PROJECT PLANS

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The purpose of this project is to build an online appointment booking System. It is important for the

user to understand how this application works and knowing the technologies that are used to implement this

project. For a better understanding, all steps are described in detail to give a full overview of the system.

3.1 Android Studio

Android Studio is the official integrated development environment (IDE) for Google's Android operating

system, built on JetBrains’s IntelliJ IDEA software and designed specifically for Android development. It is

available for download on Windows, macOS and Linux based operating systems. It is a replacement for the

Eclipse Android Development Tools (ADT) as the primary IDE for native Android application development.

The following features are provided in the current stable version:

1. Gradle -based build support

2. Android-specific refactoring and quick fixes

3. Pro Guard integration and app-signing capabilities

4. Template-based wizards to create common Android designs and components

5. A rich layout editor that allows users to drag-and-drop UI components, option to preview layouts on

multiple screen configurations

6. Support for building Android Wear apps

7. Built-in support for Google Cloud Platform, enabling integration with Firebase Cloud Messaging (Earlier

'Google Cloud Messaging') and Google App Engine.

8. Android Virtual Device (Emulator) to run and debug apps in the Android studio.

Android Studio supports all the same programming languages of IntelliJ (and CLion) e.g. Java, C++, and

more with extensions, such as Go; and Android Studio 3.0 or later supports Kotlin and "Java 7 language

features and a subset of Java 8 language features that vary by platform version." External projects back port

some Java 9 features. While IntelliJ that Android Studio is built on supports all released Java versions, and

Java 12, it's not clear to what level Android Studio supports Java versions up to Java 12 (the documentation

mentions partial Java 8 support). At least some new language features up to Java 12 are usable in Android.

3.2 Firebase

Real-time database

Firebase provides a real-time database and backend as a service. The service provides application developers

an API that allows application data to be synchronized across clients and stored on Firebase's cloud. The

company provides client libraries that enable integration with Android, IOS, JavaScript, Java, Objective-C,

Swift and Node.js applications. The database is also accessible through a REST API and bindings for several

JavaScript frameworks such as Angular JS, React, Ember.js and Backbone.js. The REST API uses the ServerSent Events protocol, which is an API for creating HTTP connections for receiving push notifications from

a server. Developers using the real-time database can secure their data by using the company's server-sideenforced security rules. Cloud Fire store which is Firebase's next generation of the Real-time Database was

released for beta use.

Firebase Storage:-

Firebase Storage provides secure file uploads and downloads for Firebase apps, regardless of network quality.

The developer can use it to store images, audio, video, or other user generated content.

Firebase Storage is backed by Google Cloud Storage.