

Web Development



Mobile

CME4414 Advances in Web Technologies

Bootstrap

- An open source toolkit
- The most popular HTML, CSS, and JavaScript framework for developing responsive, **mobile-first websites**

Bootstrap 4

- The newest version of [Bootstrap](#),
- Support the latest, stable releases of all major browsers and platforms
- Internet Explorer 9 and down is not supported

JQuery

- Lightweight, "write less, do more", JavaScript library
- The purpose is to make it much easier to use JavaScript on website
- Takes a lot of common tasks that
 - require many lines of JavaScript code to accomplish,
 - wraps them into methods that call with **a single line of code**

JQuery

- Simplifies a lot of the complicated things from JavaScript, like AJAX calls & DOM manipulation
- The jQuery library contains
 - HTML/DOM manipulation
 - CSS manipulation
 - HTML event methods
 - Effects and animations
 - AJAX
 - Utilities

jQuery

Many of the biggest companies on the Web use jQuery

- Google
- Microsoft
- IBM
- Netflix

HTTP Get Post

- `get()` and `post()` methods are used to request data from the server with an
 - HTTP GET
 - or
 - POST request
- **GET** - Requests data from a specified resource
- **POST** - Submits data to be processed to a specified resource
- `$.get("test.asp", function(data, status)`

jQuery Mobile

HTML5 based user interface system designed to **make responsive web sites** and apps that are accessible on

- all smartphome,
- tablet
- desktop devices

Android Studio

- The official Integrated Development Environment (IDE) for Android app development, based on IntelliJ IDEA
- On top of IntelliJ's powerful code editor and developer tools
- Offers more features that enhance productivity when building Android apps

Android Studio

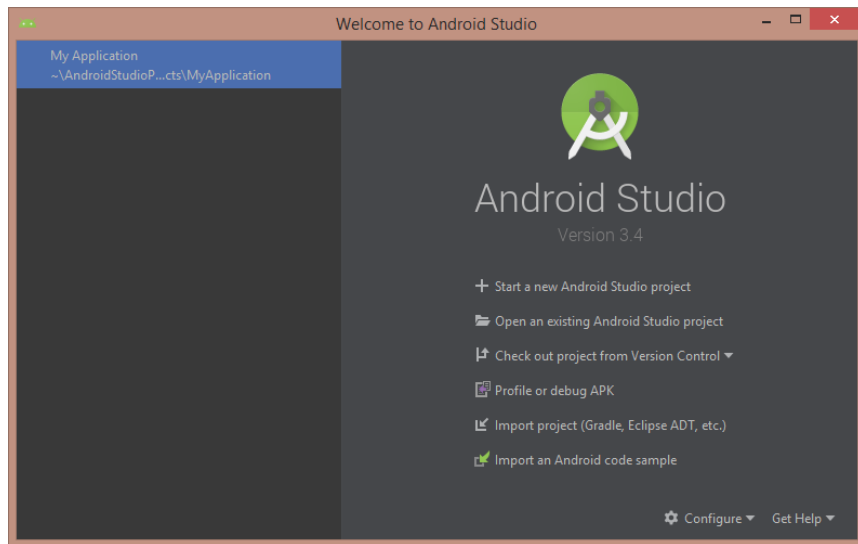
- A fast and feature-rich emulator
- A unified environment where you can develop for all Android devices
- A flexible Gradle-based build system
- Instant Run to push changes to your running app without building a new APK

Android Studio

- Code templates & GitHub integration to help build common app features & import sample code
- Extensive testing tools and frameworks
- Lint tools to catch performance, usability, version compatibility, and other problems
- C++ and NDK support
- Built-in support for Google Cloud Platform, (easy to integrate Google Cloud Messaging & App Engine)

Project

- Contains one or more modules with source code files & resource files
- Types of modules include
 - Android app modules
 - Library modules
 - Google App Engine modules

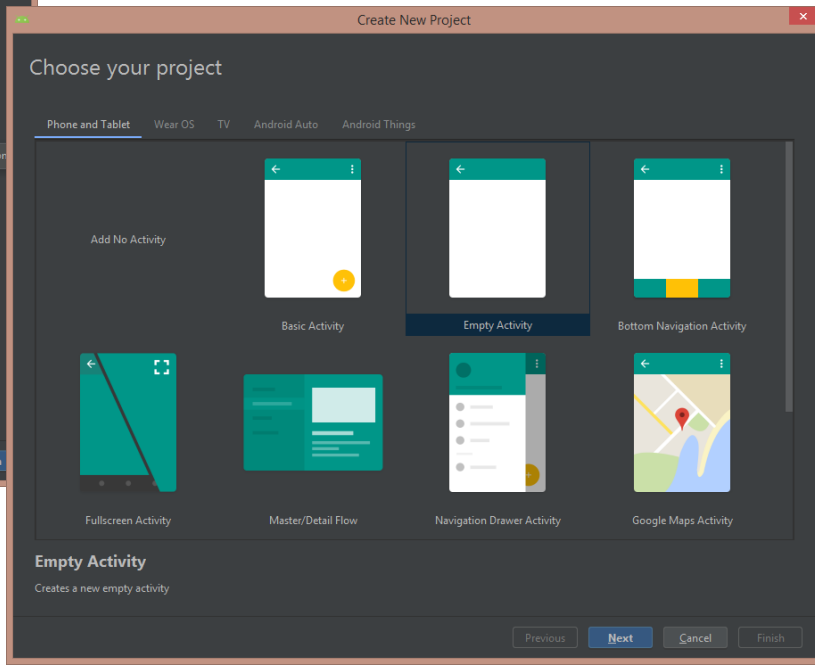
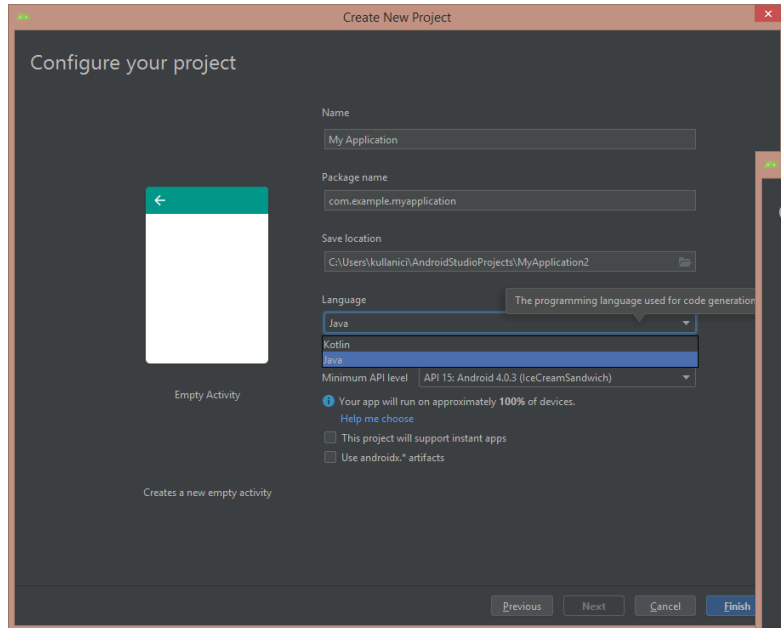


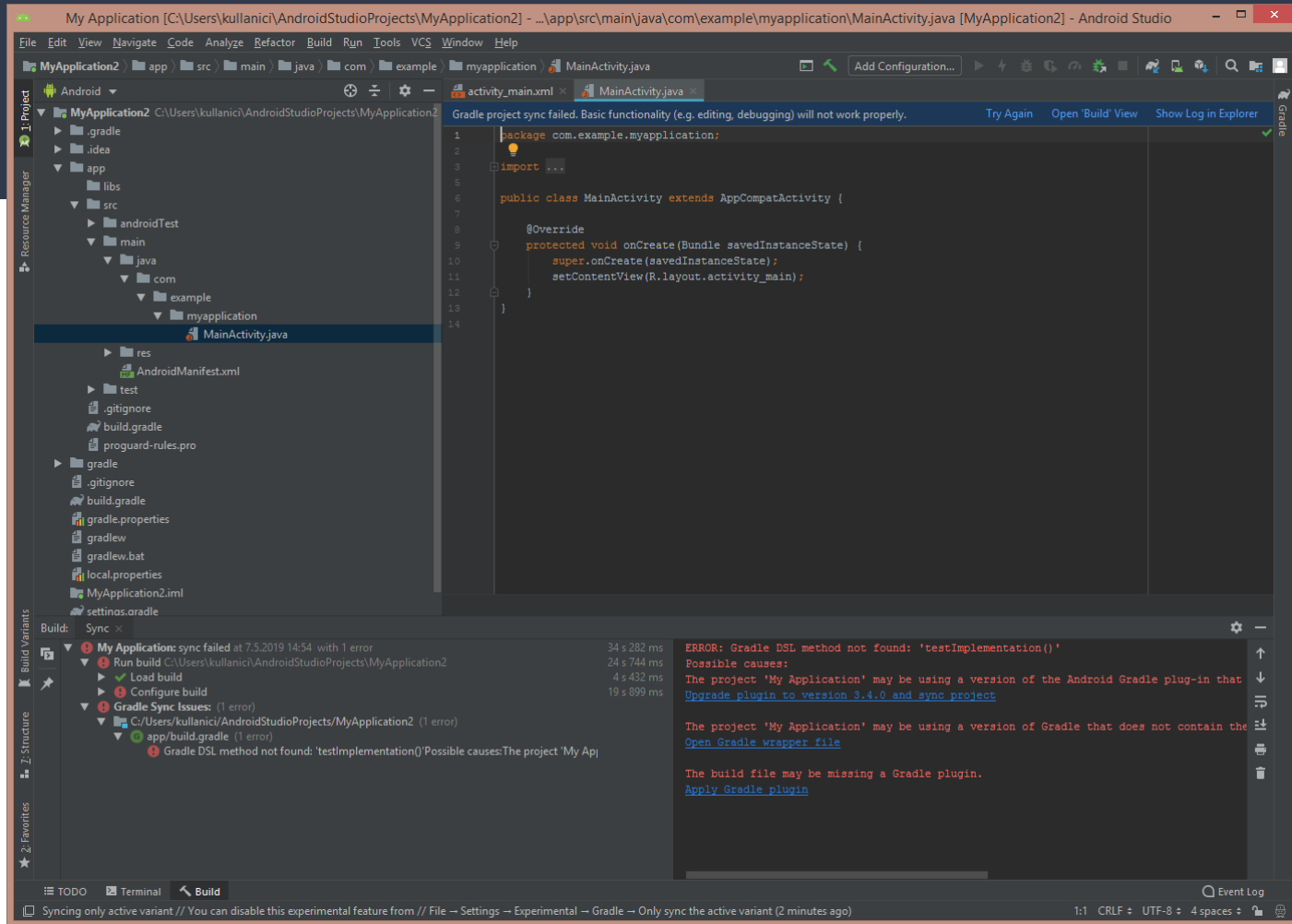
Module contains

- Manifests Folder
 - Contains the `AndroidManifest.xml` file
- Java Folder
 - Contains the Java source code files, including JUnit test code
- Res Folder
 - Contains all non-code resources, such as XML layouts, UI strings, and bitmap images

Android

- Language
- Min API Level





- MainActivity.java
- activity_main.xml

References

- <https://getbootstrap.com/>
- <https://www.w3schools.com>
- <https://jquery.com/>
- <https://jquerymobile.com/>
- <https://developer.android.com/studio>