
Project Report
Of
Meme Application

Submitted By:
Ashutosh Sharma
1900290149027

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award of the degree of*

MASTER OF COMPUTER APPLICATION



Submitted to

DEPARTMENT OF COMPUTER APPLICATION

KIET GROUP OF INSTITUTIONS. GHAZIABAD

UTTAR PRADESH

(JUNE 2021)

DECLARATION

I hereby declare that the work presented in the Report entitled “MEME APPLICATION” was carried out of me.

I have not submitted in matter embodied in this Report for the award of any other degree or Diploma of any other University or Institute.

I have Given due credit to the original authors/sources for all the words. Ideas, diagrams, graphics, computer programs, experiments, results, that are not my original contribution. I have used quotation marks to identify verbatim sentences and given credited to the original authors/sources.

I affirm that no portion of my work is plagiarized, and the experiments and results reported in the report are not manipulated. In the event of a complaint of plagiarism and the manipulation of experiments and results, I shall be fully Responsible and answerable.

Name: Ashutosh Sharma
Enroll No: 1900290149027

(Candidate Signature)

CERTIFICATE

Certified that , Ashutosh Sharma (Enrollment No.190029014005212), have carried out the project work having “MEME APPLICATION” for Master of Computer Applications from Dr. A.P.J. Abdul Kalam Technical University (AKTU), Lucknow under my supervision.

This project report embodies original work, and studies are carried out by the student himself/herself and the contents of the project report do not form the basis for the award of any other degree to the candidate or to anybody else from this or any other University/Institution.

DATE:

Ashutosh Sharma

1900290149027

This is to certify that the above statement made by candidate is correct to the best of my knowledge.

DATE:

**DEPARTMENT OF COMPUTER APPLICATION
KIET GROUP OF INSTITUTIONS GHAZIABAD**

Signature of Internal Examiner

Signature of External Examiner

**Dr. Ajay Shrivastava
Head, Department of Computer Application
KIET GROUP OF INSTITUTIONS**

ANDROID PLATFORM

Ashutosh Sharma

ABSTRACT

“Meme Application” is based on android application more commonly known simply as a **meme** is an idea, behaviour, or style (meme) that is spread via the Internet, often through Social media platform and especially for humorous purposes. What is considered a meme may vary across different communities on the Internet and is subject to change over time. Traditionally, they were a concept or catchphrase, but the concept has since become broader and more multi-faceted, evolving to include more elaborate structures such as Challenges, GIF, videos, and Viral .

Internet memes are considered a part of Internet Culture They can spread from person to person via social networks,, blogs, direct email, or news sources. Instant communication on the Internet facilitates word of mouth, transmission, resulting in fads and sensations that tend to grow rapidly. An example of such a fad is that of planking (lying down in public places); posting a photo of someone planking online brings attention to the fad and allows it to reach many people in little time. The Internet also facilitates the rapid evolution of memes.

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CHAPTER 1

INTRODUCTION

1.1 Project Details

“Meme Application” is based on android application by using Java Language and platform Android Studio it is more commonly known simply as a **meme** is an idea, behaviour, or style (meme) that is spread via the Internet, often through Social Media platform and especially for humorous purposes. What is considered a meme may vary across different communities on the Internet and is subject to change over time. Traditionally, they were a concept or catchphrase, but the concept has since become broader and more multi-faceted, evolving to include more elaborate structures such as Challenges, GIF, videos, and Viral.

1.2 Purpose

Internet memes are considered a part of Internet Culture They can spread from person to person via social networks,, blogs, direct email, or news sources. Instant communication on the Internet facilitates word of mouth, transmission, resulting in fads and sensations that tend to grow rapidly. An example of such a fad is that of planking (lying down in public places); posting a photo of someone planking online brings attention to the fad and allows it to ‘reach many people in little time. The Internet also facilitates the rapid evolution of memes.

Effective - An Internet meme may stay the same or may evolve over time, by chance or through commentary, imitations, parody, or by incorporating news accounts about itself. Internet memes spread online through influences such as popular culture.

Android is a mobile operating system . based on a modified version of the Linux Kernel and other opensource software, designed primarily for touchscreen mobile devices such as smartphones and tablets.

About 70 percent of Android smartphones run Google's ecosystem; some with vendor-customized user interface and software suite, such as *TouchWiz* and later *One UI* by Samsung, *and* Competing Android ecosystems include FireOS (developed by Amazon) or However the "Android" name and logo are trademarks of Google which impose standards to restrict "uncertified" devices outside their ecosystem to use Android brand.

Scope:

Memes and social media are perfect for each other.

Both concepts are about connecting with people online. While social media is a platform for communication, memes are a way of expressing a culturally-relevant idea. A meme is an image or video that represents the thoughts and feelings of a specific audience.

Most memes are captioned photos intended to elicit humour. However, there are many viral video memes too.

Memes are a worldwide social phenomenon, and an increasingly important aspect of viral marketing and social engagement. Memes often relate to existing cultures or subcultures. Often, memes spread rapidly through social media, email, and forum boards.

Though memes are popular in the consumer world, they're also powerful for companies too. Companies use memes to:

- Share information in a fun and memorable format.
- Making Innovative memes
- Humanize your brand through a demonstration of personality.
- Funny and humours
- Showcase complicated concepts like company culture uniquely.
- Using stickers
- Obtain higher engagement with their audience.

CHAPTER 2

Android Studio

2.1 About:

Android Studio is the official Integrated Development Environment (IDE) for Google's Android Operating System, built on JetBrains software and designed specifically for Android Development. It is available for download on Windows, macOS and Linux based operating systems or as a subscription-based service in 2020. It is a replacement for the Eclipse Android Development Tools (E-ADT) as the primary IDE for native Android application development. Android Studio was announced on May 16, 2013 at the Google I/O conference. It was in early access preview stage starting from version 0.1 in May 2013, then entered beta stage starting from version 0.8 which was released in June 2014. The first stable build was released in December 2014, starting from version 1.0.

On May 7, 2019, Kotlin replaced Java as Google's preferred language for Android app development. Java is still supported, as is C++.

2.2 Feature:

A specific feature of the Android Studio is an absence of the possibility to switch autosave feature off.

The following features are provided in the current stable version:

- Gradle-based build support
- Android-specific and quick fixes
- Lint tools to catch performance, usability, version compatibility and other problems
- Pro Guard integration and app-signing capabilities

-
- Template-based wizards to create common Android designs and components
 - A rich layout editor that allows users to drag-and-drop UI components, option to preview on multiple screen configurations
 - Support for building Android Wear apps
 - Built-in support for Google Cloud Platform, enabling integration with Firebase Cloud Messaging (Earlier 'Google Cloud Messaging') and Google App Engine
 - Android Virtual Device (Emulator) to run and debug apps in the Android studio.

Android Studio supports all the same programming languages of [IntelliJ](#) e.g. java ,C++ and more with extensions, such and Android Studio 3.0 or later supports Kotlin and "all Java 7 language features and a subset of Java 8 language features that vary by platform version." External projects backport some Java 9 features. While IntelliJ states that Android Studio 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.

Once an app has been compiled with Android Studio, it can be published on the Google Play Store. The application has to be in line with the Google Play Store developer content policy.

The Android Emulator has additional requirements beyond the basic system requirements for Android Studio, which are described below:

- SDK Tools 26.1.1 or higher;
- 64-bit processor;
- Windows: CPU with UG (unrestricted guest) support;
- Intel Hardware Accelerated Execution Manager (**HAXM**) 6.2.1 or later (HAXM 7.2.0 or later recommended).

The use of hardware acceleration has additional requirements on Windows and Linux:

-
- Intel processor on Windows or Linux: Intel processor with support for Intel VT-x, Intel EM64T (Intel 64), and Execute Disable (XD) Bit functionality;
 - AMD processor on Linux: AMD processor with support for AMD Virtualization (AMD-V) and [Supplemental Streaming SIMD Extensions 3 \(SSSE3\)](#);
 - AMD processor on Windows: Android Studio 3.2 or higher and Windows 10 April 2018 release or higher for [Windows Hypervisor Platform \(WHPX\)](#) functionality.

To work with Android 8.1 (API level 27) and higher system images, an attached webcam must have the capability to capture 720p frames.

Android is a mobile operating system based on a modified version of the Linux Kernel and other open source software, designed primarily for touch screen mobile devices such as smartphones and tablets. Android is developed by a consortium of developers known as the Open Handset Alliance and commercially sponsored by Google. It was unveiled in November 2007, with the first commercial Android device, the HTC Dream, being launched in September 2008.

It is free and open source Software; its source code is known as Android Open Source Project (AOSP), which is primarily licensed under the Apache license. However most Android devices ship with additional pre-installed, most notably Google Mobile Service (GMS)^[13] which includes core apps such as Google Chrome, the digital distribution platform Google Play and associated Google Play Services development platform.

About 70 percent of Android smartphones run Google's ecosystem; some with vendor-customized user interface and software suite, such as *TouchWiz* and later *One UI* by Samsung, and *HTC Sense*. Competing Android ecosystems and include Fire-OS (developed by Amazon) or . However the "Android" name and logo are trademarks of Google which impose standards to restrict "uncertified" devices outside their ecosystem to use Android branding.

The source code has been used to develop variants of Android on a range of other electronics, such as game consoles, digital cameras, portable media

players, PCs and others, each with a specialized user interface. Some well known derivatives include Android Tv for televisions and Wear OS for wearables, both developed by Google. Software packages on Android, which use the APK format, are generally distributed through proprietary Application stores like Google play Stores, Samsung galaxy stores App Gallery,, and Get Jar, or open source platforms like or F-droid.

Android has been the best-selling OS worldwide on smartphones since 2011 and on tablets since 2013. As of May 2021, it has over three billion monthly active services, the largest of any operating system, and as of January 2021, the Google Play Store features over 3 million apps. The current stable version is Android 11 released on September 8, 2020.

CHAPTER 3

JAVA

Java is a high-level, class-based, object-oriented programming language that is designed to have as few implementation dependencies as possible. It is a general -purpose programming language intended to let application developers *write once, run anywhere* (WORA),^[16] meaning that compiled Java code can run on all platforms that support Java without the need for recompilation. Java applications are typically compiled to byte code that can run on any Java Virtual Machine (JVM) regardless of the underlying computer Architecture. The syntax of java is similar to C and C++, but has fewer Low Level facilities than either of them. The Java runtime provides dynamic capabilities (such as reflection and runtime code modification) that are typically not available in traditional compiled languages. As of 2019, Java was one of the most popular programming language In use according to Git Hub, particularly for client-server Web Applications, with a reported 9 million developers.

Java was originally developed by James Gosling at Sun Microsystems (Which has been acquired by Oracle) and released in 1995 as a core component of Sun Microsystems' Java Platform. The original and reference Implementations Java compilers, virtual machines, and class libraries were originally released by Sun under proprietary .As of May 2007, in compliance with the specifications of the Java Community process, Sun had relicensed most of its Java technologies under the license. Oracle offers its own Hot Spot Java Virtual Machine, however the official reference implementation is the OpenJDK JVM which is free open source software and used by most developers and is the default JVM for almost all Linux distributions.

As of March 2021, the latest version is Java 16, with Java 11, a currently supported Long term Service (LTS) version, released on September 25, 2018. Oracle released the last zero-cost public update for the legacy version Java 8 LTS in January 2019 for commercial use, although it will otherwise still support Java 8 with public updates for personal use indefinitely. Other vendors have begun to offer Zero cost builds of OpenJDK 8 and 11 that are still receiving security and other upgrades.

Oracle (and others) highly recommend uninstalling outdated versions of Java because of serious risks due to unresolved security issues.^[21] Since Java 9, 10, 12, 13, 14, and 15 are no longer supported, Oracle advises its users to immediately transition to the latest version (currently Java 16) or an LTS release.

3.2 Java Versions

The Java Language has undergone several changes since JDK 1.0 as well as numerous additions of classes and packages to the standard library. Since J2SE 1.4, the evolution of the Java language has been governed by the Java Community Process (JCP), which uses *Java Specification Requests* (JSRs) to propose and specify additions and changes to the Java Platform. The language is specified by the *Java Language Specification* (JLS); changes to the JLS are managed under JSR 901.

In addition to the language changes, other changes have been made to the Java Class Library over the years, which has grown from a few hundred classes in JDK 1.0 to over three thousand in J2SE 5. Entire new APIs, such as Swing and java2D, have been introduced, and many of the original JDK 1.0 classes and methods have been deprecated. Some programs allow conversion of Java programs from one version of the java platform to an older one (for example Java 5.0 backported to 1.4) (see java backporting tool).

Regarding Oracle Java SE Support Roadmap,^[1] version 11 is the currently supported Long Term Support (LTS) version, together with Java 8 LTS, where Oracle Customers will receive Oracle Premier Support. Java 8 LTS last free software public update for commercial use was released by Oracle in January 2019, while Oracle continues to release no-cost public Java 8 updates for development^[1] and personal use indefinitely.^[2] Java 10 a previously supported rapid release version, had its support ended in September 2018 the same date support for Java 11 began. Java 7 is no longer publicly supported. For Java 11, long-term support will not be provided by Oracle for the public; instead, the broader OpenJDK community, as AdoptOpenJdk or others, is expected to perform the work.^[3]

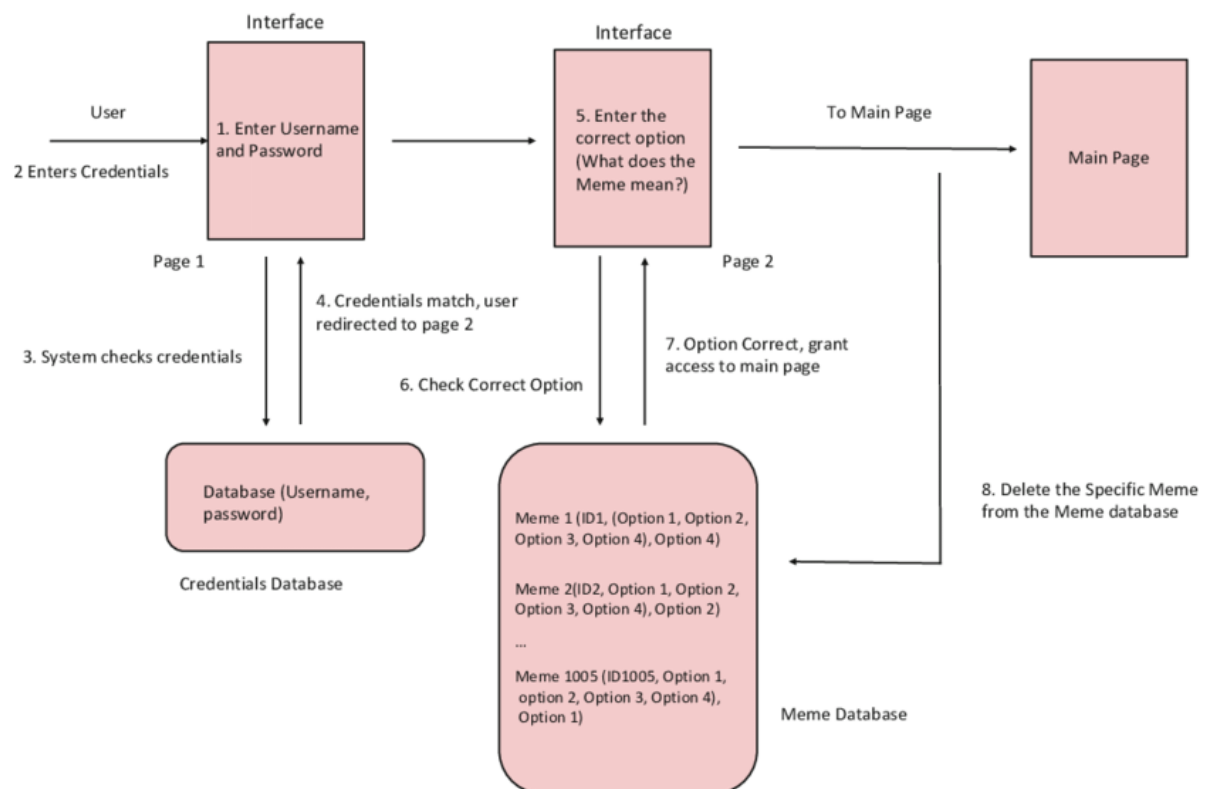
Java 16 General Availability occurred on March 16, 2021, with Java 17 now also Rampdown Phase Two, and Java 18 is in development.

Version	Release date	End of Free Public Updates [1][6][7][8]	Extended Support Until
JDK Beta	1995	?	?
JDK 1.0	January 1996	?	?
JDK 1.1	February 1997	?	?
J2SE 1.2	December 1998	?	?
J2SE 1.3	May 2000	?	?
J2SE 1.4	February 2002	October 2008	February 2013
J2SE 5.0	September 2004	November 2009	April 2015
Java SE 6	December 2006	April 2013	December 2018 December 2026, paid support for Azul Platform Core [9]
Java SE 7	July 2011	April 2015	July 2022
Java SE 8 (LTS)	March 2014	January 2019 for Oracle (commercial) December 2030 for Oracle (non-commercial) December 2030 for Azul At least May 2026 for AdoptOpenJDK At least May 2026 for Amazon Corretto	December 2030
Java SE 9	September 2017	March 2018 for OpenJDK	N/A

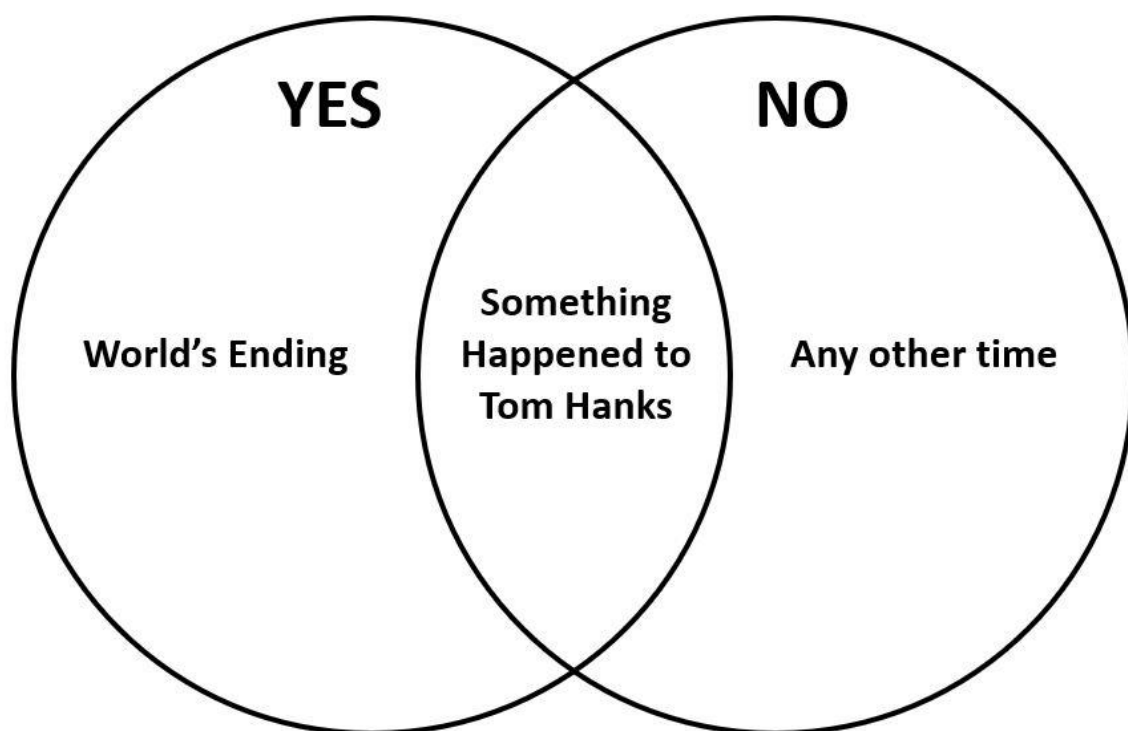
Java SE 10	March 2018	September 2018 for OpenJDK	N/A
Java SE 11 (LTS)	September 2018	September 2026 for Azul At least October 2024 for AdoptOpenJDK At least September 2027 for Amazon Corretto	September 2026, or September 2028 for Azul ^[9]
Java SE 12	March 2019	September 2019 for OpenJDK	N/A
Java SE 13	September 2019	March 2020 for OpenJDK	N/A
Java SE 14	March 2020	September 2020 for OpenJDK	N/A
Java SE 15	September 2020	March 2021 for OpenJDK, March 2023 for Azul ^[9]	N/A
Java SE 16	March 2021	September 2021 for OpenJDK	N/A
Java SE 17 (LTS)	September 2021	September 2030 for Zulu	TBA
Java SE 18	March 2022	September 2022 for OpenJDK	N/A

Version	Date
JDK Beta	1995
JDK1.0	January 23, 1996 ^[39]
JDK 1.1	February 19, 1997
J2SE 1.2	December 8, 1998
J2SE 1.3	May 8, 2000
J2SE 1.4	February 6, 2002
J2SE 5.0	September 30, 2004
Java SE 6	December 11, 2006
Java SE 7	July 28, 2011
Java SE 8	March 18, 2014
Java SE 9	September 21, 2017
Java SE 10	March 20, 2018
Java SE 11	September 25, 2018 ^[40]
Java SE 12	March 19, 2019
Java SE 13	September 17, 2019
Java SE 14	March 17, 2020
Java SE 15	September 15, 2020 ^[41]

Java SE 16	March 16, 2021
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4.1 Meme Generator Diagram



4.2 Performance

The application response time shall be adequate and sufficient enough, that's why the time required for this application to response to its user's actions has to been managed and controlled. But in order to maintain the performance of the application, the user has to follow the required steps to get the desired result.

4.3. Portability Requirements:

The application should be compatible with different version of Android, so if the version of Android is upgraded, the application should be upgraded as well.

4.3. Delivery Requirements:

I agreed with my client, to deliver the mobile based application by the beginning of December, and exactly on December 4th, 2015.

5.1. Implementation Requirements:

I used Java as a programming language for the implementation of the project

5.2. Standards Requirements:

The application shall follow the AUI standard form.

5.3. Ethical Requirements:

This application should protect the confidentiality of the user's personal information and any personal data stored on his\her mobile phone.

5.4. Legislative Requirements:

5.5. Security:

The security signature and certificate of the application is required as in any mobile application.

5.6. Privacy:

The application shall protect the user's data and make sure to keep it confidential. The device can be protected by a pin code or finger prints in order to ensure the privacy.

6. Attributes of the Software:

6.1. Maintainability:

The application shall respond to any change on the requirements.

6.2. Adaptability:

The application shall be compatible to any Android OS version.

6.3. Availability:

The application shall be available on the store whenever users want to download it.

6.4. Flexibility:

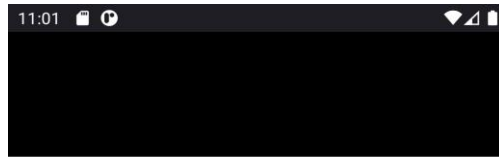
The architecture shall be flexible to any change of the requirements.

7.1 Implementation Results

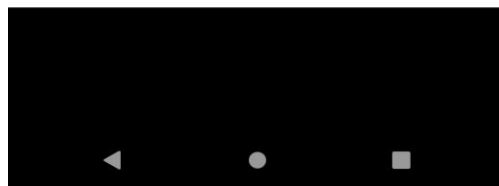
The implementation results shows the end result of the project. It is an Android based device application that fulfills the requirements set by the client. These are some snapshots of the application with their description.



7.2. Meme Output From Emulator



HEHEHE



8. Software Components and Technology used:

The software components and technology used in this project are:

8.1. Technology enablers:

- ▣ Java as an object oriented programming language.
- ▣ Android SDK(Software development Kit)
- Android Studio.

8.2. Operating Systems:

- Windows
- Android OS

8.3. Hardware Components:

- Personal Computers
- Android based mobile phone with high resolution.

9. Testing:

Testing is an important step that helps to detect errors. Testing is a process of finding faults that might occur during the implementation phase. It is also a way to test if the product fulfills the requirements and to check the components functionalities. There exists many ways of testing where each one of them has a distinct requirement, but the only testing that we made is the acceptance testing.

I have tested the application, Android based device, with the supervisor using acceptance testing strategy.

10. STEEPLE Analysis:

The STEEPLE Analysis includes seven external factors that can affect or be affected by the industry. Actually, before moving to the step of the implementation, we must know the risks and challenges that we might face later on. In other words, we must analyze the possible chances and threats to the industry as a whole.

10.1.Economic: Since people will be using a such technology, so instead of wasting time typing on their keyboards or writing on papers, many actions might be performed in few minutes which will contribute on the growth of the economy.

10.2. Political: No political trend.

10.3. Technological: This application helps to Create Funny , Innovative memes.

10.4. Legal: No legal trend.

10.5. Ethical: This application should protect the confidentiality of the user's personal information and any personal data stored on the mobile phone.

11. Conclusion:

This capstone project is the biggest and most important project that I worked on during our entire academic career. First, it is not only the final step to getting my bachelor degree, but also it is a great self-capacity-check as I stepped away from what I am used to work with to a new development field. During this period, which was less than 4 months, I got to work on a project that helped me improve my capacities in the computer science field especially that it is a different and new platform using Android. It also added a lot to the knowledge that I have accumulated throughout my academic journey at KIET group of institutions, it widened up my experience in dealing with different platforms, and enhanced my aptitudes to work with similar platforms in real life application which is going to work in our favor in future internships or jobs. Putting the technical part aside, this project had a positive impact on some of my personal traits. It upgraded our punctuality because I had to manage my time to provide the best work I can do in no later time than the deadline by sending our weekly dairies to my supervisor It also helped me develop my team spirit and improved my attitudes regarding listening carefully to others' opinions and respecting them as I have collaborated with each other which smoothened out the flow of this project. Moreover, having to deal with constant pressure, I learnt to be more efficient and confident with what I am

doing, and I managed to prevent stress from getting over me and pushing me to lose control over myself. To conclude, this project was a great experience in my academic career that pushed me on so many levels, technically, professionally, and personally. I am quite satisfied with the outcome that I ended up with, but none of it could have been possible without the help of my supervisor, Dr. Vipin sir, whom I would love to thank extremely.

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