

Wireless lab week 1

Steven "Steven"

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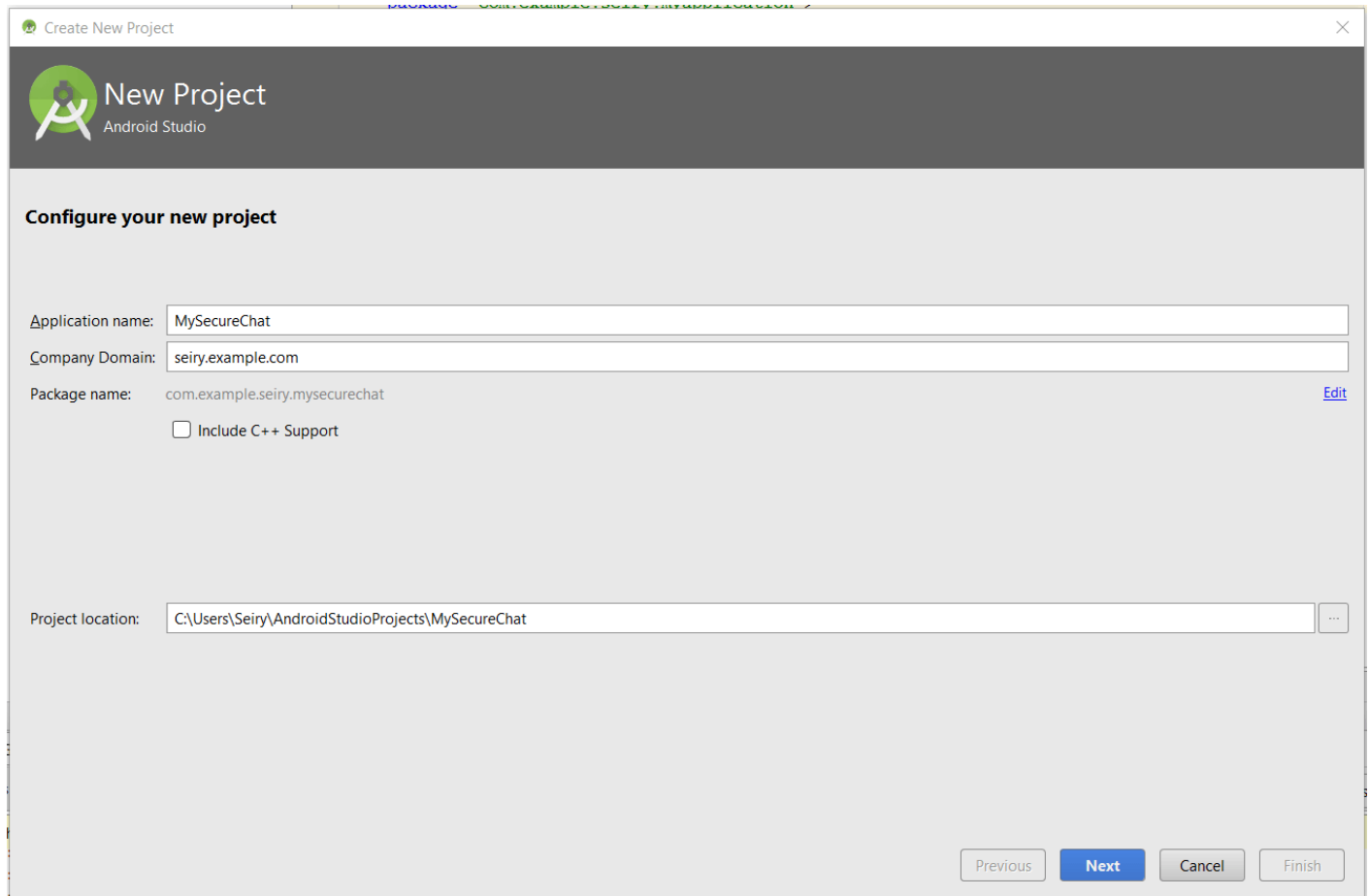
1 Introduction

The purpose of this week's lab session is to prepare an android project for the next few weeks of tutorials. We will be creating a secure messaging app and this session will be about setting up the activities we'll be using. We will use 3 different activity:


1. Login Activity
2. Chat list
3. Chat details

2 Follow these steps

2.1 Create new project



Create New Project

 New Project
Android Studio

Configure your new project

Application name:

Company Domain:

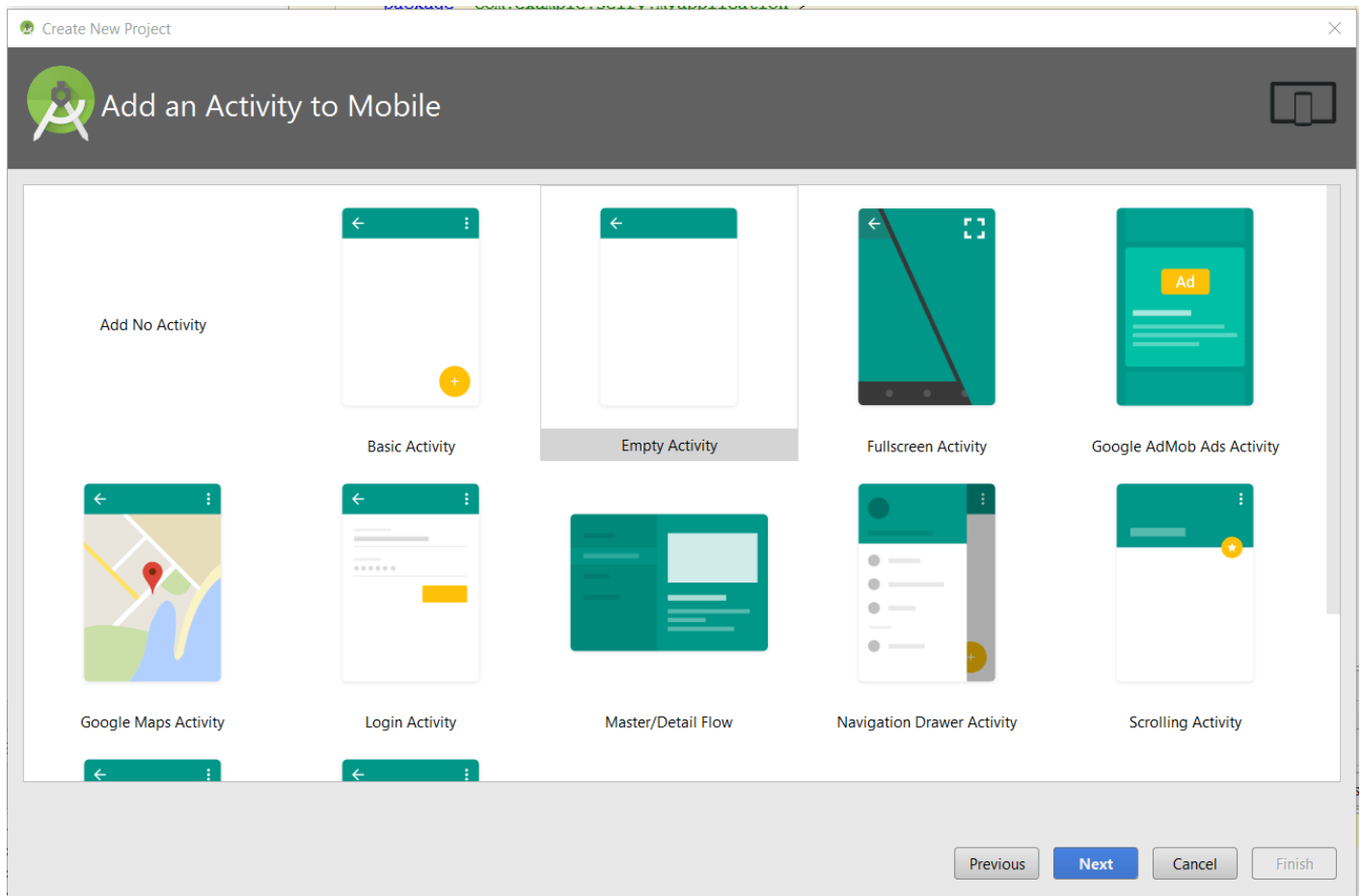
Package name: [Edit](#)

☐ Include C++ Support

Project location:

Previous Next Cancel Finish

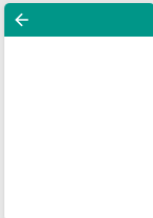
2.2 Choose an empty activity as starting activity



2.3 Name the first activity as LoginActivity

Create New Project

Customize the Activity



Empty Activity

Creates a new empty activity

Activity Name: LoginActivity

☒ Generate Layout File

Layout Name: activity_login

☒ Backwards Compatibility (AppCompat)

The name of the activity class to create

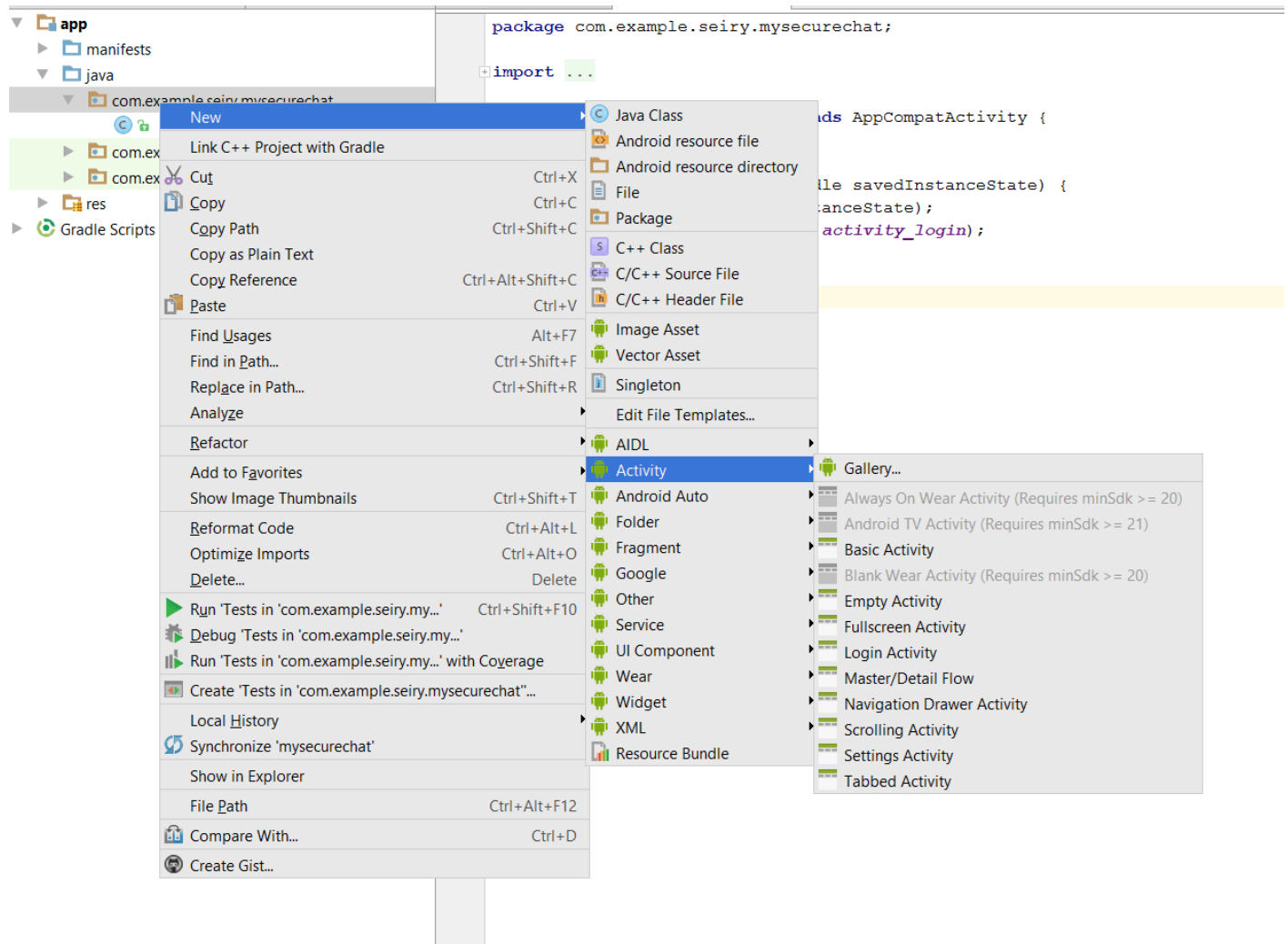
Previous

Next

Cancel

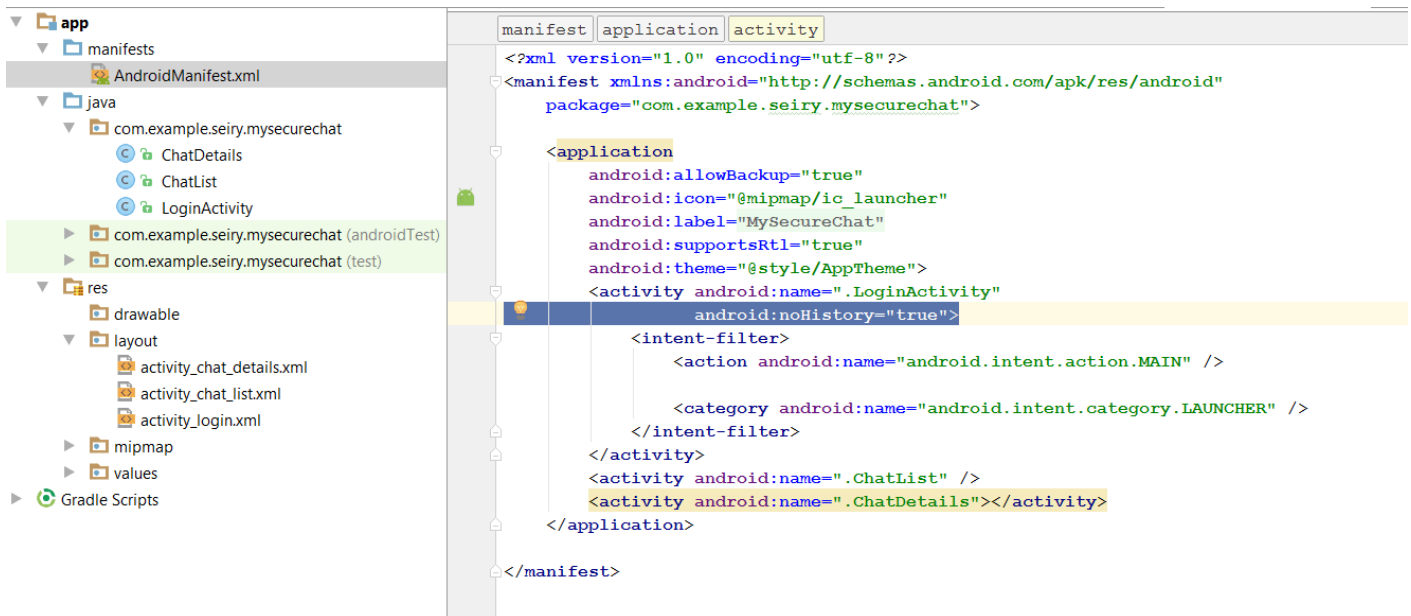
Finish

2.4 Add another 2 empty activity named ChatList and ChatDetails

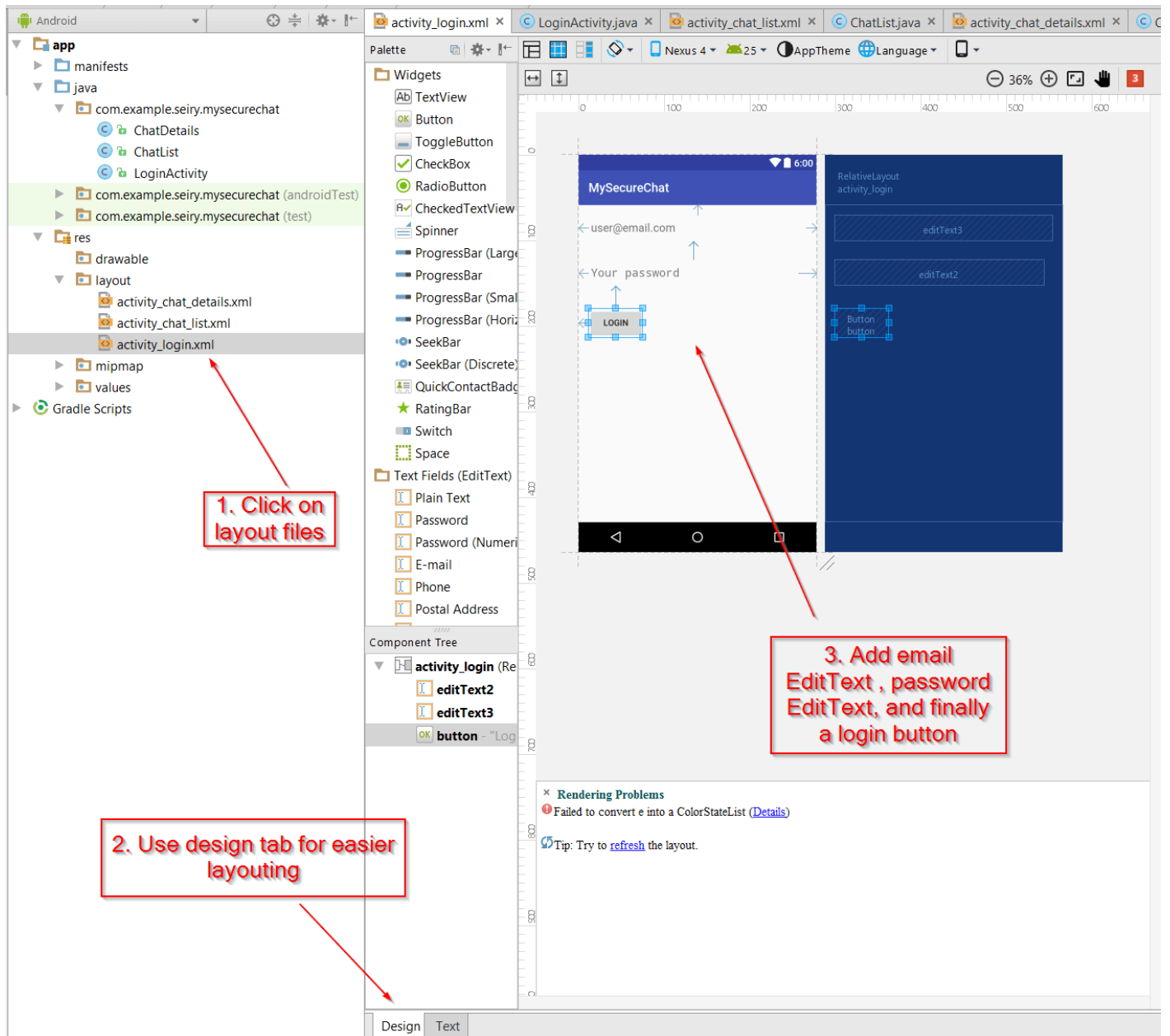


2.5 Modify AndroidManifest.xml

We do not want users to be able to press back and go to the login page after logging in. Therefore, we have to make sure that the LoginActivity is not pushed into the backstack of the task. We do this by editing the **AndroidManifest.xml** and added **android:noHistory="true"** to the activity



2.6 Add basic UI elements to the LoginActivity layout



2.7 Add onClickListener to Button in LoginActivity

We want to hook some functionalities to the button we put on the LoginActivity button. From the layout XML files, we can add "onClick" properties to the Button element. The value of the properties will be the name of the listener function in the activity's java file.



2.8 Add the function into the corresponding java files

In this case, we have declared that the listener on the login button will be named **loginButtonPressed** and we have to define the function in the activity files. We defined the function with the signature of **public void**, and accepting parameters with type **View**.

Since we are not hooking up any validations or authentication yet, what we are going to do is starting the next activity when login button is pressed. The way we do that is by creating an **Intent** by passing *Context* (**this** instance) and target class to the **Intent** constructor. Next, we can start the activity with that intent (This is not yet covered in this week's material, so just follow the instruction).



2.9 Repeat above instructions to add button to start ChatDetails from ChatList

Now that we have working buttons from **LoginActivity** to **ChatList**, please add similar functionalities to the **ChatList** page. Add a button, and add an **onClick** listener to start **ChatDetails** activity.

Finally, notice that when you are in **ChatList** page. Whenever you press the back button, the application just closes instead of going back to login page.