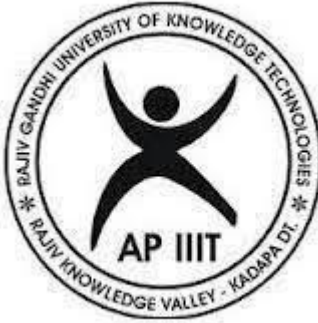# "MIRROR NEWS"

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

RGUKT

Rajiv Gandhi University of Knowledge Technologies
R.K.VALLEY

Submitted by

YAPARALA NAGENDRA   -- R170391

**Under the Esteemed guidance
of Mr. Satyanandaram N
RGUKT RK Valley.**

DECLARATION

We hereby declare that the report of the B.Tech Major Project Work entitled

"**MIRROR NEWS**" which is being submitted to Rajiv Gandhi

University of Knowledge Technologies, RK Valley, in partial fulfillment of the requirements for the award of Degree of Bachelor of Technology in Computer Science and Engineering, is a bonafide report of the work carried out by us. The material contained in this report has not been submitted to any university or institution for award of any degree.

YAPARALA NAGENDRA – R170391

Dept. Of Computer Science and Engineering.

RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES
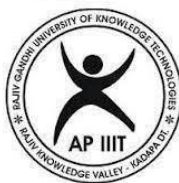
RGUKT

(A.P.Government Act 18 of 2008)

RGUKT, RK VALLEY

Department of Computer Science and Engineering

CERTIFICATE FOR PROJECT COMPLETION

This is certify that the project entitled "**MIRROR NEWS**" submitted by **YAPARALA NAGENDRA—R170391**,under our guidance and supervision for the partial fulfillment for the degree Bachelor of Technology in Computer Science and Engineering during the academic semester -2 2021-2022 at RGUKT, RK VALLEY. To the best of my knowledge, the results embodied in this dissertation work have not been submitted to any University or Institute for the award of any degree or diploma.

Project Internal Guide   **Head of the Department**

Mr. Satyanandaram N   Mr. Harinadha P

Assistant Professor   HOD Of CSE

RGUKT, RK Valley   RGUKT, RK Valley

Abstract

Mirror News is an android based application that will provide news to the users. Mirror News Android Application contains various Categories like Sports,Technology General News,Science,Business,Health,Entertainment etc. Each Category will contain Many News,User can view any Particular news Completely.

User Friendly GUI will help user choose the news category and view the news without any problem in a simple and easy Manner.

As The Android Plays a vital role Android Os,So this Application will Reach Many Users.

Index

Mirror News SRS Document

Introduction:

This document has the requirements of Knowing updated news.The Mirror News is used to provide the updated news to the user.

Purpose

The purpose of this document is to gather the requirements that are needed for implementing the Mirror News. It also focuses on various key features, the product, product vision and scope,product overview.The main purpose of Mirror News is to provide a platform to the user for updated news.

Intended Audience:

The intended audience will be the users who can access the platform to get recently updated news with a different categories.

Product Vision:

The product vision is to providing updated news, which is user friendly and easily accessible. This Mirror News helps to provide the updated news for the people,who are willing to know the news.

Technologies:
  - ➢ Android Studio
  - ➢ XML
  - ➢ JAVA

Android Studio

Android Studio is the IDE to Build Android Apps. It is integrated Development Kit For the android Development. Android Support Both Java and Kotlin to Write Code. Google Announces that Android Development Will be Kotlin-first. **Android Studio** is the official **IDE (Integrated Development Environment)** for Android app development and it is based on **JetBrains' IntelliJ IDEA** software. Android Studio provides many excellent features that enhance productivity when building Android apps, such as:

- A blended environment where one can develop for all Android devices
- Apply Changes to push code and resource changes to the running app without restarting the app
- A flexible Gradle-based build system
- A fast and feature-rich emulator
- GitHub and Code template integration to assist you to develop common app features and import sample code
- Extensive testing tools and frameworks
- C++ and NDK support
- Built-in support for Google Cloud Platform, making it easy to integrate Google Cloud Messaging and App Engine, and many more.

System Requirements

- Microsoft Windows 7/8/10 (32-bit or 64-bit)
- 4 GB RAM minimum, 8 GB RAM recommended (plus 1 GB for the Android Emulator)
- 2 GB of available disk space minimum, 4 GB recommended (500 MB for IDE plus 1.5 GB for Android SDK and emulator system image)
- 1280 x 800 minimum screen resolution

Installation Guide

Step 1: Head over to **this link** to get the Android Studio executable or zip file.

Step 2: Click on the **Download Android Studio Button**

Android Studio provides the fastest tools for building apps on every type of Android device.

DOWNLOAD ANDROID STUDIO

4.1.3 for Windows 64-bit (896 MiB)

Click on the "I have read and agree with the above terms and conditions" checkbox followed by the download button.

Click on the Save file button in the appeared prompt box and the file will start downloading.

Step 3: After the downloading has finished, open the file from downloads and run it. It will prompt the following dialog box.

Click on next. In the next prompt, it'll ask for a path for installation. Choose a path and hit next.

Step 4: It will start the installation, and once it is completed, it will be like the image shown below

Step 5: Once "**Finish**" is clicked, it will ask whether the previous settings need to be imported [if the android studio had been installed earlier], or not. It is better to choose the 'Don't import Settings option'.

Click the **OK** button.

Step 6: This will start the Android Studio.

Meanwhile, it will be finding the available SDK components
Step 7: After it has found the SDK components, it will redirect to the Welcome dialog box.

Choose Standard and click on Next. Now choose the theme, whether the **Light** theme or the **Dark** one. The light one is called the **IntelliJ** theme whereas the dark theme is called **Darcula**. Choose as required.
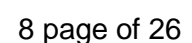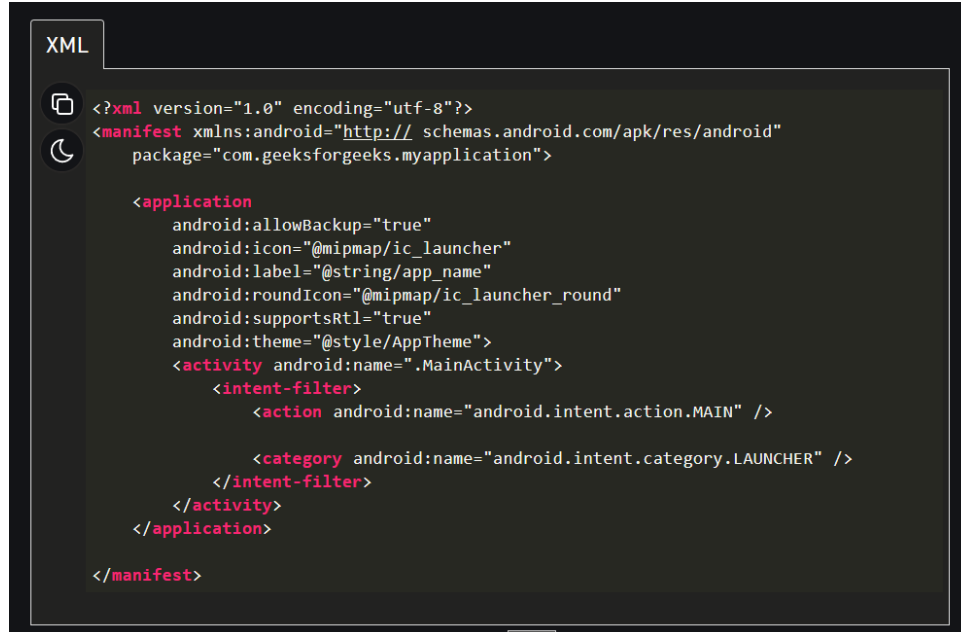
<u>Android Project folder Structure</u>

The android project contains different types of app modules, source code files, and resource files. We will explore all the folders and files in the android app.

1. Manifests Folder
2. Java Folder
3. res (Resources) Folder
   - o Drawable Folder
   - o Layout Folder
   - o Mipmap Folder
   - o Values Folder
4. Gradle Scripts

Manifests Folder

Manifests folder contains **AndroidManifest.xml** for creating our android application. This file contains information about our application such as the Android version, metadata, states package for Java file, and other application components. It acts as an intermediator between android OS and our application.

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http:// schemas.android.com/apk/res/android"
    package="com.geeksforgeeks.myapplication">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

Java folder

The Java folder contains all the java and Kotlin source code (.java) files that we create during the app development, including other Test files. If we create any new project using Java, by default the class file MainActivity.java file will create automatically under the package name

```java
package com.geeksforgeeks.myapplication;

import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}
```

Resource (res) folder

The resource folder is the most important folder because it contains all the non-code sources like images, XML layouts, and UI strings for our android application.

res/drawable folder

It contains the different types of images used for the development of the application. We need to add all the images in a drawable folder for the application development.

res/layout folder

The layout folder contains all XML layout files which we used to define the user interface of our application. It contains the **activity_main.xml** file.

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http:// schemas.android.com/apk/res/android"
    xmlns:app="http:// schemas.android.com/apk/res-auto"
    xmlns:tools="http:// schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

res/mipmap folder

This folder contains launcher.xml files to define icons that are used to show on the home screen. It contains different density types of icons depending upon the size of the device such as hdpi, mdpi, xhdpi.

res/values folder

Values folder contains a number of XML files like strings, dimensions, colors, and style definitions. One of the most important files is the **strings.xml** file which contains the resources.

```xml
<resources>
    <string name="app_name">NameOfTheApplication</string>
    <string name="checked">Checked</string>
    <string name="unchecked">Unchecked</string>
</resources>
```
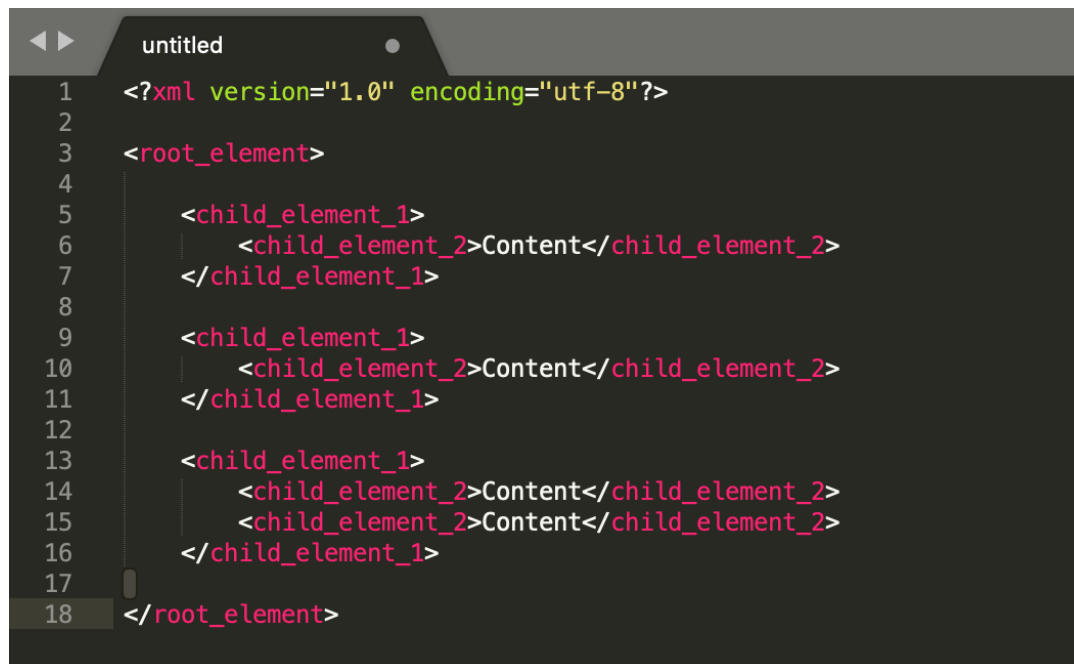
Gradle Scripts folder

Gradle means automated build system and it contains a number of files that are used to define a build configuration that can be applied to all modules in our application. In build.gradle (Project) there are buildscripts and in build.gradle (Module) plugins and implementations are used to build configurations that can be applied to all our application modules

XML:

XML stands for **E**xtensible **M**arkup **L**anguage. It is a text-based markup language

```xml
<?xml version="1.0" encoding="utf-8"?>

<root_element>

    <child_element_1>
        <child_element_2>Content</child_element_2>
    </child_element_1>

    <child_element_1>
        <child_element_2>Content</child_element_2>
    </child_element_1>

    <child_element_1>
        <child_element_2>Content</child_element_2>
        <child_element_2>Content</child_element_2>
    </child_element_1>

</root_element>
```

Java:

Java is a high-level, class-based, object-oriented programming language that is designed to have as few implementation dependencies as possible.

What is an API?

APIs are mechanisms that enable two software components to communicate with each other using a set of definitions and protocols. For example, the weather bureau's software system contains daily weather data. The weather app on your phone "talks" to this system via APIs and shows you daily weather updates on your phone.
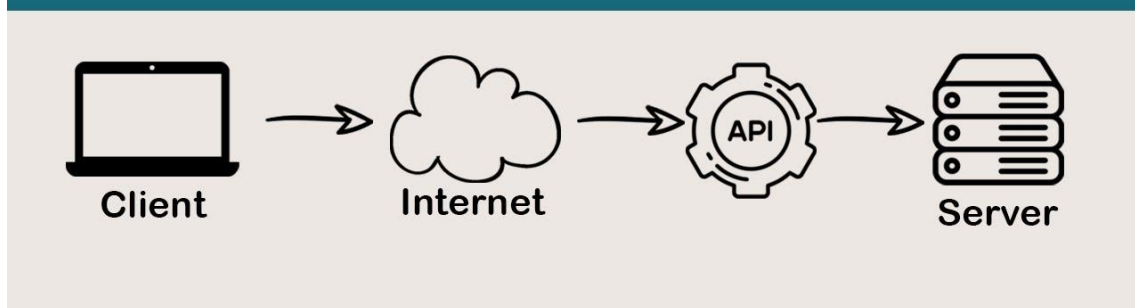

How do APIs work?

API architecture is usually explained in terms of client and server. The application sending the request is called the client, and the application sending the response is called the server. So in the weather example, the bureau's weather database is the server, and the mobile app is the client.

HOW AN API WORKS
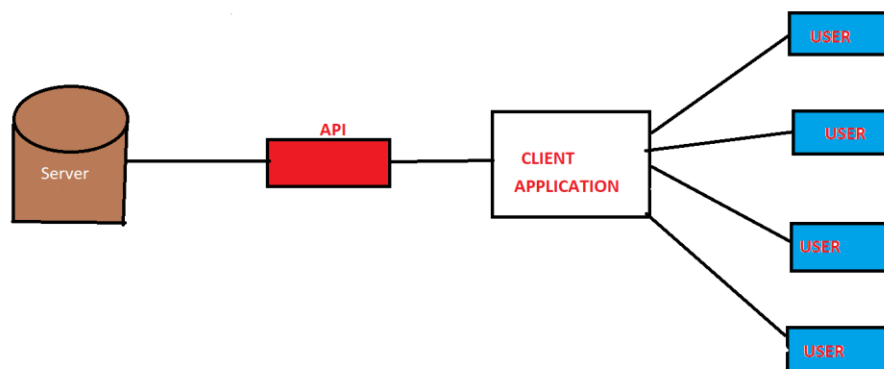
CLIENT
APPLICATION

API
REQUESTS

SERVER/
DATABASE

API
RESPONSE
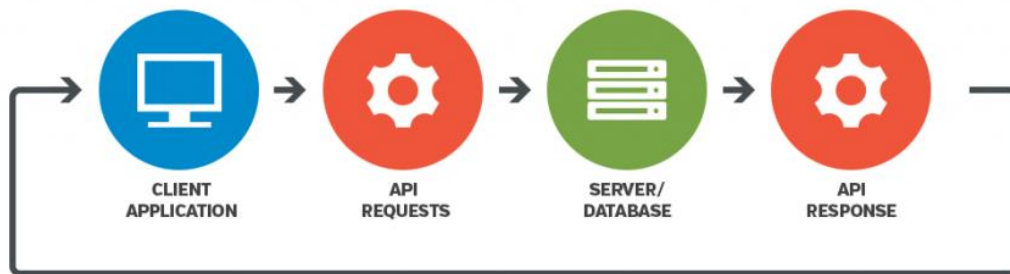
System in Context:

Mirror News provides the news to the user who are willing to know the updated news its displays the headilines first ,if he interested on it he just click on it it will redirected into the another activity which is provided full news.

Context Diagram :

System-wide Requirements(Received):

Actors:

The system interact with the user and server ,actors are here users only.

Events:

Mirror News Platform is a multi-user system which provides the day to day updated news.

The most critical events are:

1.User onclick the app icon and open the app with showing the splash screen.
2.User can click on the any category item it shows the related news to that category.
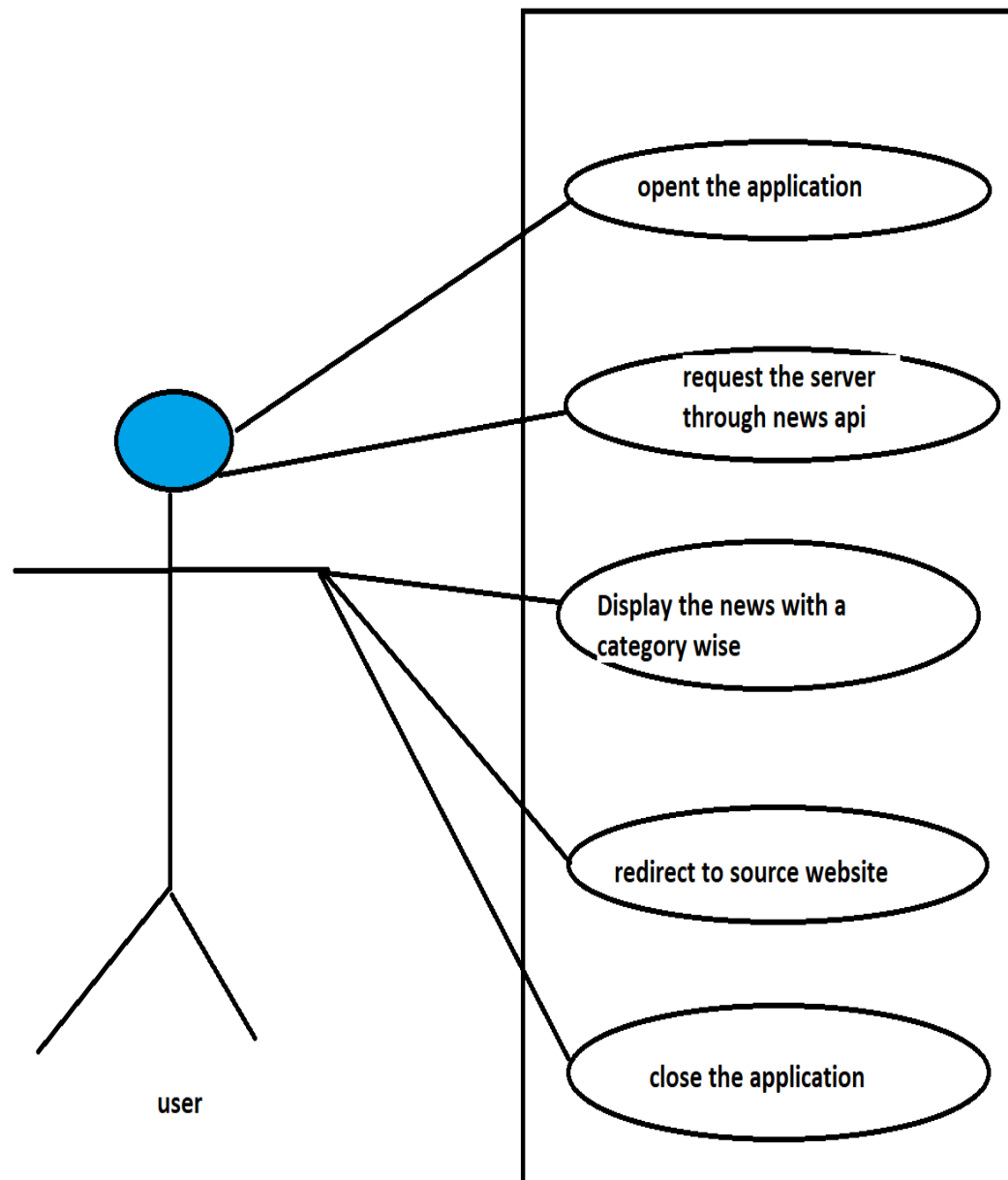3.user can click on the news it will redirect into the source website.
The below table provides a set of user visible events that define the functionalities that are in Mirror News.

	Actor	Action	Object	Frequency	Arrival Pattern	Response
1.	user	onclick	Splash screen	1/day	Episodic	Show the app icon for a while.
2.	user	Onclick	Technology	1/day	Episodic	Provide the updated Technology news
3.	user	Onclick	Science	1/day	Episodic	Provide the updated Science news
4.	user	onclick	Sports	1/day	Episodic	Provide the updated sports news

5.	user	onclick	Business	1/day	Episodic	Provide the updated Business news
6.	user	onclick	Entertainment	1/day	Episodic	Provide the updated Entertainment news
7.	user	onclick	Health	1/day	Episodic	Provide the updated health news.
8.	user	Onclick	More news	1/day	Episodic	Redirect to the source website

Functional Requirements:

Use case Diagram:

opent the application

request the server through news api

Display the news with a category wise

redirect to source website

close the application

user

ER Diagram:

Image References:

MIRROR NEWS

All | Technology | Science

Jupiter Will Make Its Closest Approach To Earth In 70 Years On This Date - ABP Live

Jupiter will make its closest approach to Earth in the last 70 years, this month. When Jupiter is in opposition, it appears larger and brighter than any time of the year.

Shashi Tharoor Meets Sonia Gandhi After Sharing Post On Congress Reforms - NDTV

Shashi Tharoor, who is believed to be considering running for Congress president, met with Sonia Gandhi today, shortly after giving his public approval to a petition seeking reforms in the party.

Shashi Tharoor's move comes ahead of the Congress internal election scheduled for October. File
New Delhi: Shashi Tharoor, who is believed to be considering running for Congress president, met with … [+2862 chars]

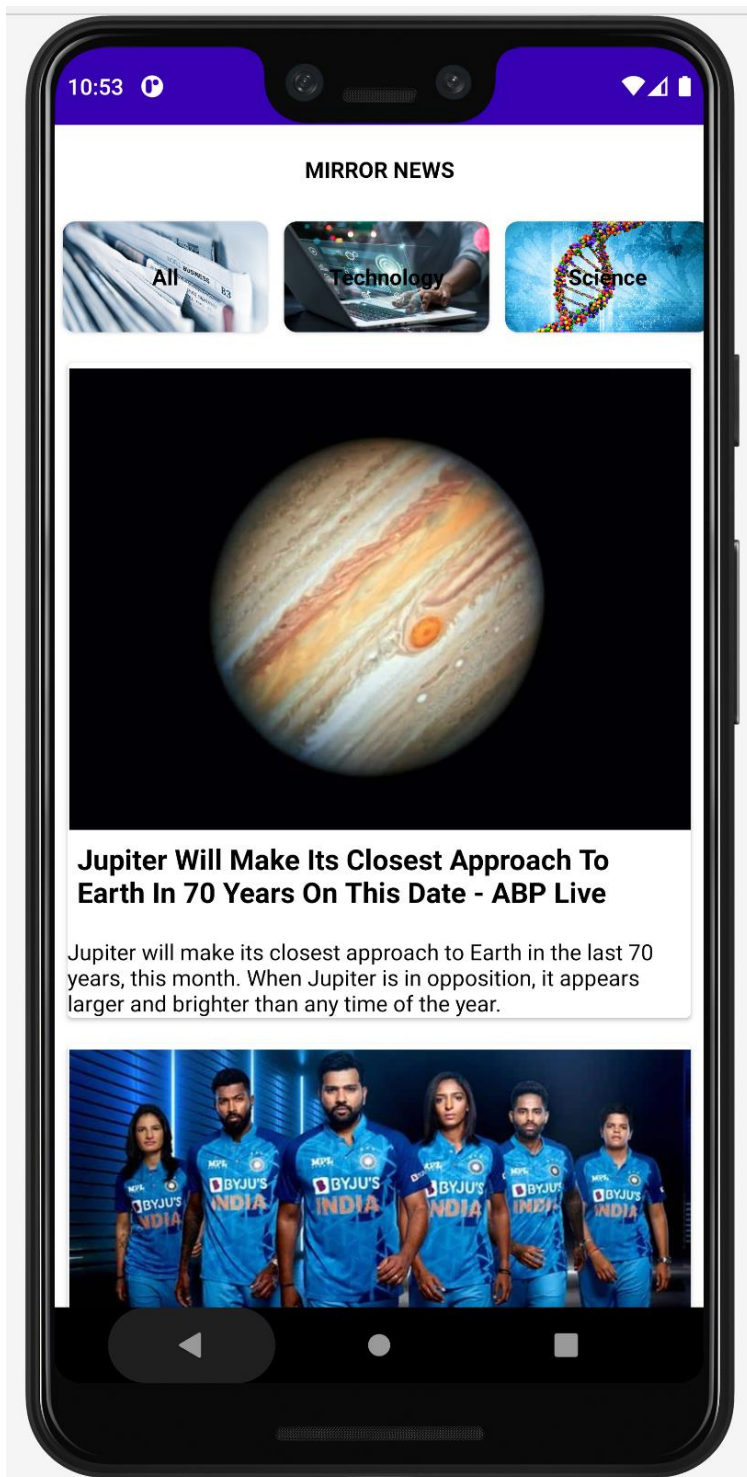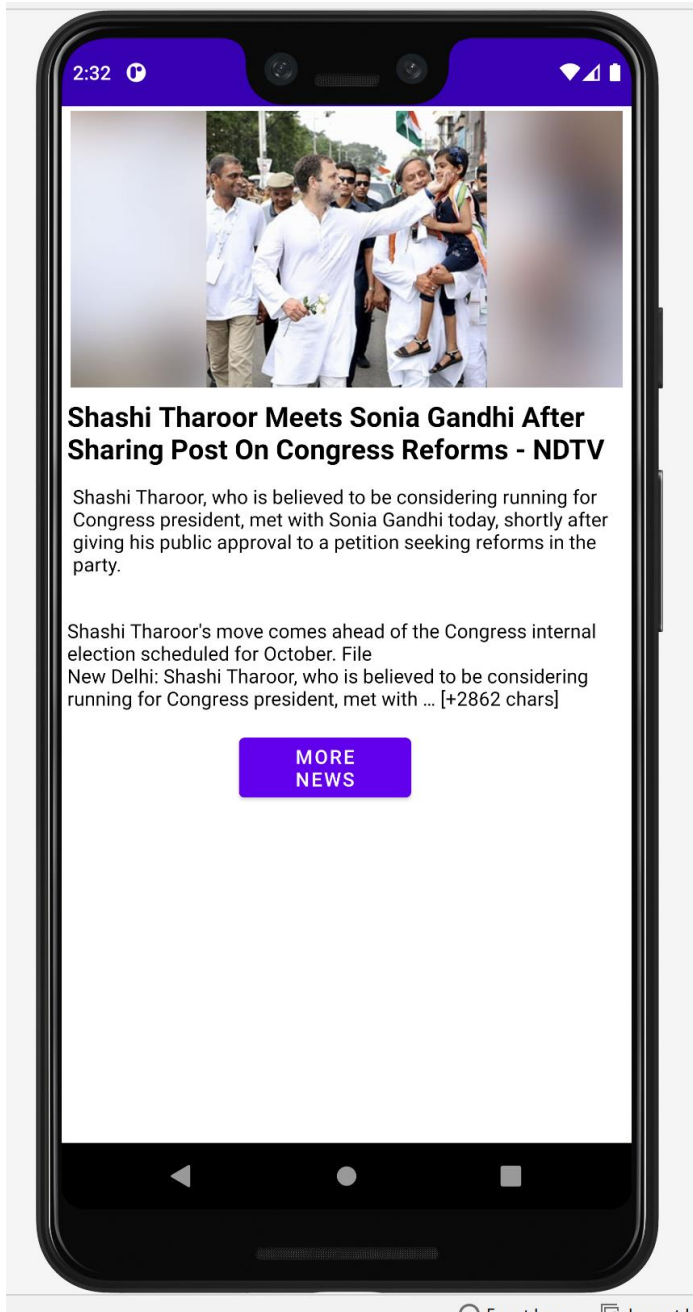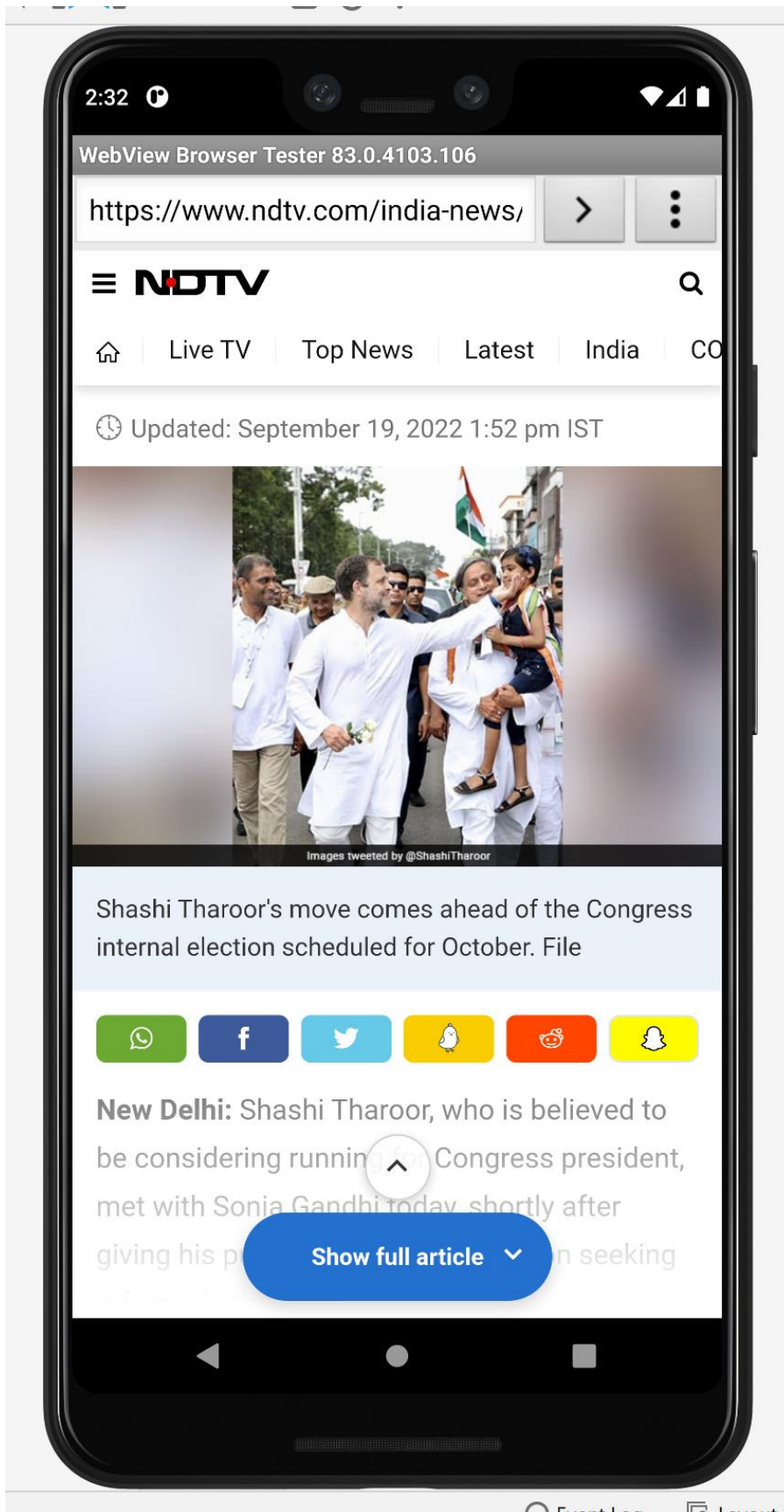MORE NEWS

CONCLUSION

This Mirror News Application provides user various News with Rich User   Interface and UX.Mirror App Covers the news Related various Categories and displays the news for the user.This App Provides Various types of news and help users to go through the Current Affairs.

FUTURE ENHANCEMENT

User can Upload their news in their Sorroundings.User will be provided with certain Username and Password for the User Authentication.

The Ratings will be provided by the Co-users for the news.so the News poster will be provided with Money Vochures based on the Ratings of his news.

Notifications about the News will received by the User from the Next Version.

REFERENCES

https://www.geeksforgeeks.org/how-to-create-a-news-app-in-android/