江西理工大学 信息工程学院

JIANGXI UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF INFORMATION ENGINEERING

Mobile application development

移动应用开发

Lecture 016:

Java Bridge With App Inventor

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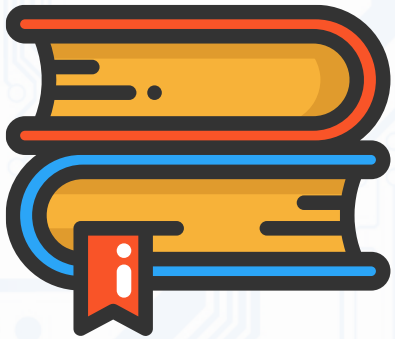


MOBILE APPLICATION DEVELOPMENT

LECTURE 016: Java Bridge With App Inventor

What is Java Bridge?

- The App Inventor Java Bridge is an exploratory (alpha) version of App Inventor that allows you to generate a Java equivalent of the apps you have built. The tool helps students who have learned coding in AI's visual block-based paradigm to transition to coding in a textual programming language.
- Besides the educational benefits, the tool also allows for hybrid development whereby the visual blocks language is used to create a portion of the app, and Java is used to add functionality that is difficult to develop in AI.

http://www.appinventor.org/jbridge

Java Bridge

Java Bridge Library

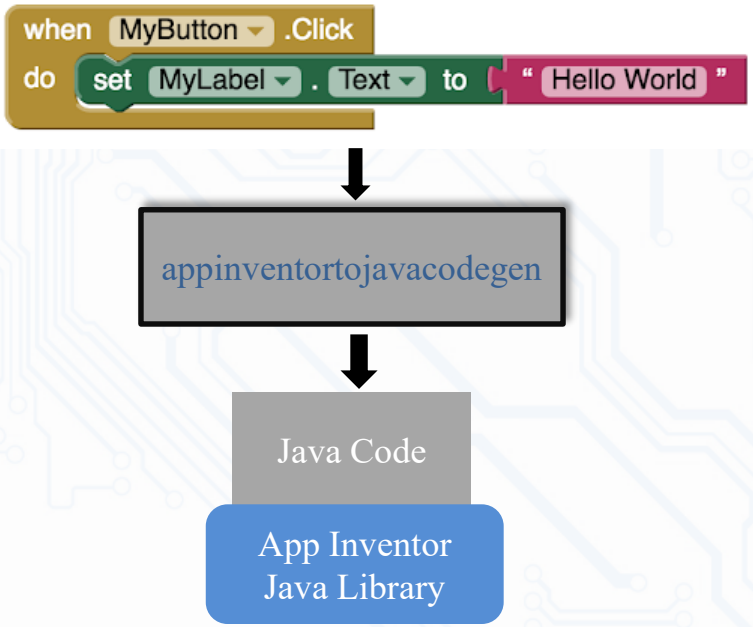
http://www.appinventor.org/javaBridge/downloads/AppInventor-JavaLibrary.jar

- It's java code library for building app component
- High level –built on top of Android SDK
- A java class for every component with the same app inventor methods/property names.

Java Code Generator

It takes your app inventor block structure and converts it into java code

http://www.appinventortojava.com/?locale=en

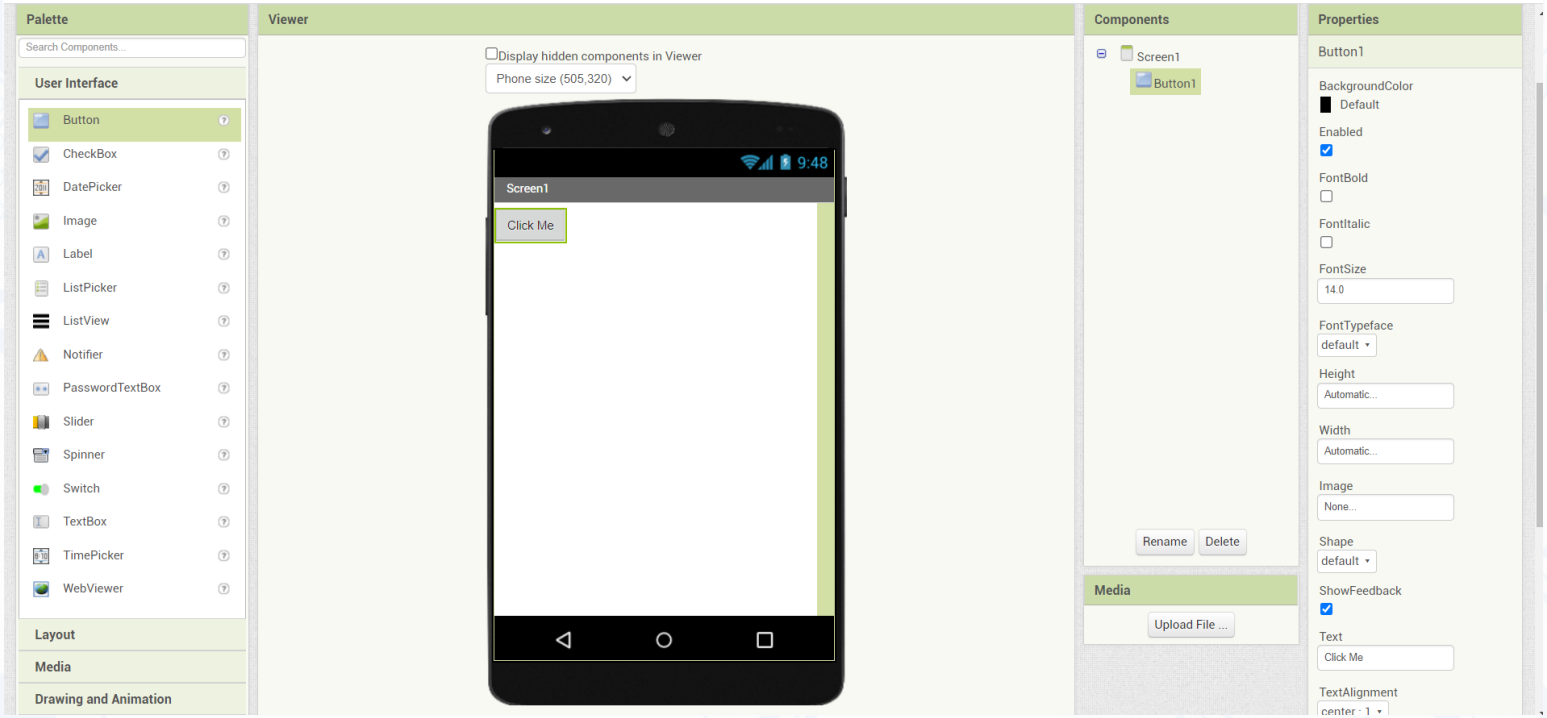


Basic Transition from App Inventor to Java Using Java Code Generator

- At first we design the basic overview of the app using app inventor.
- Then we generate the corresponding java code for the app using Java Code generator.
- We open the generated java code in android studio and continue to work on it using java.

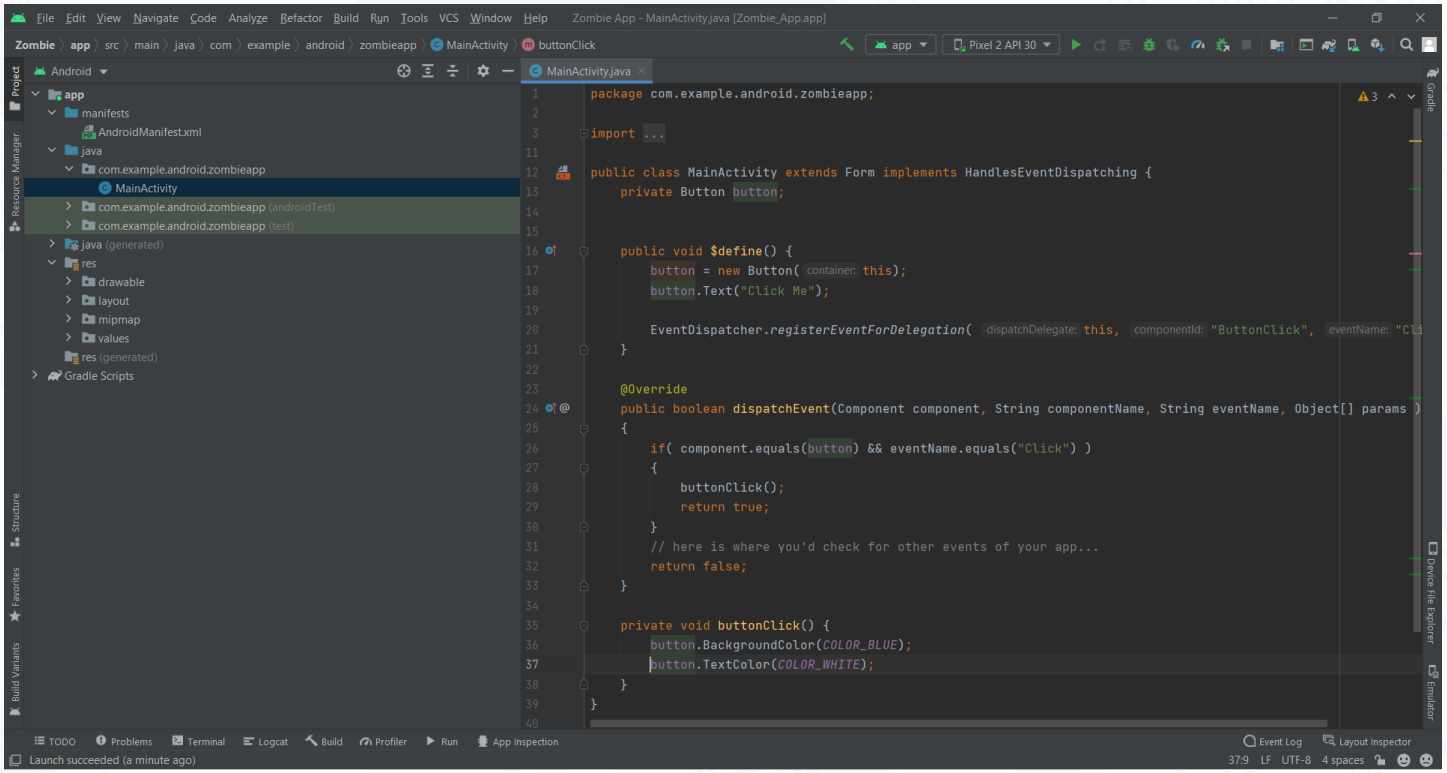
Basic Transition from App Inventor to Java Using Java Code Generator

Basic Overlay Using App Inventor



Basic Transition from App Inventor to Java Using Java Code Generator

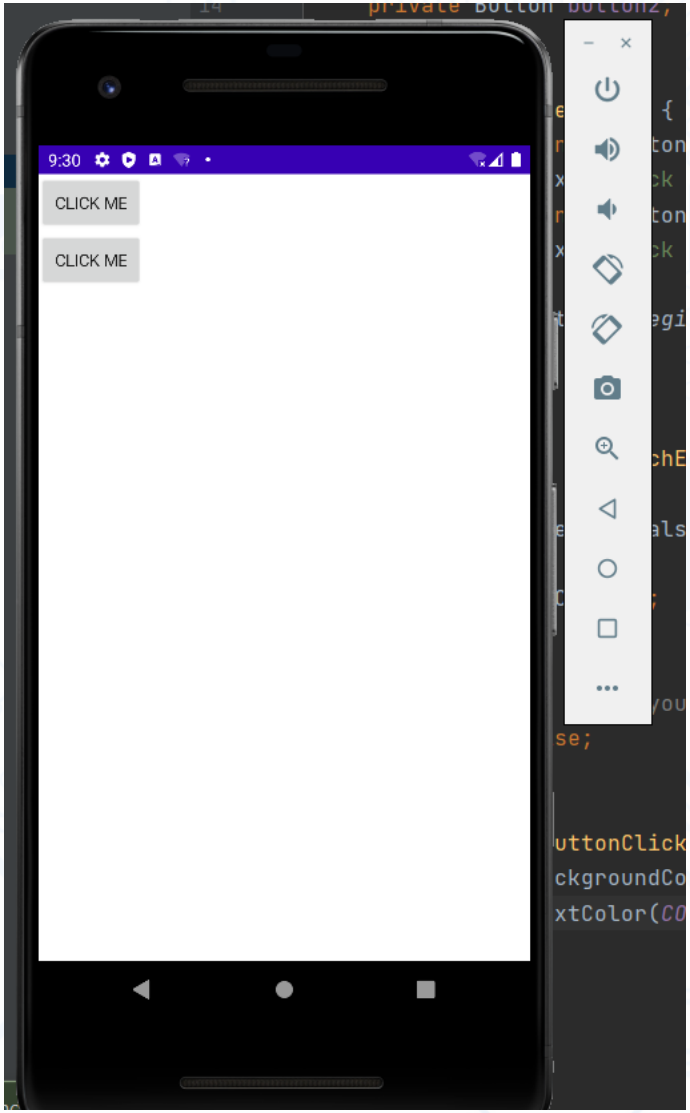
Open the Project in Android Studio



App Inventor

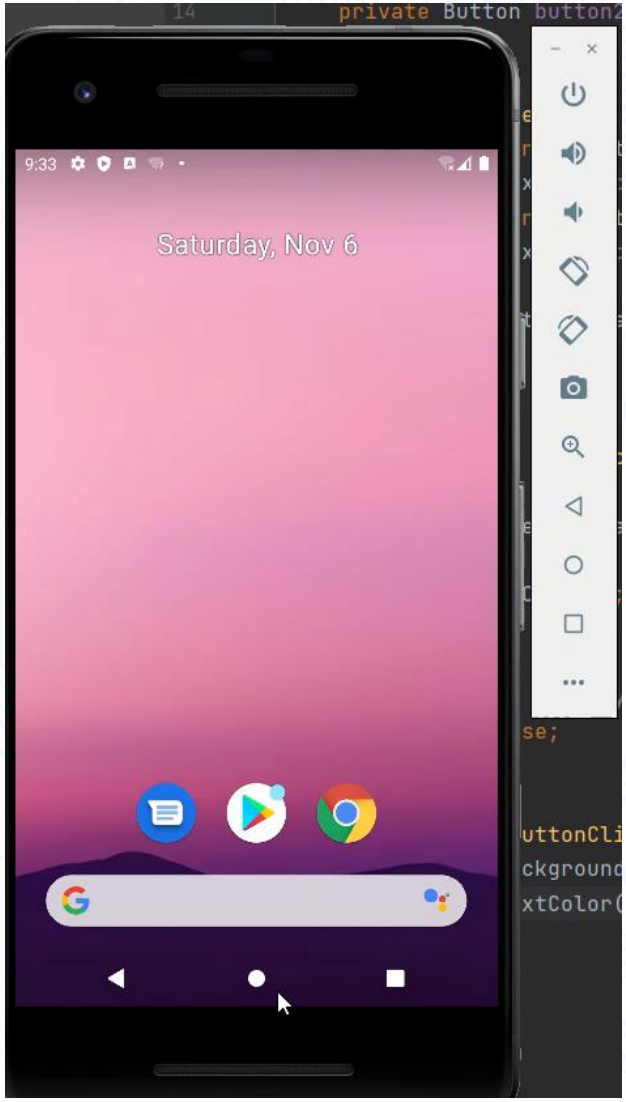
Basic Transition from App Inventor to Java Using Java Code Generator

Added Some Design Using Java Code



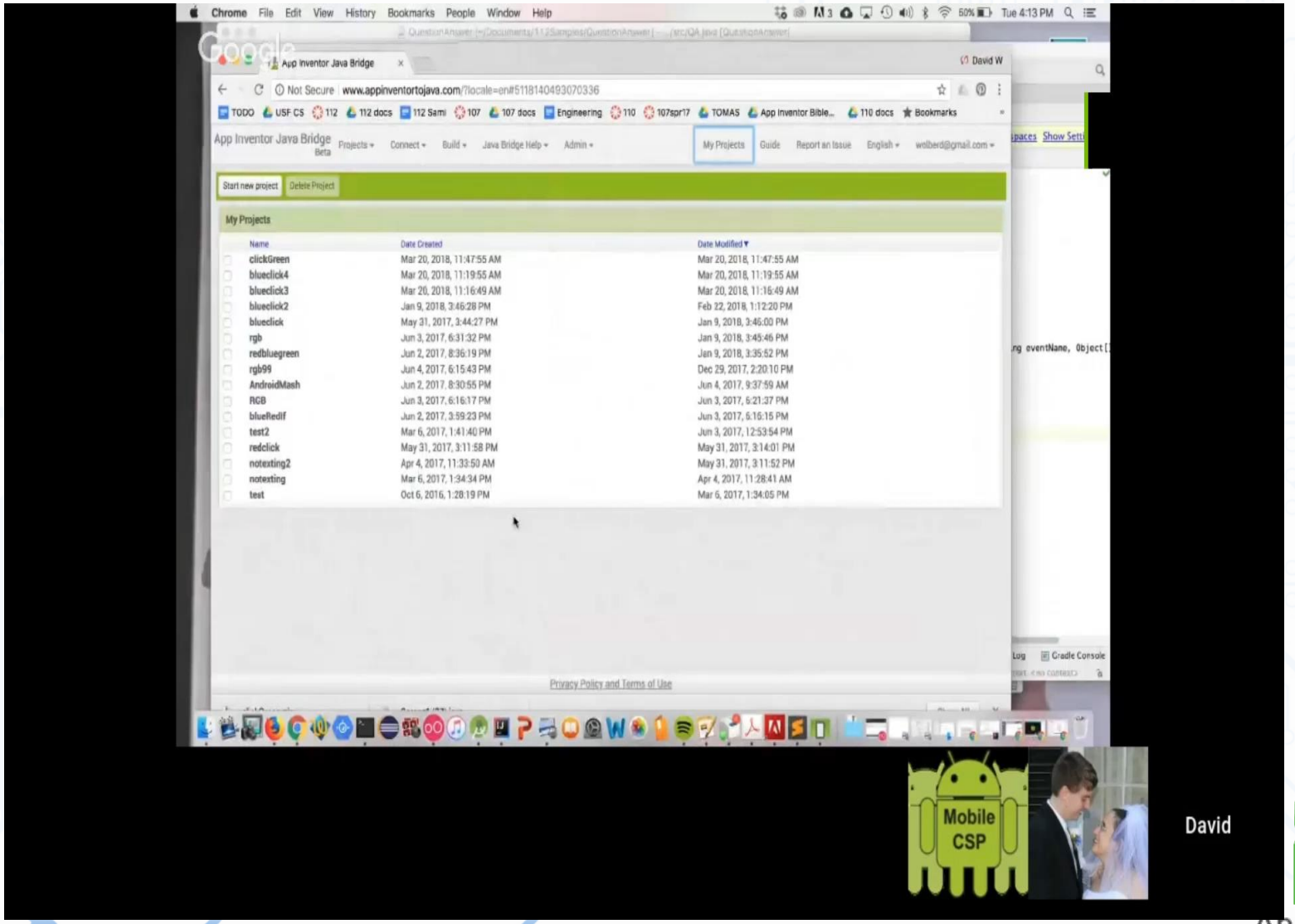
App Inventor

App Demo



App Inventor

Basic Transition from App Inventor to Java Using Java Code Generator



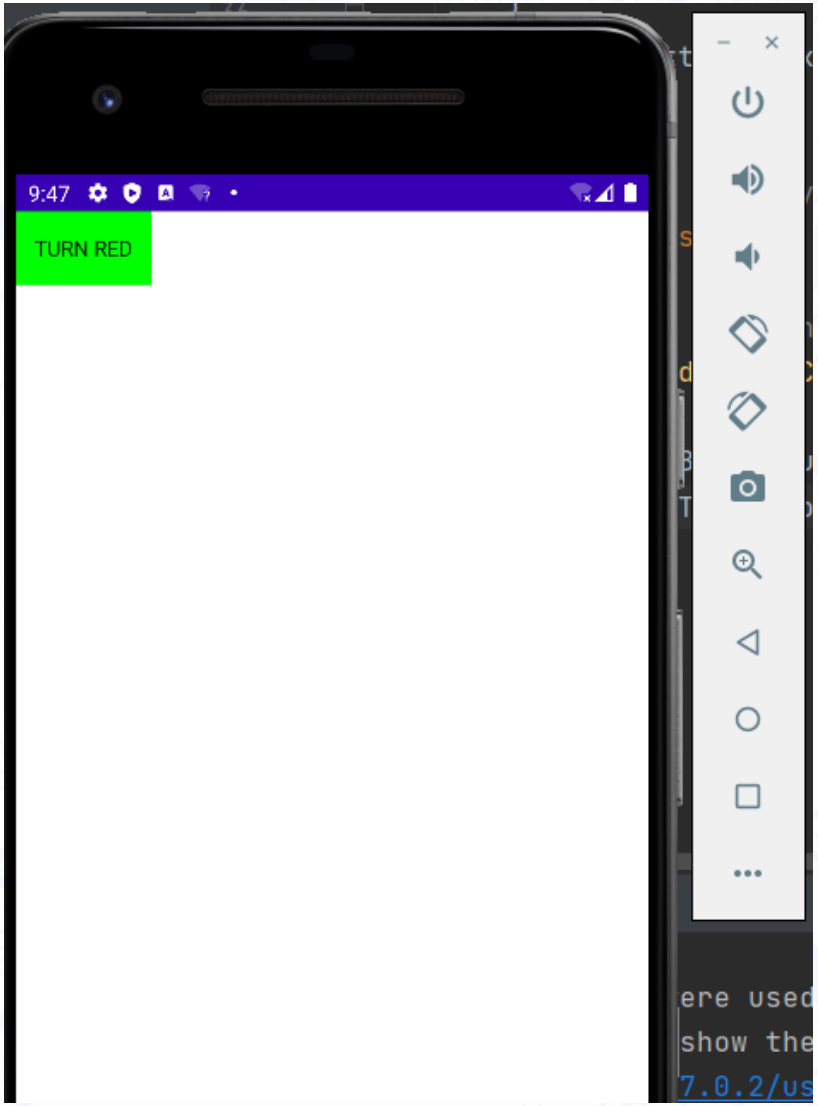
App Inventor

Getting Started With Java Bridge (Android Studio)

- Create a New Android Application Project.
- Then Import the Java bridge library into the project.
- Write the Java Code for the app.
- Modify the manifest file.
- Run the project.

App Inventor

Design Layout

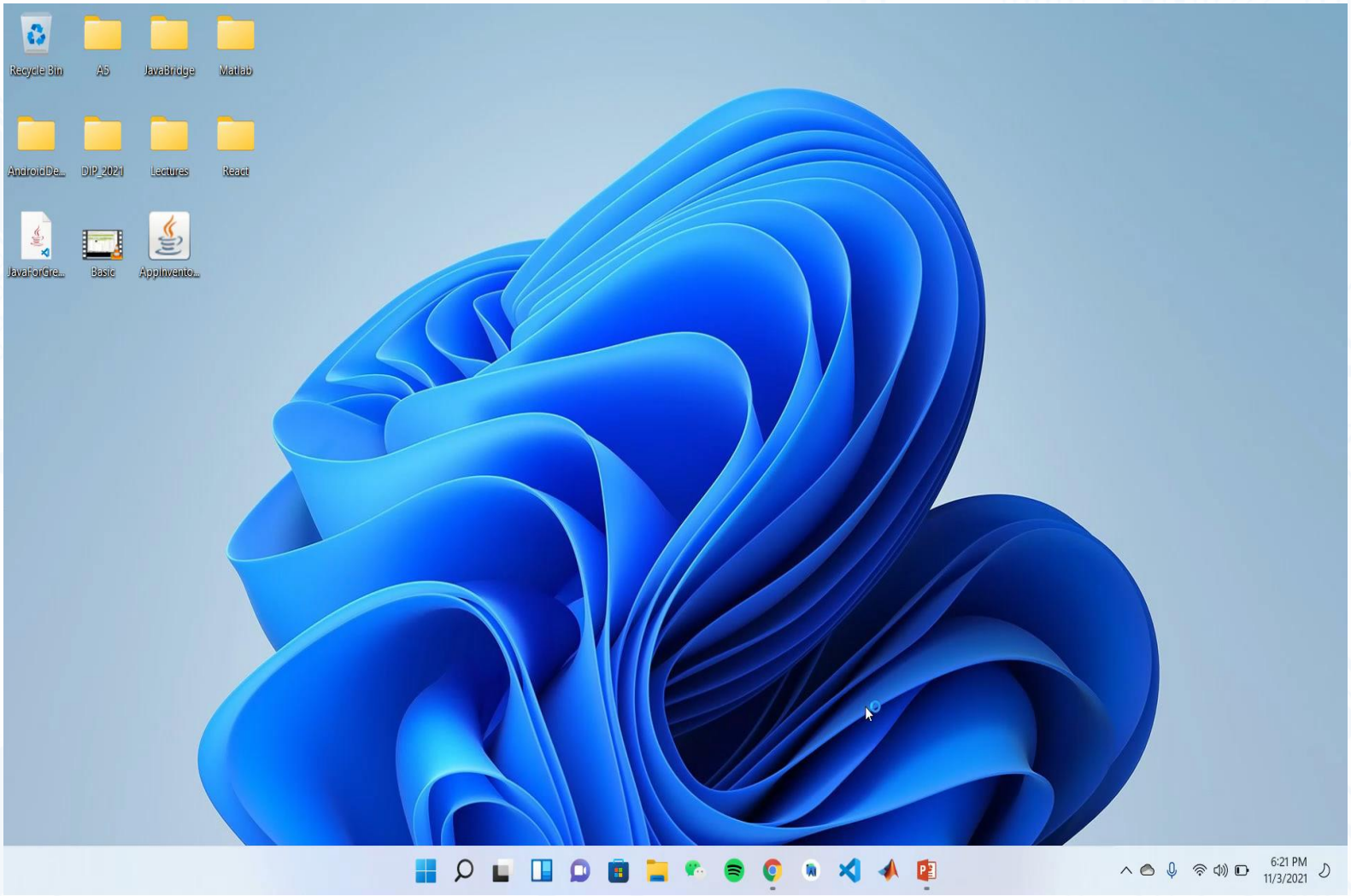


App Inventor

App Demo

App Inventor

Getting Started With Java Bridge (Android Studio)



App Inventor

Simple Greet App Example

- Create a New Android Application Project.
- Then Import the Java bridge library into the project.
- Design the project

  - Create three component: TextBox, Label, and button.

  - Design them using appropriate style

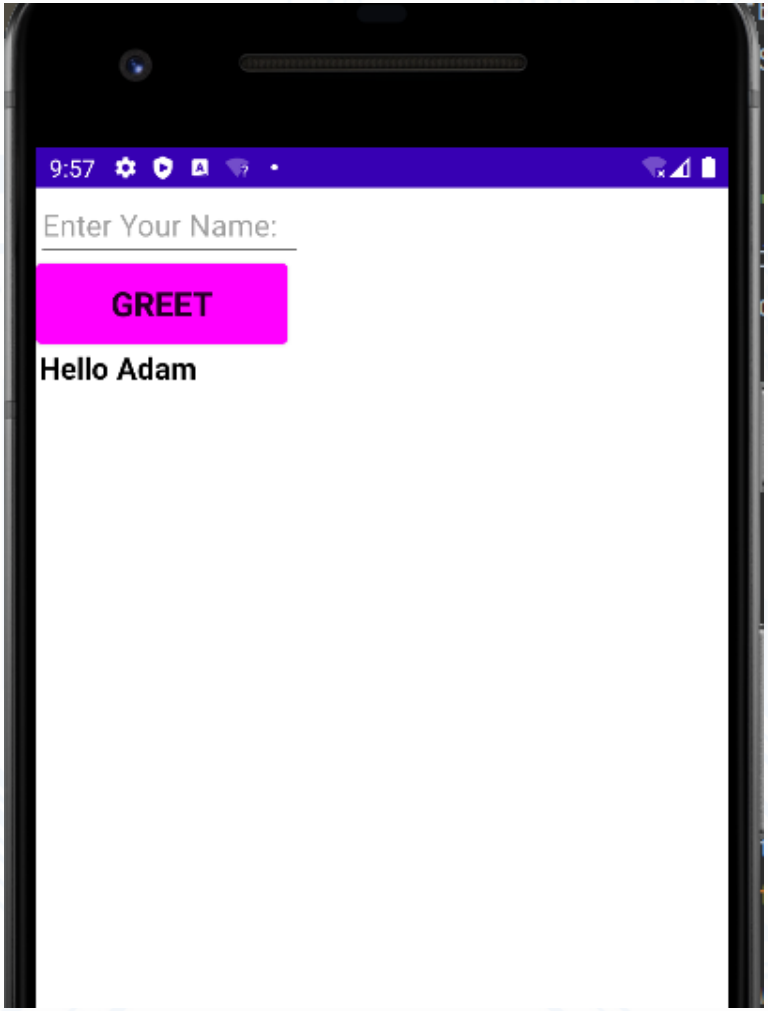
  - Add the event click event handler in button.

  - On clickButton callback method, get the name from the TextBox and Show it in the Label.
- Run the project.

App Inventor

Simple Greet App Example

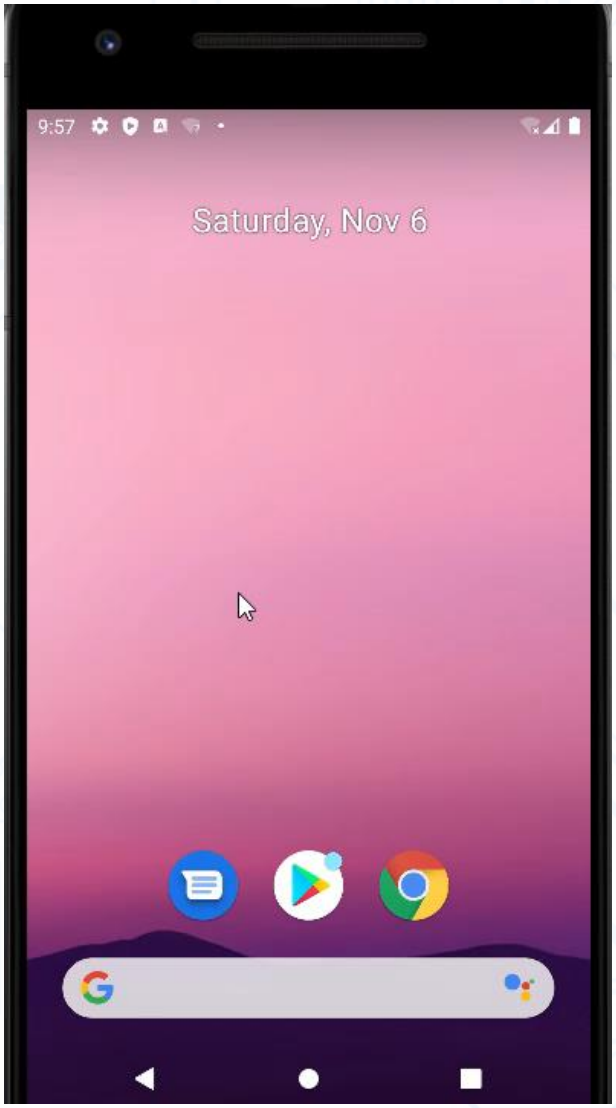
Design Layout



App Inventor

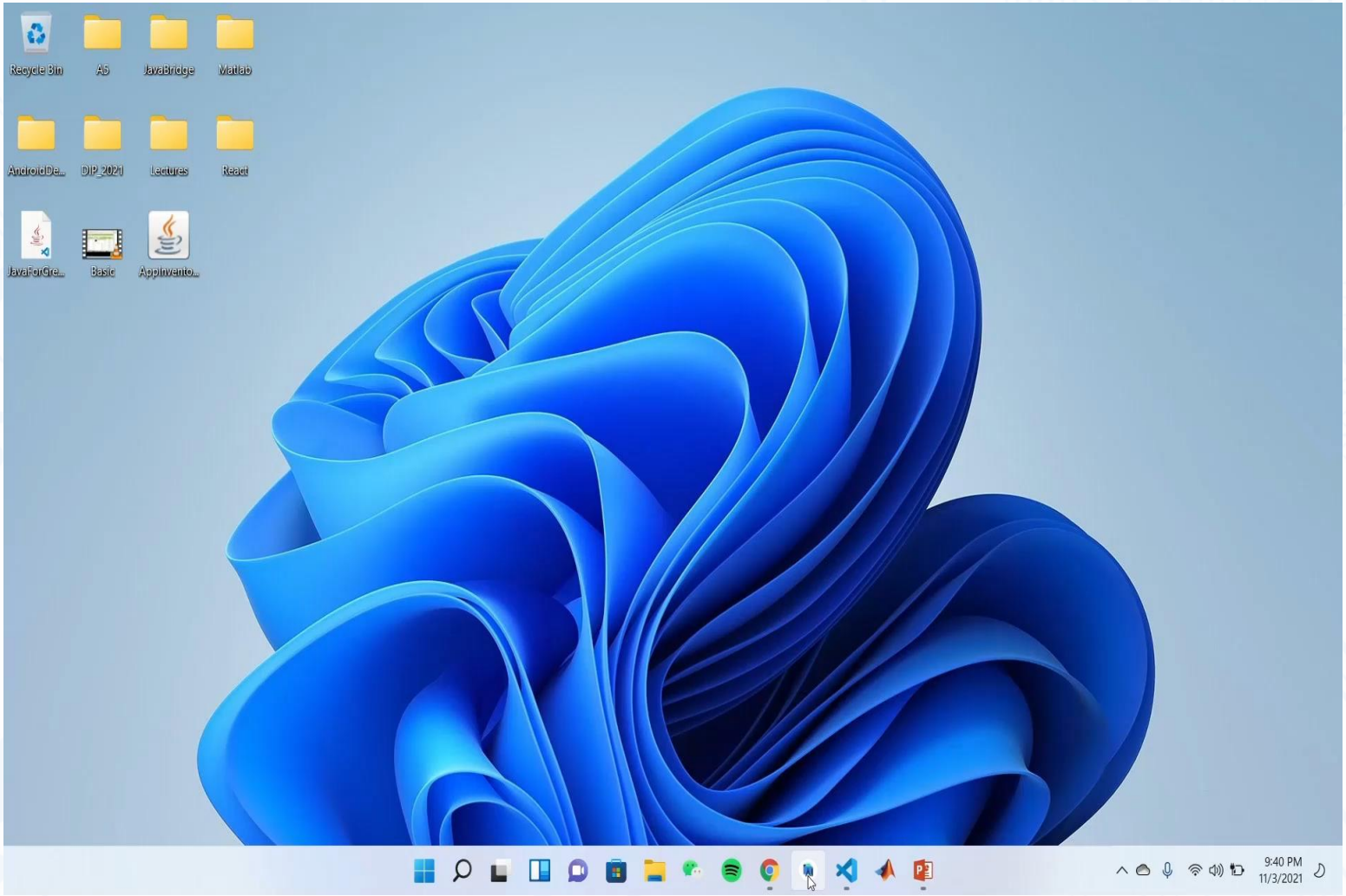
Simple Greet App Example

App Demo



App Inventor

Simple Greet App Example



App Inventor

"BE HUMBLE. BE HUNGRY. AND ALWAYS BE THE HARDEST WORKER IN THE ROOM."

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School of information engineering

Digital Image Processing

THANK YOU

"The beauty of research is that you never know where it's going to lead."

RICHARD ROBERTS
Nobel Prize in Physiology or Medicine 1993