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BCS3283-Mobile Application Development

Chapter 3 Build Your First Application

Editor

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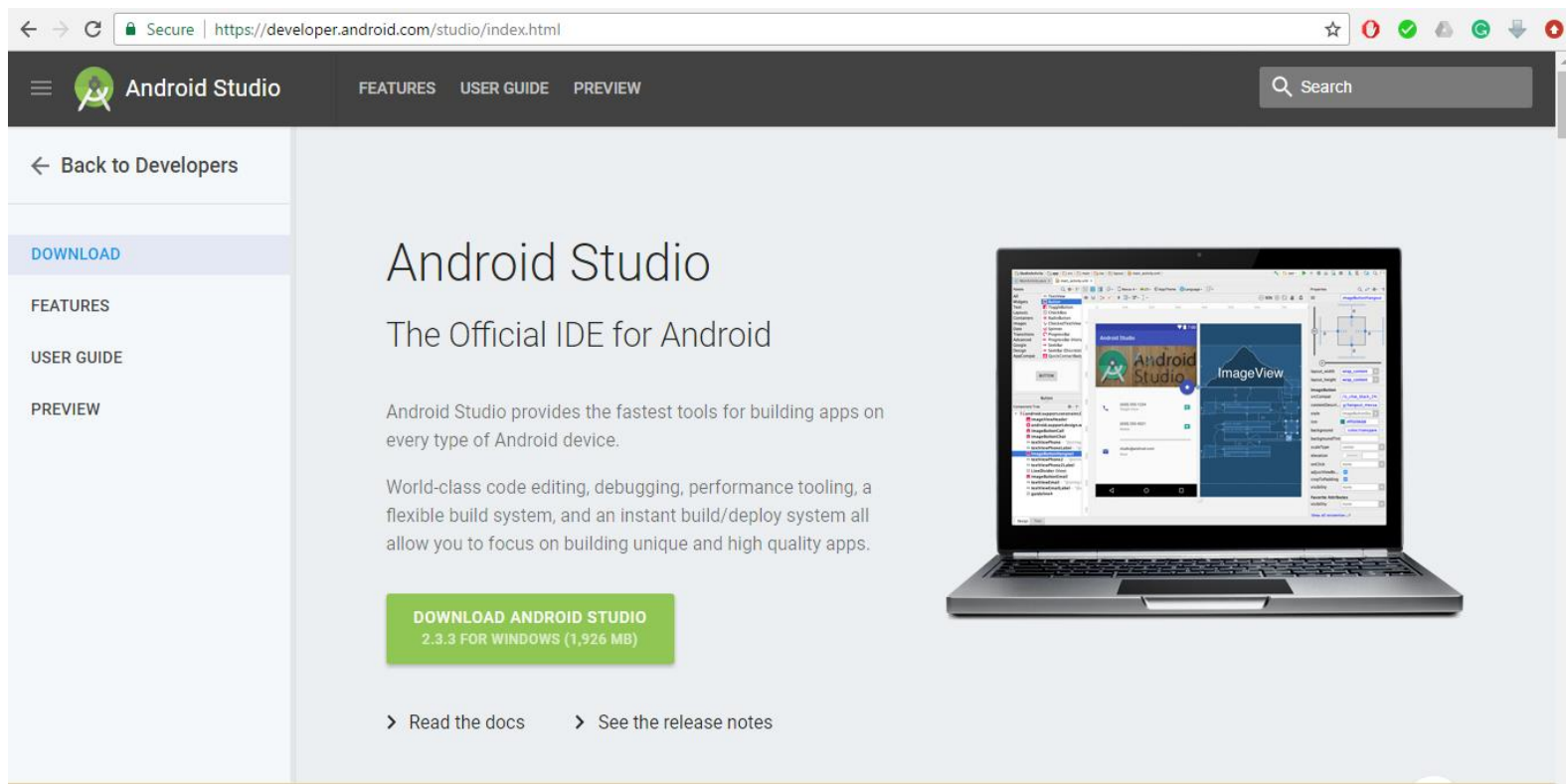
Build Your First Application

- Aims
 - To develop a welcome app using android studio.
- Expected Outcomes
 - Able to create project using Android Studio.
 - Able to edit and interact the project folders.
 - Able to add pallet contents and edit them properties.
 - Build and Run Your App using Emulator and real device.
- References
 - <https://developer.android.com/studio/intro/index.html>
 - <https://pixabay.com/en/smile-smiley-wink-ok-correctly-2352472/>

Introduction to Android Studio

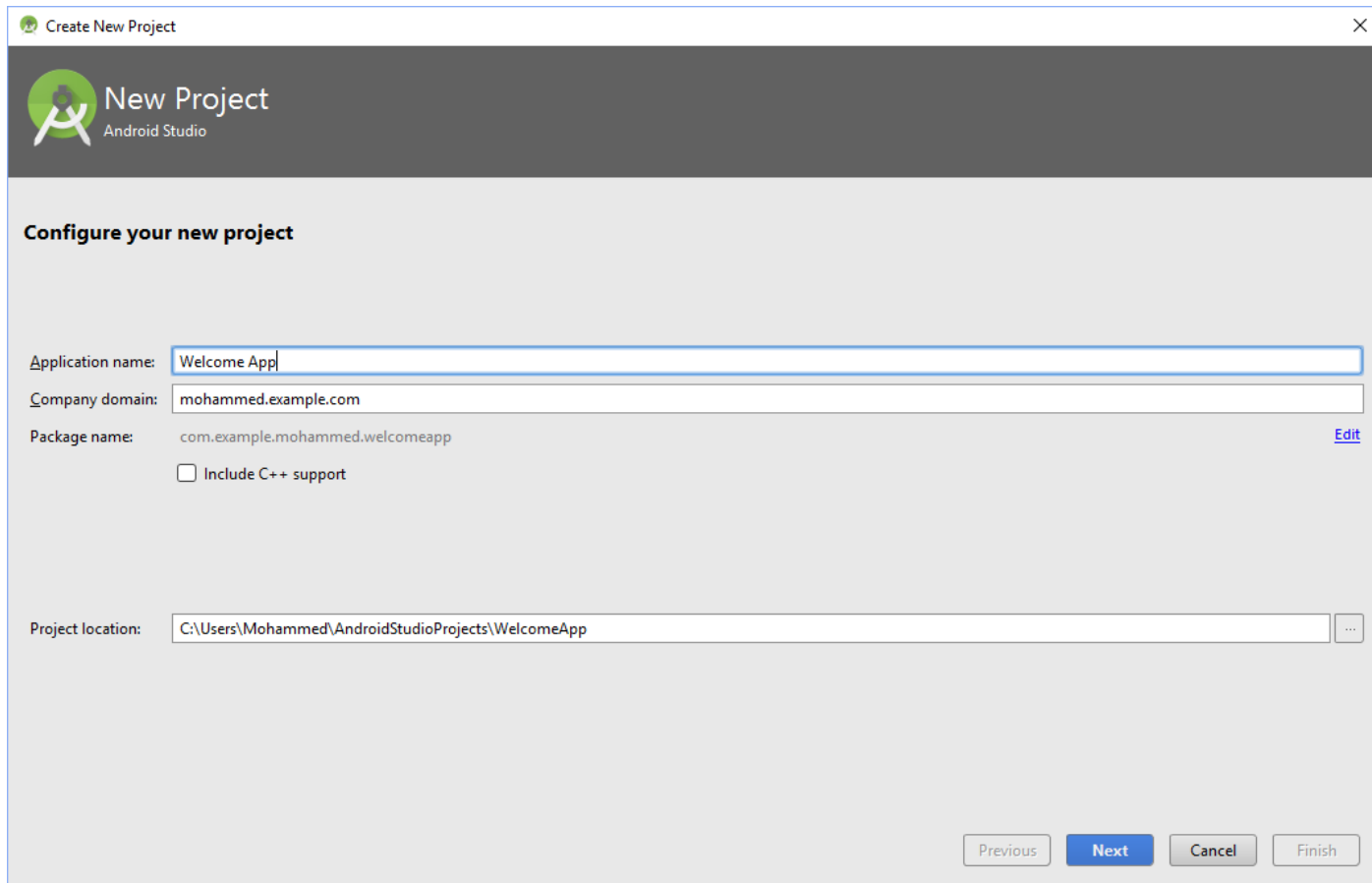
- Download the Android Studio from the following link:

<https://developer.android.com/studio/index.html>



Creating project

- Creating a project

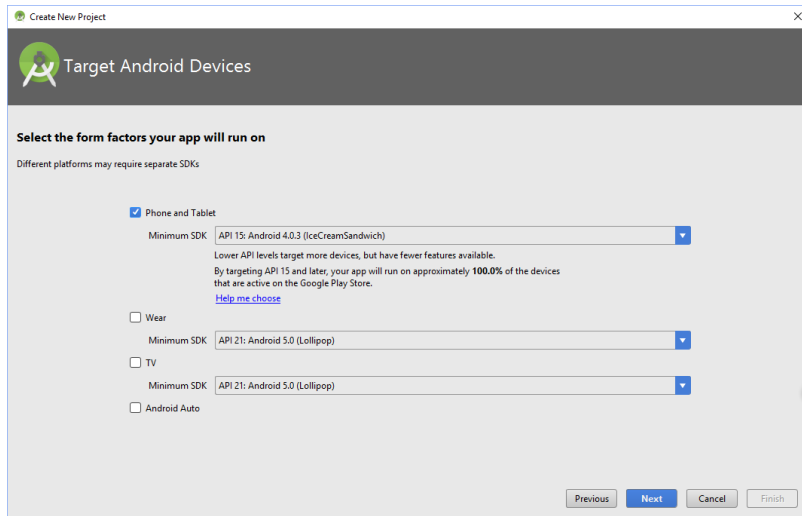


The screenshot shows the 'Create New Project' dialog in Android Studio. The window title is 'Create New Project'. The header area features the Android Studio logo and the text 'New Project' and 'Android Studio'. Below the header, the section 'Configure your new project' is visible. The form contains the following fields and options:

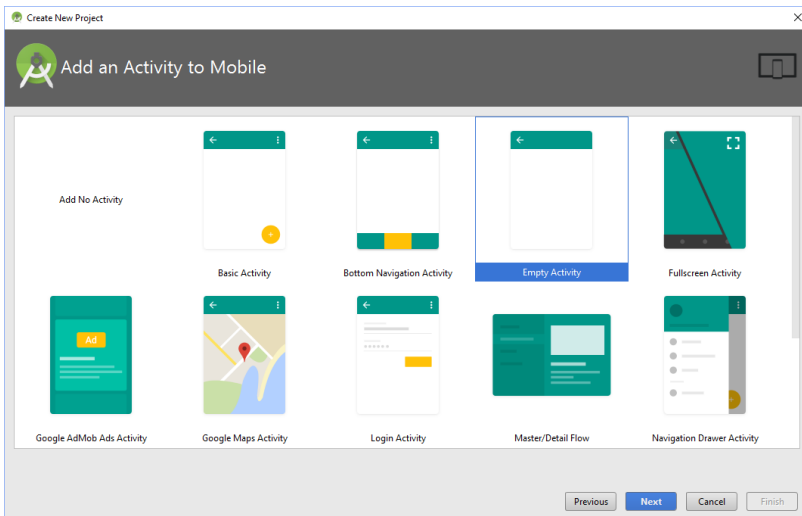
- Application name:** A text field containing 'Welcome App'.
- Company domain:** A text field containing 'mohammed.example.com'.
- Package name:** A text field containing 'com.example.mohammed.welcomeapp'. To the right of this field is a blue 'Edit' link.
- Include C++ support:** A checkbox that is currently unchecked.
- Project location:** A text field containing 'C:\Users\Mohammed\AndroidStudioProjects\WelcomeApp'. To the right of this field is a button with three dots '...'.

At the bottom right of the dialog, there are four buttons: 'Previous' (disabled), 'Next' (active/highlighted in blue), 'Cancel' (disabled), and 'Finish' (disabled). In the bottom right corner of the window, there is a Creative Commons license logo showing 'CC BY NC SA'.

Creating project



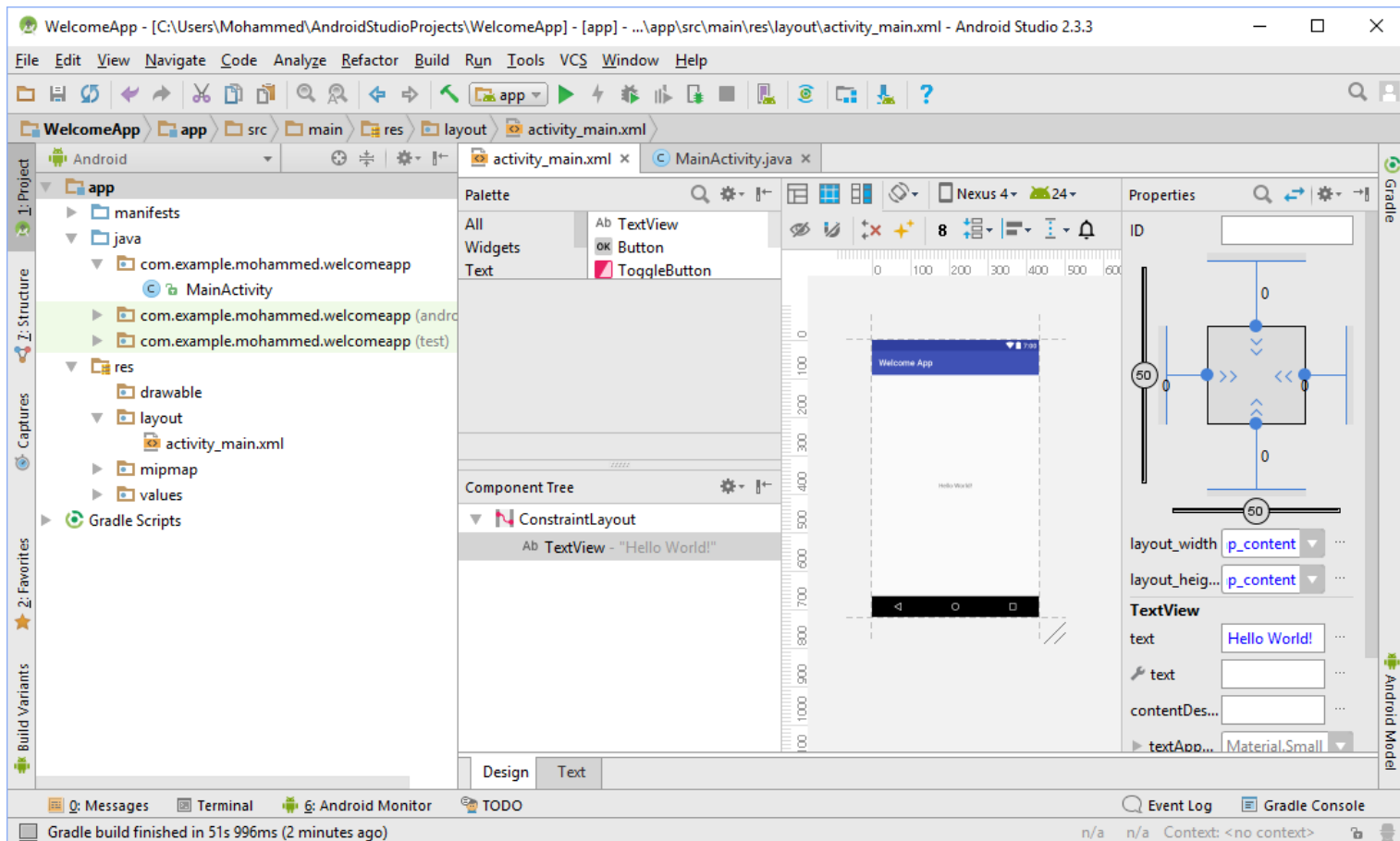
Selecting the android target device



Available Activities

Creating project

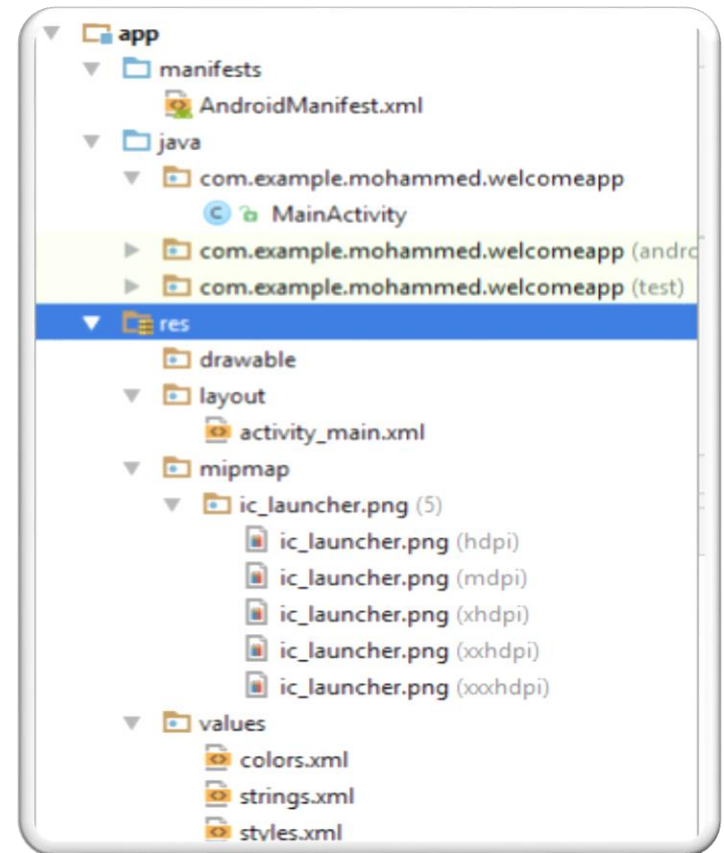
- The Android Studio windows includes several Parts.



Edit and interact the project folders

The project includes the following folders:

- Android Manifest (AndroidManifest.xml).
- Java source code of the created activity (MainActivity.java).
- Drawable, layout, mipmap, and values of the project under res.




Pallet contents and properties

- Adding Images to the Project:
 - Locate the location of the drawable folder (right click on the drawable folder then select Show in Explorer).
 - Copy and paste the selected image inside the folder (image extension supported in android studio are PNG, GIF, JPEG and BMP).
 - Drag the ImageView from Images under palette then drop it in the project interface then select the Image.

Pallet contents and properties

- RelativeLayout properties
 - Under the Component Tree, Click on the created Layout (like RelativeLayout).
 - Under the Properties, edit the required properties i.e. ID, layout_width, layout_hoght ...etc.
- Adding TextView and EditeText to the project.
- Create connections between the project materials.

Build and Run Your App

- To build and run the application using the Emulator:
 - Click on the green run button in the top of the android studio window ().
- To build and run the application on your smartphone device:
 - Connect the smartphone to the PC.
 - Activate the USB debug.
 - Click on the run button.