Application/Project Structure

Modules - Android projects are composed of modules

- Android Application Modules
- Test Modules
- Library Modules
- App Engine Modules

Android Application Modules

An Android Application Module is the container for your application's source code, resource files, and application level settings, such as the module-level build file, resource files, and Android Manifest file. The application module contents are eventually built into the .apk file that gets installed on a device.

Test Modules

These modules contain code to test your application projects and are built into test applications that run on a device. By default, Android Studio creates the *androidTest* module for inserting JUnit tests.

Library Modules

These modules contain shareable Android source code and resources that you can reference in Android projects. This is useful when you have common code that you want to reuse. Library modules cannot be installed onto a device, however, they are pulled into the .apk file at build time.

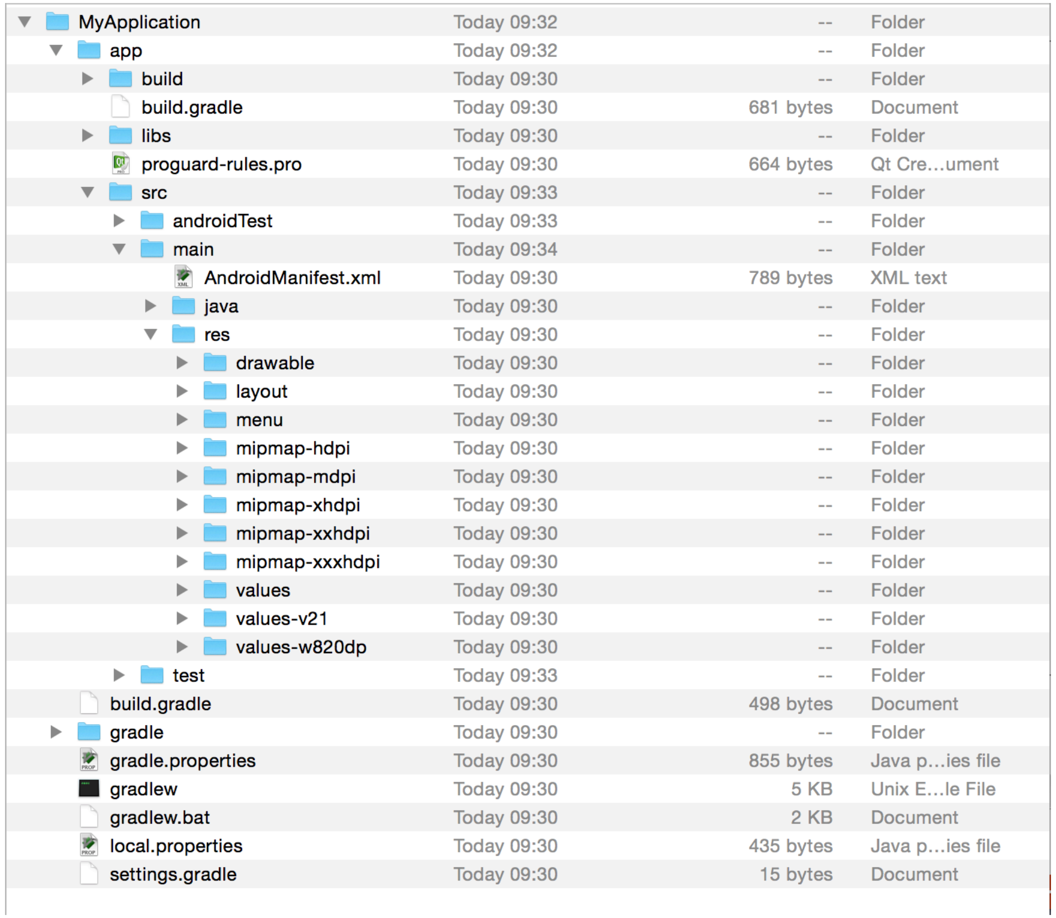
App Engine Modules

Android Studio lets you easily add a cloud backend to your application. A backend allows you to implement functionality such as backing up user data to the cloud, serving content to client apps, real-time interactions, sending push notifications through Google Cloud Messaging for Android (GCM), and more. App Engine modules are App Engine java Servlet Module for backend development, App Engine java Endpoints Module to convert server-side Java code annotations into RESTful backend APIs, and App Engine Backend with Google Cloud Messaging to send push notifications from your server to your Android devices.

Project Files

- app - Application module directories and files
- build - This directory stores the build output for all project modules.
- local.properties - Customizable computer-specific properties for the build system, such as the path to the SDK installation. Because the content of the file is specific to the local installation of the SDK, the local.properties should not be maintained in a source revision control system.

Directory Structure



```
▼ MyApplication                          Today 09:32          --   Folder
    ▼ app                                Today 09:32          --   Folder
        ▶ build                          Today 09:30          --   Folder
          build.gradle                   Today 09:30   681 bytes   Document
        ▶ libs                           Today 09:30          --   Folder
          proguard-rules.pro             Today 09:30   664 bytes   Qt Cre...ument
        ▼ src                            Today 09:33          --   Folder
            ▶ androidTest                Today 09:33          --   Folder
            ▼ main                       Today 09:34          --   Folder
                  AndroidManifest.xml    Today 09:30   789 bytes   XML text
                ▶ java                   Today 09:30          --   Folder
                ▼ res                    Today 09:30          --   Folder
                    ▶ drawable           Today 09:30          --   Folder
                    ▶ layout             Today 09:30          --   Folder
                    ▶ menu               Today 09:30          --   Folder
                    ▶ mipmap-hdpi        Today 09:30          --   Folder
                    ▶ mipmap-mdpi        Today 09:30          --   Folder
                    ▶ mipmap-xhdpi       Today 09:30          --   Folder
                    ▶ mipmap-xxhdpi      Today 09:30          --   Folder
                    ▶ mipmap-xxxhdpi     Today 09:30          --   Folder
                    ▶ values             Today 09:30          --   Folder
                    ▶ values-v21         Today 09:30          --   Folder
                    ▶ values-w820dp      Today 09:30          --   Folder
            ▶ test                       Today 09:33          --   Folder
      build.gradle                       Today 09:30   498 bytes   Document
    ▶ gradle                             Today 09:30          --   Folder
      gradle.properties                  Today 09:30   855 bytes   Java p...ies file
      gradlew                            Today 09:30        5 KB   Unix E...le File
      gradlew.bat                        Today 09:30        2 KB   Document
      local.properties                   Today 09:30   435 bytes   Java p...ies file
      settings.gradle                    Today 09:30    15 bytes   Document
```

Application Modules

- main – All source files (such as .java or .aidl files) and resources for the application module.
- androidTest – Android application test suite
- test – Junit or other similar unit test suites for business logic