var intent = Intent(Intent.ACTION_VIEW)  
    intent.type = "text/giftcards_browse"  
    intent.data = Uri.parse( uriString: "https://appsecclass.report/api/index")  
    intent.putExtra( name: "User", loggedInUser);  
    startActivity(intent)  
}
```

SecondFragment.kt Intent

```
64  
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} else {  
    loggedInUser = response.body()  
    Log.d( tag: "Login Success", msg: "Login success. Boo.")  
    Log.d( tag: "Login Success", msg: "Token:" + loggedInUser?.token.toString())  
    var intent = Intent(activity, ProductScrollingActivity::class.java)  
    intent.putExtra( name: "User", loggedInUser);  
    startActivity(intent)  
}
```

ThirdFragment.kt Intent

```
65  
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} else {  
    loggedInUser = response.body()  
    Log.d( tag: "Register Success", msg: "Register success. Boo.")  
    Log.d( tag: "Register Success", msg: "Token:" + loggedInUser?.token.toString())  
    var intent = Intent(activity, ProductScrollingActivity::class.java)  
    intent.type = "text/giftcards_browse"  
    intent.data = Uri.parse( uriString: "https://appsecclass.report/api/index")  
    intent.putExtra( name: "User", loggedInUser);  
    startActivity(intent)  
}
```

SecondFragment.kt Intent fixed

## Part 2.2: Shutting out the world

To prevent other apps from preventing ours, I added  
**android:exported="false"** to all activities.

The only exception is the activity containing LAUNCHER intent, which would allow the user to launch our app directly.

### **Part 3: Can you read me out there?**

In Android it is simple - I just replaced all occurrences of "<http://appsecclass...>" with "<https://appsecclass...>",

### **Part 4: Oop, was that card yours?**

If the user knows the card number, there seems to be no checking who that card belongs to. If the user is authorized, we should go through querying the user's cards and find out whether the requested card is actually purchased by that user.

### **Part 5: Privacy is important**

1. I removed the application request to access the location. Only the "mock" location is left.
2. I removed all location-related requests in card scrolling activity. There is no need for location, gps etc. in it.