



Internship Report

Bachelor of Technology

In

COMPUTER ENGINEERING

By

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19SE02CE044

Under the mentorship of

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Training Report Submitted to
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CERTIFICATE

This is to certify that Mr. Darshak Mangroliya,

Enrollment No. 19SE02CE044 From the Department of

Computer Engineering has successfully completed on

the Internship in android

During June 2022 Session.

Date: _____

Name and Sign of Supervisor

Dean, SOE



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To Whosoever It May Concern

This letter certifies that Mr. DARSHAK KISHORBHAI MANGROLIYA worked at Exomoon Infotech as a Jr. Android Development Executive working from 1/6/2022 to 30/6/2022 and he continued as a Android Development Executive from 1/6/2022 to 30/6/2022.

During his tenure of employment, he carried out several duties. Some of these included:

- He gained basic knowledge of Android and its file structure, packages, Java language.
- He also learns corporate's skills like communication and Email drafting.
- He is a good team member too.
- He was completed all the task which was given to him.

He rendered all his duty with care and made sure that all the tasks assigned to him were completed before the deadline. It is his dedication and devotion towards his work that led him to this post in exomoon infotech.

We hope that Mr. DARSHAK KISHORBHAI MANGROLIYA achieves all his career goals and succeeds in all his missions.

For Exomoon Infotech

**Mr. Vaghani Darshan
(Chief Executive Officer)**

ACKNOWLEDGEMENT

I express my sincere thanks to Dr. Niraj Shah, Dean of School of Engineering, P P Savani University to embed this summer training in Institution's curriculum. It makes all the student to explore their interests and find their strength.

Also I want to thank our coordinator Ms. Bhavisha shah, who provides every feedback and information about how to do the summer project.

my project on the android and learned android in the 4th semester and my android subject professor Dr. Ashish Jani, and Mrs. Bannishikha Banerjee so thanks for given us lot of valuable knowledge about the android.

I am extremely grateful to our Departmental staff members, Lab technicians and Nonteaching staff members for their extreme help throughout the project period. I also thank him once again for his guidance, advices and motivation. Without his continued support and interest, this thesis would not have been the same as presented here.

My sincere appreciation also extends to all my colleagues and others who have provided assistance at various occasions. Their views and tips are useful indeed.

Heartiest Thanks to all our family and friends to help us in our tough time. We would have not done it without their support.

Unfortunately, it is not possible to list all of them in this limited space.

19SE02CE044
Darshak Mangroliya

ABSTRACT

This is my android project on the clothes making company or boutique so in this application any any boutique is show your on various design for the sell on the application.

And the other side customer is buy any dress on the application the is normal and all application is provide this type of service but in this application is work on the some other fundamental.

In this application customer have own design and own cloth then the customer is upload they own design and the own cloth and add on they body measurement is also give or upload in the application.

Then after the cloth is taken by the shop and after making the customer design with the given or uploaded body measurement and delivery to customer they product this is the basic fundamental of this application.

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CHAPTER: - 1 Overview Of Company

1.1 Introduction

We are skilled in developing Web Developing, Android App Developing, IOS App Developing, SEO, Digital marketing based on Facebook, Twitter, Google as well as Custom Enterprise Application development and related IT outsourcing services.

Our team members have the experiences and technical expertise to exceed all of your expectations. We provide our high level IT services with absolute confidence, protecting your important data and your business.

1.2 Organization Chart

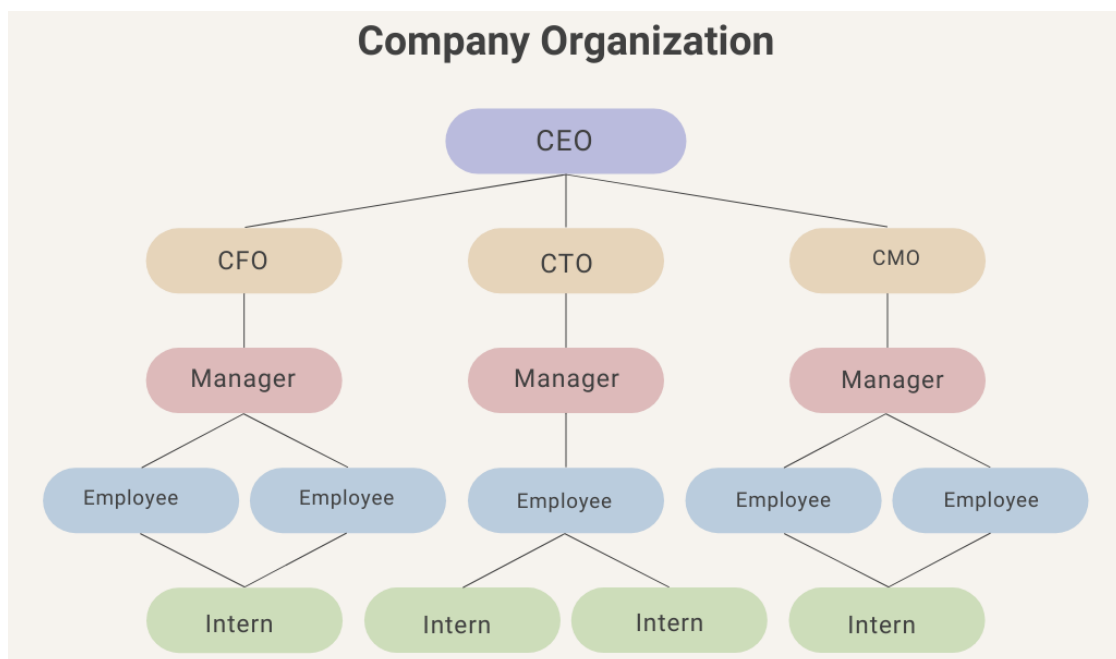


Figure 1.2.1 Organization Chart

Currently, Exomoon infotech does not have a lot of staff members. It has only 25-30 people staff. Because the company is not following any particular organizational chart company is working under managers of “Production” and “Manager” and other team leaders and team members work under those managers. Supervision of the project work is done by the company’s CEO.

1.3 Company Personal Contact Details



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Vip Circle Surat, Gujarat.

1.4 Core Work Area & Related Details

The main objective of the company is to work on clients' projects and fulfill their requirements. The company is currently working on the following areas:

- Web Development
- Mobile Development
- Digital Marketing
- UI / UX Design
- Search Engine Optimization
- Project Training

1.5 Skill Requirements For Employment In The Company

There are different skill requirements for employment in this company, it varies according to the role of the employer. If the candidate could be a frontend or backend developer or could be both, it is depended on the candidate. After getting experience and expertise, the employer could be promoted to higher post like team leader and manager.

1.5.1 Skill Requirement for Web Development

- Keen on solving problems and building solutions
- Capable of general computer skills
- Works well in a team
- Excellent communication skill
- Having a creative mindset
- Good time management skills
- Ability to self-learn and overcome to others
- Logical approach to work
- Curious and eager interest in technology

1.5.2 Skill Requirement for Android App Development

- Proficiency in Java Programming
- Android App Developer should be Technically Sound
- Understanding the Importance of Good Design
- Expertise in Cross-platform Solutions
- Critical Thinker

1.5.3 Skill Requirement for UI/UX Designer

- Wireframing and prototyping skills
- UX writing skills
- Visual communication skills
- Interaction design skills
- Coding skills

1.5.3 Skill Requirement for Digital Marketing

- Writing and Editing Skills
- SEO and SEM Skills
- CRM Skills
- Communication Skills
- Agility and Adaptability
- Email Marketing Skills

CHAPTER: - 2 INTRODUCTION

2.1 Introduction

- The Android operating system is the largest installed base among various mobile platforms across the globe.
- Hundreds of millions of mobile devices are powered by Android in more than 190 countries of the world.
- It conquered around 75% of the global market share by the end of 2020, and this trend is growing bigger every other day.
- The company named Open Handset Alliance developed Android for the first time that is based on the modified version of the Linux kernel and other open-source software.
- In September 2008, the first Android-powered device launched in the market. Android dominates the mobile OS industry because of the long list of features it provides.
- At first, the purpose of Android was thought of as a mobile operating system.
- With the advancement of code libraries and its popularity among developers of the divergent domain, Android becomes an absolute set of software for all devices like tablets, wearables, set-top boxes, smart TVs, notebooks, etc.

2.2 Features

- Android is a powerful open-source operating system that open-source provides immense features and some of these are listed below.



Figure 2.2.1 Features of Android

- Android Open Source Project so we can customize the OS based on our requirements. Android supports different types of connectivity for GSM, CDMA, Wi-Fi, Bluetooth,

etc. for telephonic conversation or data transfer. Using wifi technology we can pair with other devices while playing games or using other applications.

- It contains multiple APIs to support location-tracking services such as GPS. We can manage all data storage related activities by using the file manager.
- It contains a wide range of media supports like AVI, MKV, FLV, MPEG4, etc. to play or record a variety of audio/video.
- It also supports different image formats like JPEG, PNG, GIF, BMP, MP3, etc.
- It supports multimedia hardware control to perform playback or recording using a camera and microphone.

2.3 Android Versions

- Google launched the first version of the Android platform on Nov 5, 2007.
- Since then, Google released a lot of android versions such as Apple Pie, Banana Bread, Cupcake, Donut, Éclair, Froyo, Gingerbread, Jellybeans, Kitkat, Lollipop, marshmallow, Nougat, Oreo, etc. with extra functionalities and new features.

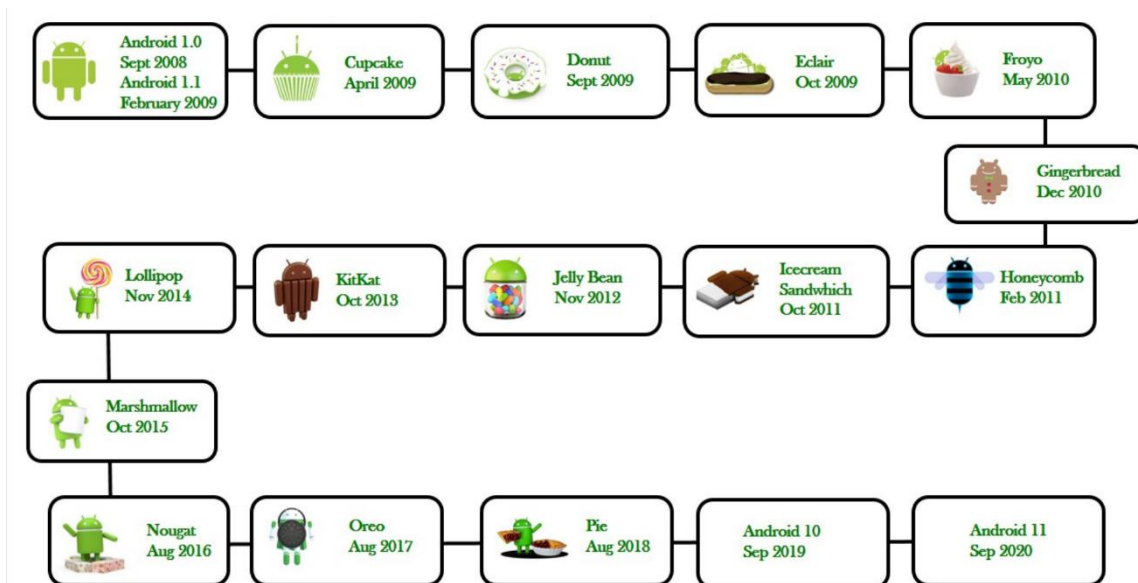


Figure 2.3.1 Versions of Android

- In my case I use android 7 Nougat for testing application.

Code Name	Version	API level	Release date
Apple Pie	Android 1.0	1	September 23, 2008
Banana Bread	Android 1.1	2	February 9, 2009
Cupcake	Android 1.5	3	April 30, 2009
Donut	Android 1.6	4	September 15, 2009
Eclair	Android 2.0 – 2.1	5-7	October 26, 2009
Froyo	Android 2.2 – 2.2.3	8	May 20, 2010
Gingerbread	Android 2.3 – 2.3.4	9-10	December 6, 2010
Honeycomb	Android 3.0.x – 3.2.x	11 – 13	February 22, 2011
Ice Cream Sandwich	Android 4.0 – 4.0.4	14 – 15	October 18, 2011
Jelly Bean	Android 4.1 – 4.1.2	16 – 18	July 9, 2012
Kitkat	Android 4.4 – 4.4.4	19	July 9, 2012
Lollipop	Android 5.0 – 5.1	21 – 22	October 17, 2014
Marshmallow	Android 6.0 – 6.0.1	23	October 5, 2015
Nougat	Android 7.0 – 7.1	24 – 25	August 22, 2016
Oreo	Android 8.0	26	August 21, 2017
Pie	Android 9.0	27	August 6, 2018
Android Q	Android 10.0	29	September 3, 2019
Android 11	Android 11.0	30	September 8, 2020

Figure 2.3.2 Versions of Android with API level and date

2.4 Programming Languages used in Developing Android Applications

1. Java
 2. Kotlin
- Developing the Android Application using Kotlin is preferred by Google, as Kotlin is made an official language for Android Development, which is developed and maintained by JetBrains.
 - Previously before the Java is considered the official language for Android Development. Kotlin is made official for Android Development in Google I/O 2017.

In my project I use java programming language because I have good command on java compare the kotlin.

CHAPTER: - 3 INTRODUCTION OF IDE

3.1 Introduction of IDE

Android Studio provides a unified development environment for creating apps for all Android-powered devices. Android Studio includes code templates with sample code for common app features, extensive testing tools and frameworks, and a flexible build system.

- A flexible Gradle-based build system
- A fast and feature-rich emulator
- A unified environment where you can develop for all Android devices
- Apply Changes to push code and resource changes to your running app without restarting your app
- Code templates and GitHub integration to help you build common app features and import sample code
- Extensive testing tools and frameworks
- Lint tools to catch performance, usability, version compatibility, and other problems
- Built-in support for Google Cloud Platform, making it easy to integrate Google Cloud Messaging and App Engine

3.2 System Requirements

- 64-bit Microsoft® Windows® 8/10.
- x86_64 CPU architecture; 2nd generation Intel Core or newer, or AMD CPU with support for a Windows Hypervisor.
- 8 GB RAM or more.
- 8 GB of available disk space minimum (IDE + Android SDK + Android Emulator)
- 1280 x 800 minimum screen resolution.

Know more for the Requirements and download :- <https://developer.android.com/studio>

3.3 GUI of IDE

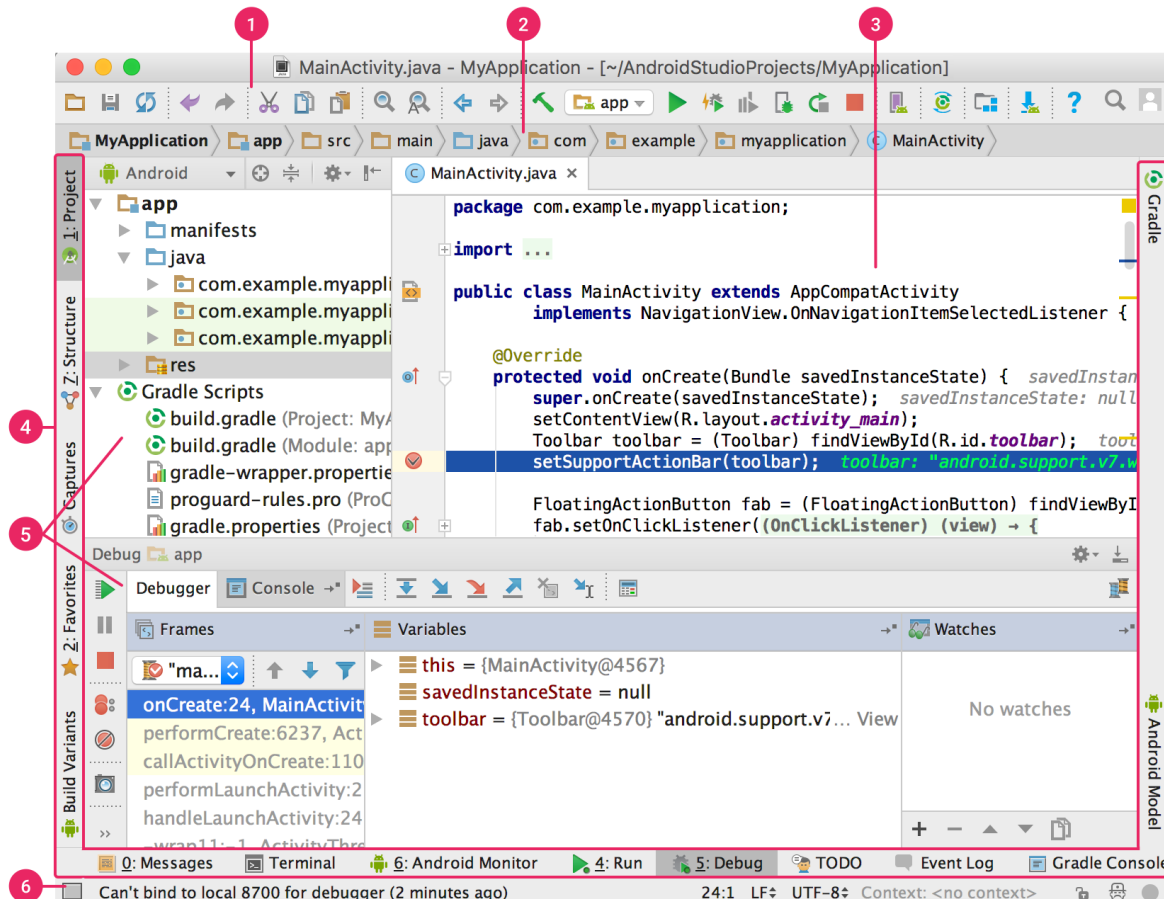


Figure 3.3.1 The Android Studio main window.

1. The **toolbar** lets you carry out a wide range of actions, including running your app and launching Android tools.
2. The **navigation bar** helps you navigate through your project and open files for editing. It provides a more compact view of the structure visible in the Project window.
3. The **editor window** is where you create and modify code. Depending on the current file type, the editor can change. For example, when viewing a layout file, the editor displays the Layout Editor.
4. The **tool window bar** runs around the outside of the IDE window and contains the buttons that allow you to expand or collapse individual tool windows.
5. The **tool windows** give you access to specific tasks like project management, search, version control, and more. You can expand them and collapse them.
6. The **status bar** displays the status of your project and the IDE itself, as well as any warnings or messages.

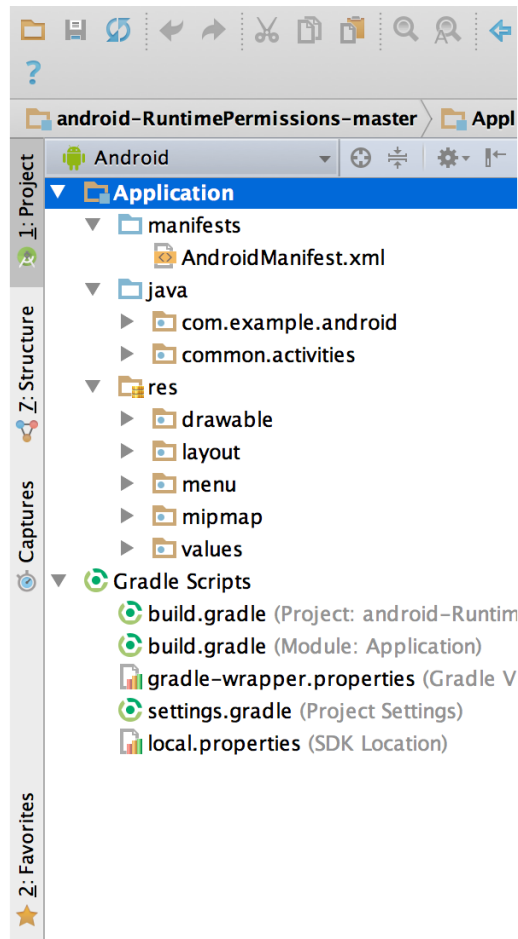


Figure 3.3.2 Project structure

Each project in Android Studio contains one or more modules with source code files and resource files. Types of modules include:

- Android app modules
- Library modules
- Google App Engine modules

By default, Android Studio displays your project files in the Android project view, as shown in figure 1. This view is organized by modules to provide quick access to your project's key source files.

All the build files are visible at the top level under Gradle Scripts and each app module contains the following folders:

- **manifests:** Contains the AndroidManifest.xml file.
- **java:** Contains the Java source code files, including JUnit test code.
- **res:** Contains all non-code resources, such as XML layouts, UI strings, and bitmap images

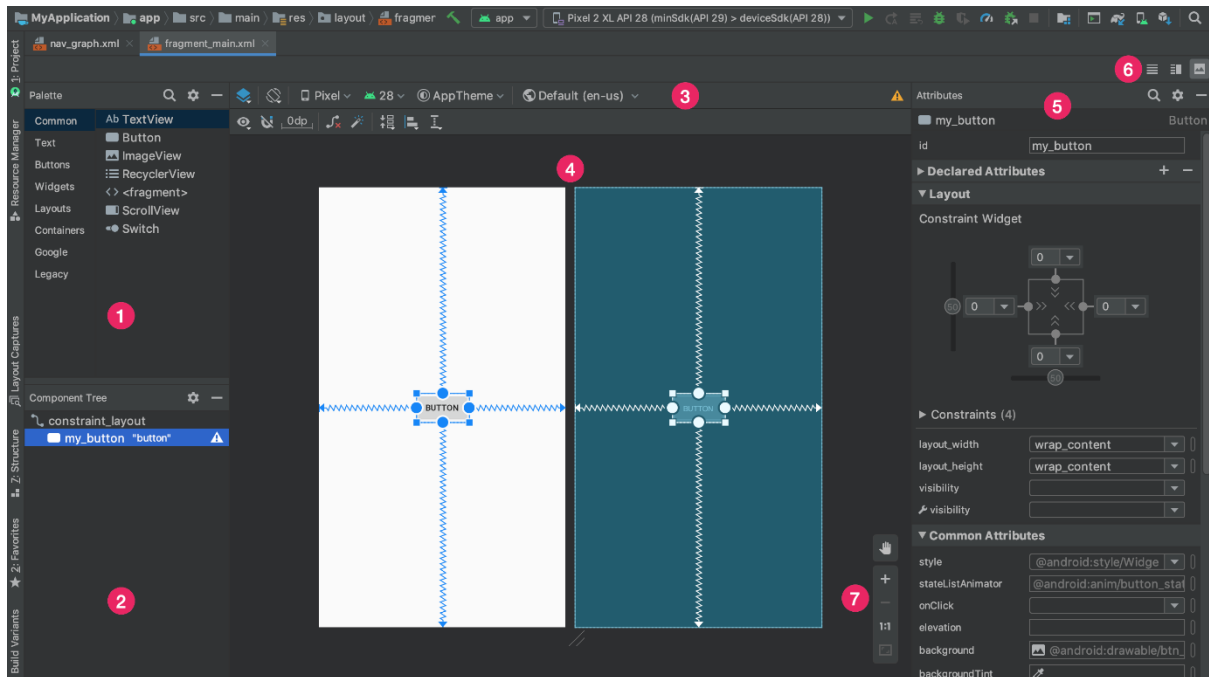


Figure 3.3.3 The Layout Editor

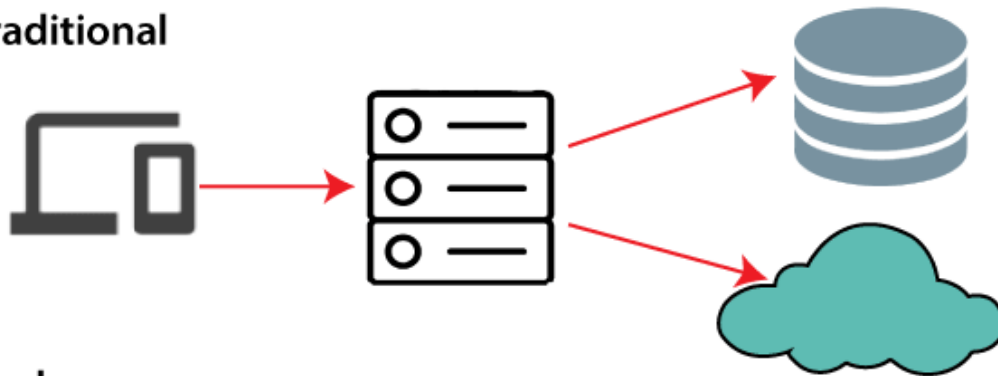
1. **Palette:** Contains various views and view groups that you can drag into your layout.
2. **Component Tree:** Shows the hierarchy of components in your layout.
3. **Toolbar:** Click these buttons to configure your layout appearance in the editor and change layout attributes.
4. **Design editor:** Edit your layout in Design view, Blueprint view, or both.
5. **Attributes:** Controls for the selected view's attributes.
6. **View mode:** View your layout in either Code, Design, or **Split** modes. **Split** mode shows both the **Code** and **Design** windows at the same time.
7. **Zoom and pan controls:** Control the preview size and position within the editor.

CHAPTER: - 4 INTRODUCTION OF FIREBASE

4.1 Introduction of Firebase

- Firebase is a product of Google which helps developers to build, manage, and grow their apps easily.
- It helps developers to build their apps faster and in a more secure way. No programming is required on the firebase side which makes it easy to use its features more efficiently.
- It provides services to android, ios, web, and unity. It provides cloud storage. It uses NoSQL for the database for the storage of data.

Traditional



Firebase

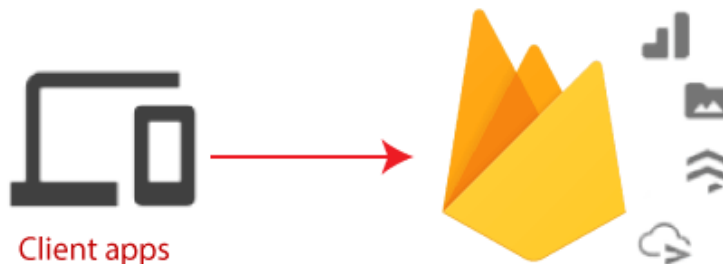


Figure 4.1.1 Introduction of Firebase

- Google Firebase is Google-backed application development software which allows developers to develop Android, IOS, and Web apps. For reporting and fixing app crashes, tracking analytics, creating marketing and product experiments, firebase provides several tools.
- Firebase has three main services, i.e., a real-time database, user authentication, and hosting. We can use these services with the help of the Firebase iOS SDK to create apps without writing any server code.

4.2 Brief History of Firebase

- Firebase initially was an online chat service provider to various websites through API and ran with the name Envolv.
- It got popular as developers used it to exchange application data like a game state in real time across their users more than the chats.
- This resulted in the separation of the Envolv architecture and its chat system.
- The Envolv architecture was further evolved by its founders James Tamplin and Andrew Lee, to what modern day Firebase is in the year 2012.

4.3 Features of Firebase

- Mainly there are 3 categories in which firebase provides its services.

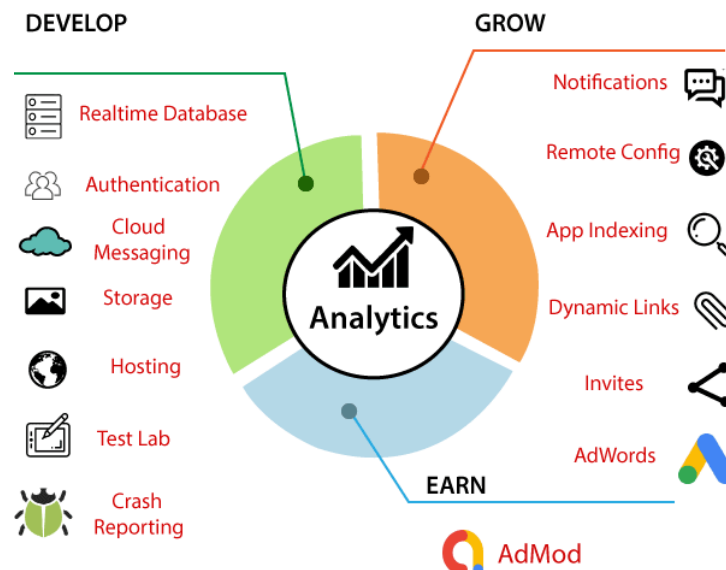


Figure 4.3.1 Categories of Firebase

4.4 Why use Firebase?

- Firebase manages real-time data in the database. So, it easily and quickly exchanges the data to and from the database. Hence, for developing mobile apps such as live streaming, chat messaging, etc., we can use Firebase.
- This feature mainly includes backend services that help developers to build and manage their applications in a better way. Services included under this feature are:

Realtime Database:

- The Firebase Realtime Database is a cloud-based NoSQL database that manages your data at the blazing speed of milliseconds. In simplest term, it can be considered as a big JSON file.



Figure 4.4.1 Realtime Database in Firebase

- Realtime database I am use in our my application for the login.

Cloud Firestore:

- The cloud Firestore is a NoSQL document database that provides services like store, sync, and query through the application on a global scale.
- It stores data in the form of objects also known as Documents. It has a key-value pair and can store all kinds of data like, strings, binary data, and even JSON trees.

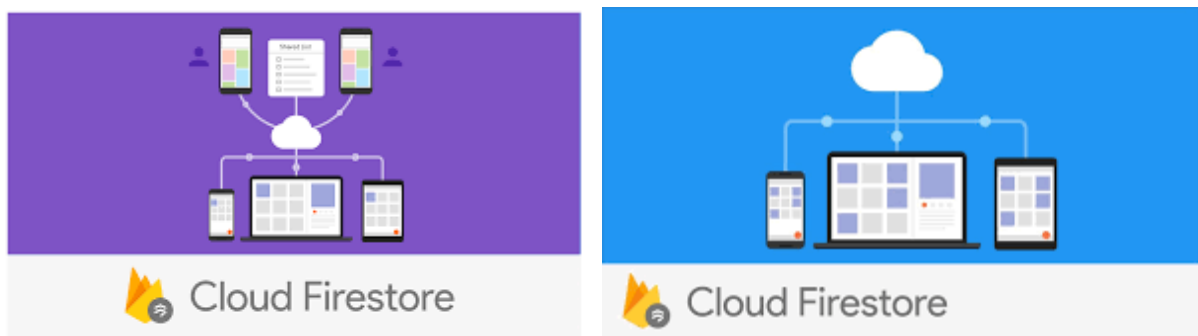


Figure 4.4.2 Cloud Firestore

Authentication:

- Firebase Authentication service provides easy to use UI libraries and SDKs to authenticate users to your app. It reduces the manpower and effort required to develop and maintain the user authentication service.
- It even handles tasks like merging accounts, which if done manually can be hectic.

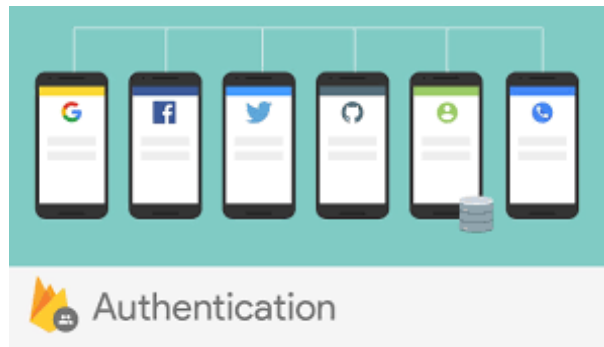


Figure 4.4.3 Authentication

Remote Config:

- The remote configuration service helps in publishing updates to the user immediately. The changes can range from changing components of the UI to changing the behavior of the applications.
- These are often used while publishing seasonal offers and contents to the application that has a limited life.

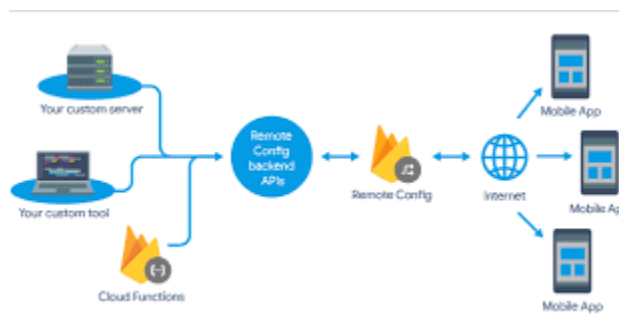


Figure 4.4.4 Remote Config

Hosting:

- Firebase provides hosting of applications with speed and security. It can be used to host Static or Dynamic websites and microservices.
- It has the capability of hosting an application with a single command.



Figure 4.4.5 Hosting

Firestore Cloud Messaging(FCM):

- The FCM service provides a connection between the server and the application end users, which can be used to receive and send messages and notifications.
- These connections are reliable and battery-efficient.

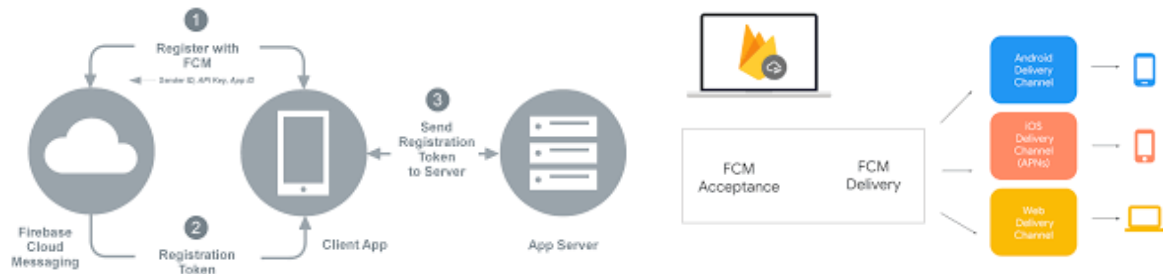


Figure 4.4.6 Firebase Cloud Messaging

4.5 Companies using Firebase

Below are some reputable organizations that rely on a firebase backend for its functioning:

- The New York Times
- Alibaba.com
- Gameloft
- Duolingo
- Trivago
- Venmo

CHAPTER: - 5 DETAILS OF APPLICATION

5.1 Introduction

- This is my android project on the clothes making company or boutique so in this application any boutique is show your on various design for the sell on the application.
- And the other side customer is buy any dress on the application the is normal and all application is provide this type of service but in this application is work on the some other fundamental.
- In this application customer have own design and own cloth then the customer is upload they own design and the own cloth and add on they body measurement is also give or upload in the application.
- Then after the cloth is taken by the shop and after making the customer design with the given or uploaded body measurement and delivery to customer they product this is the basic fundamental of this application.

5.2 Requirement

If you want to install this application so you have full fill to some requirement.

5.2.1 Hardware Requirement

- Minimum space 100mb or more than
- 2 GB RAM
- MediaTek Quad Core (64-bit) and above
- 1.3 GHz

5.2.2 Software Requirement

- Android OS
- Operating System Version 7.0 (Nougat) and above

5.3 Details of System

Make this application in android studio. Android studio version 2020.3.1

5.3.1 System Details

- 4gb ram
- 256gb SSD
- Window 10 pro
- Processor intel i3 2.00 GHz

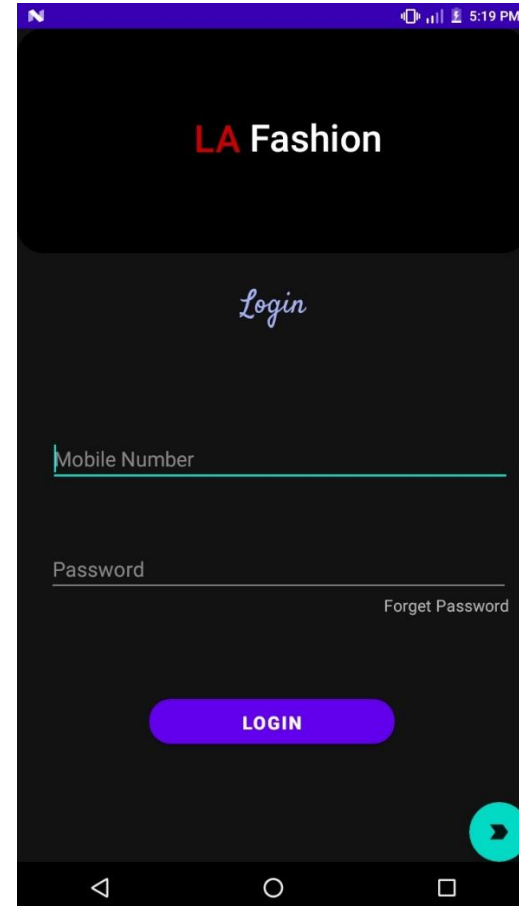
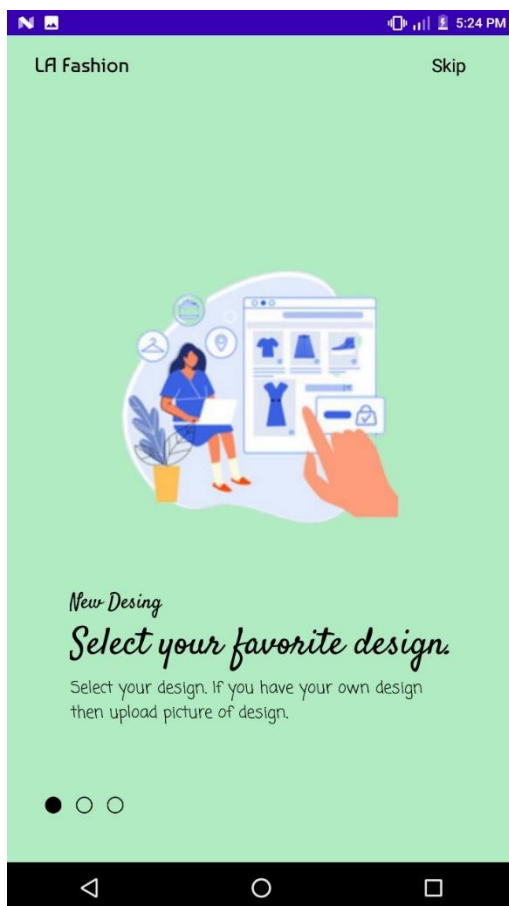
5.3.2 Testing devices information

- Lenovo Tab 7

5.4 Some of screen sort of application UI



Splash Screen



Onboarding Screen

CHAPTER: - 6 CONCLUSION

This application is helpful for the Boutique or shop owner they no need to find the costumer by offline. Also for the costumer also more and more help full because they make own design via online and home delivery and costumer also use they own cloth for making anything.

6.1 Experience Sharing

I had a great time while doing this internship. I learned new concepts as well as improved my communication skills as it was of utmost importance while communicating with the mentor. Even I understood how much professionalism is important. I learned to solve the obstacles which I faced during accomplishing the internship. The training period was very intensive and learning new skills with industry experts is very helpful. I was fortunate to have an extremely patient supervisor, who genuinely took an interest in helping me learn and grow as a Android Developer. I found the direction that I am looking for.

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