



INTERNSHIP PROJECT (PRJT – 421)

“Android News App”

**A
PROJECT REPORT
SUBMITTED TO THE
COLLEGE OF AGRICULTURAL INFORMATION
TECHNOLOGY
IN PARTIAL FULFILLMENT OF THE REQUIREMENT
FOR THE AWARD OF THE DEGREE**

OF

B.Tech. (Agricultural Information Technology)

By

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CERTIFICATE

This is to certify that the internship project report entitled “Android News App ” submitted by Mr. “AFTAB M MADHARA” in partial fulfillment of the requirement for the award of the degree of B. Tech. in Agricultural Information Technology of the Anand Agricultural University, is a record of bonafide internship project work carried out by him/her under my personal guidance and supervision and the project report has not previously formed the basis for the award of any degree, diploma or other similar title.

Place: Ahmedabad

Date: May 29, 2021



(Major Supervisor)

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Acknowledgement

“Gratitude is a feeling which is more eloquent than words, more tranquil than silence...”

The successful completion of a project is generally not an individual effort. It is an outcome of the collective efforts of a number of persons, each having own importance to the objective. This session is a vote of thanks to all those persons who have directly or indirectly added in their own special way towards the completion of this project.

I heartily thank to Mr. D.K.Parmar and Mr. Deep Rathod for his time, suggestions, support and guidance at each and every step of this project and without whom, this project would have been a tough task.

With this it would have been a very difficult task without my classmates who were there at each time for the functioning and testing of this website.

Thanks to all of them.

Thank you to Dr. D. R. Kathiriya (Dean, College of agricultural information technology, AAU, Anand) for providing this platform which helped in the development of my technical skills.

At last respect and thanks to all who directly or indirectly were part in the completion of this project.

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1. Title

“Android Agriculture News App”

2. Introduction

The “Android Agriculture News App” is an android application that shows the news having different categories like World news, Entertainment news, Agriculture news, Sport news etc. The news you see can be added to favourite and user can also comment on the news. You can read articles, news, and videos related to the specific news .User can also search the news and can share the news as well.

3. Objective

- To design a user friendly application that enables users to view the news of his interest.
- To design a system that enables reading news online anytime anywhere.
- To develop a system that is have good user interface so that the user can use it smoothly.

4. System Requirement

4.1. Software Configuration

Front End	:	Android Studio
Back End	:	MYSQL
Technology	:	Android Studio 3.6 API Level 21
Programming Language	:	Java (J2ME)
Operating System	:	Windows 10

4.2. Hardware Configuration

Processor	:	Core i5 2.8 GHz
RAM	:	4 GB
		150 GB
Hard Disk	:	(Minimum Space

Required)

5. Interfaces

a. User

- Login
- Registration
- Explore Categories
- Play videos
- Comment
- Share
- Add to favourite

b. Admin

- Login
- Manage Dashboard
- Manage Categories
- Manage News
- Push Notifications
- Read comments
- Check Registered Users

6. Description

System Modules:

- User
- Admin

Module Description:

User

1. All users can access the system and can be authorized.
2. All User can browse the categories of his choice.
3. All User can see the uploded videos.
4. Registered user can add news to favourite.
5. Registered user can comment on the news.
6. Users can share the news to social media.

Admin

1. Admin manages the categories and can add or delete it.
2. Admin adds the news everyday according to its categories.
3. Admin manages the notification and send it to users.
4. Admin can check the registered members and can manage them.
5. Admin can change the FCM server Key as well as API key.

7. Literature Review

7.1. Java Programming Language

Java is a **programming language** and a **platform**.

Java is a high level, robust, object-oriented and secure programming language.

Platform: Any hardware or software environment in which a program runs, is known as a platform. Since Java has a runtime environment (JRE) and API, it is called a platform.

According to Sun, 3 billion devices run Java. There are many devices where Java is currently used. Some of them are as follows:

1. Desktop Applications such as acrobat reader, media player, antivirus, etc.
2. Web Applications such as irtc.co.in, javatpoint.com, etc.
3. Enterprise Applications such as banking applications.
4. Mobile
5. Embedded System
6. Smart Card
7. Robotics 8. Games, etc.

Types of Java Applications

There are mainly 4 types of applications that can be created using Java programming:

1) Standalone Application

Standalone applications are also known as desktop applications or window-based applications. These are traditional software that we need to install on every machine. Examples of standalone application are Media player, antivirus, etc. AWT and Swing are used in Java for creating standalone applications.

2) Web Application

An application that runs on the server side and creates a dynamic page is called a web application. Currently, Servlet, JSP, Struts, Spring,

Hibernate, JSF, etc. technologies are used for creating web applications in Java.

3) Enterprise Application

An application that is distributed in nature, such as banking applications, etc. is called enterprise application. It has advantages of the high-level security, load balancing, and clustering. In Java, EJB is used for creating enterprise applications.

4) Mobile Application

An application which is created for mobile devices is called a mobile application. Currently, Android and Java ME are used for creating mobile applications.

Java Platforms / Editions

There are 4 platforms or editions of Java:

1) Java SE (Java Standard Edition)

It is a Java programming platform. It includes Java programming APIs such as java.lang, java.io, java.net, java.util, java.sql, java.math etc. It includes core topics like OOPs, [String](#), Regex, Exception, Inner classes, Multithreading, I/O Stream, Networking, AWT, Swing, Reflection, Collection, etc.

2) Java EE (Java Enterprise Edition)

It is an enterprise platform which is mainly used to develop web and enterprise applications. It is built on the top of the Java SE platform. It includes topics like Servlet, JSP, Web Services, EJB, JPA, etc.

3) Java ME (Java Micro Edition)

It is a micro platform which is mainly used to develop mobile applications.

4) JavaFX

It is used to develop rich internet applications. It uses a light-weight user interface API.

Prerequisite

To learn Java, you must have the basic knowledge of C/C++ programming language.

7.2. Java J2SE (Java Platform, Standard Edition)

- Also known as Core Java, this is the most basic and standard version of Java. It's the purest form of Java, a basic foundation for all other editions.
- It consists of a wide variety of general purpose API's (like java.lang, java.util) as well as many special purpose APIs
- J2SE is mainly used to create applications for Desktop environment.
- It consist all the basics of Java the language, variables, primitive data types, Arrays, Streams, Strings Java Database Connectivity(JDBC) and much more. This is the standard, from which all other editions came out, according to the needs of the time.
- The famous JVM of Java, the heart of Java development, was also given by this edition only. It's because of this feature, that Java has such a wide usage.

7.3. Android Studio

- Android Studio is the official Integrated Development Environment (IDE) for Android app development, based on IntelliJ IDEA. On top of IntelliJ's powerful code editor and developer tools, Android Studio offers even more features that enhance your productivity when building Android apps, such as:
 - A flexible Gradle-based build system
 - A fast and feature-rich emulator
 - A unified environment where you can develop for all Android devices
 - Instant Run to push changes to your running app without building a new APK
 - 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
 - C++ and NDK support
 - Built-in support for Google Cloud Platform, making it easy to integrate Google Cloud Messaging and App Engine

➤ 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.

➤ The User Interface

- The toolbar lets you carry out a wide range of actions, including running your app and launching Android tools.
- 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.
- 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.
- 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.
- The tool windows give you access to specific tasks like project management, search, version control, and more. You can expand them and collapse them.

- The status bar displays the status of your project and the IDE itself, as well as any warnings or messages.
- You can organize the main window to give yourself more screen space by hiding or moving toolbars and tool windows. You can also use keyboard shortcuts to access most IDE features.
- At any time, you can search across your source code, databases, actions, elements of the user interface, and so on, by double pressing the Shift key, or clicking the magnifying glass in the upper right-hand corner of the Android Studio window. This can be very useful if, for example, you are trying to locate a particular IDE action that you have forgotten how to trigger.

7.4. MySQL

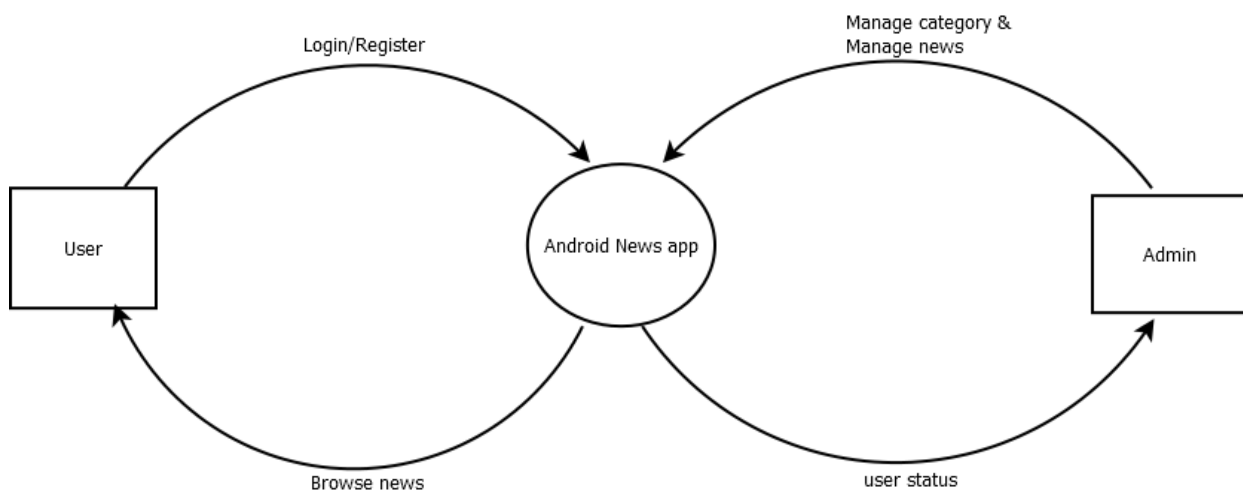
- MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter and "SQL", the abbreviation for Structured Query Language.
- MySQL is free and open-source software under the terms of the GNU General Public License and is also available under a variety of proprietary licenses. MySQL was owned and sponsored by the Swedish company MySQL AB, which was bought by Sun Microsystems (now Oracle Corporation). In 2010, when Oracle acquired Sun, Widenius forked the open-source MySQL project to create MariaDB.
- MySQL is offered under two different editions: the open source MySQL Community Server and the proprietary Enterprise Server. MySQL Enterprise Server is differentiated by a series of proprietary extensions which install as server plugins but otherwise shares the version numbering system and is built from the same code base.
- MySQL Enterprise Edition includes the most comprehensive set of advanced features, management tools and technical support to achieve the highest levels of MySQL scalability, security, reliability and uptime. It reduces the risk, cost and complexity in developing, deploying and managing business-critical MySQL applications.

7.5.XAMPP

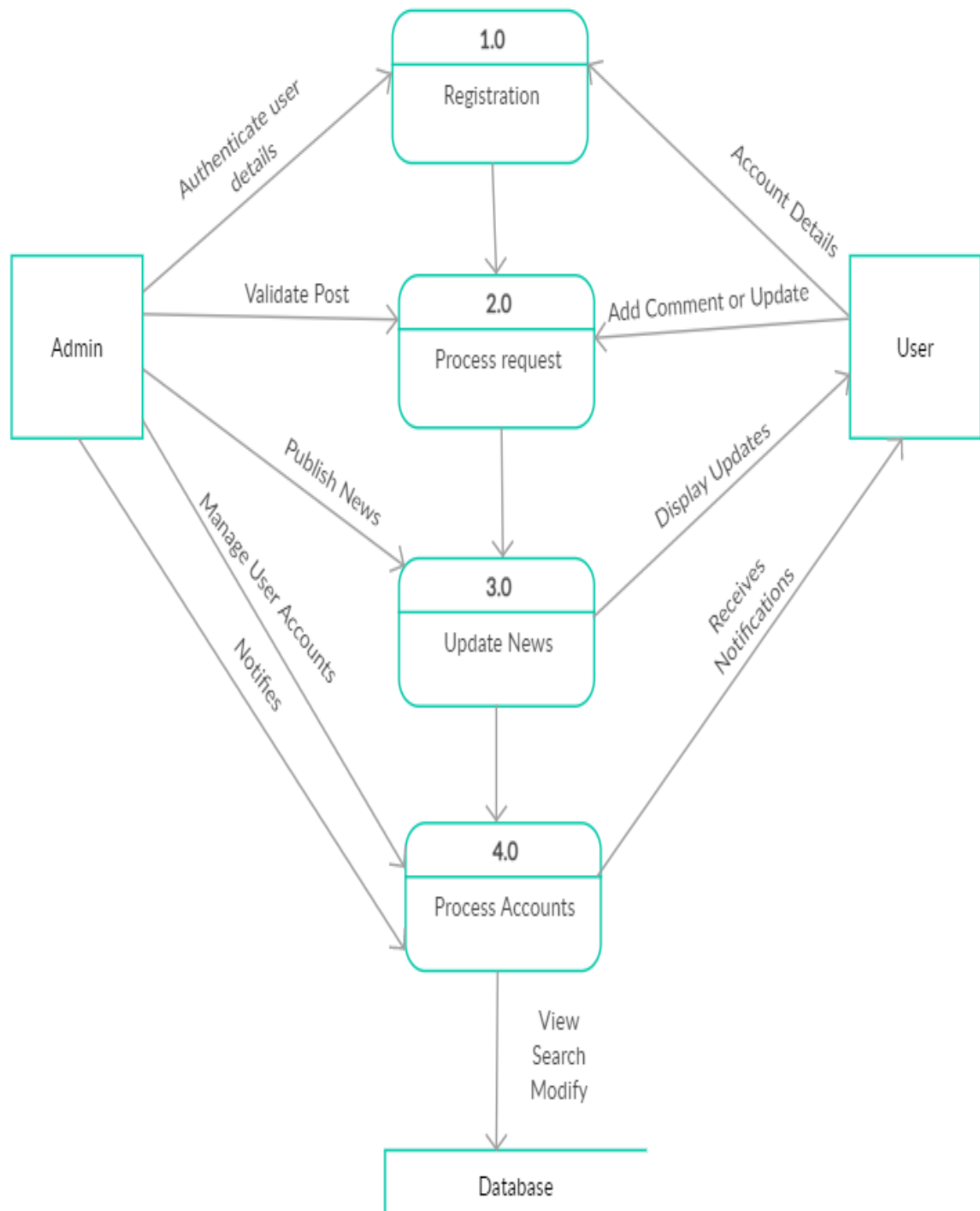
- XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database and interpreters for scripts written in the PHP and Perl programming languages. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible.
- XAMPP's ease of deployment means a WAMP or LAMP stack can be installed quickly and simply on an operating system by a developer. With the advantage a number of common add-in applications such as WordPress and Joomla! can also be installed with similar ease using Bitnami.
- XAMPP also provides support for creating and manipulating databases in MariaDB and SQLite among others.

8.DataFlowDiagram

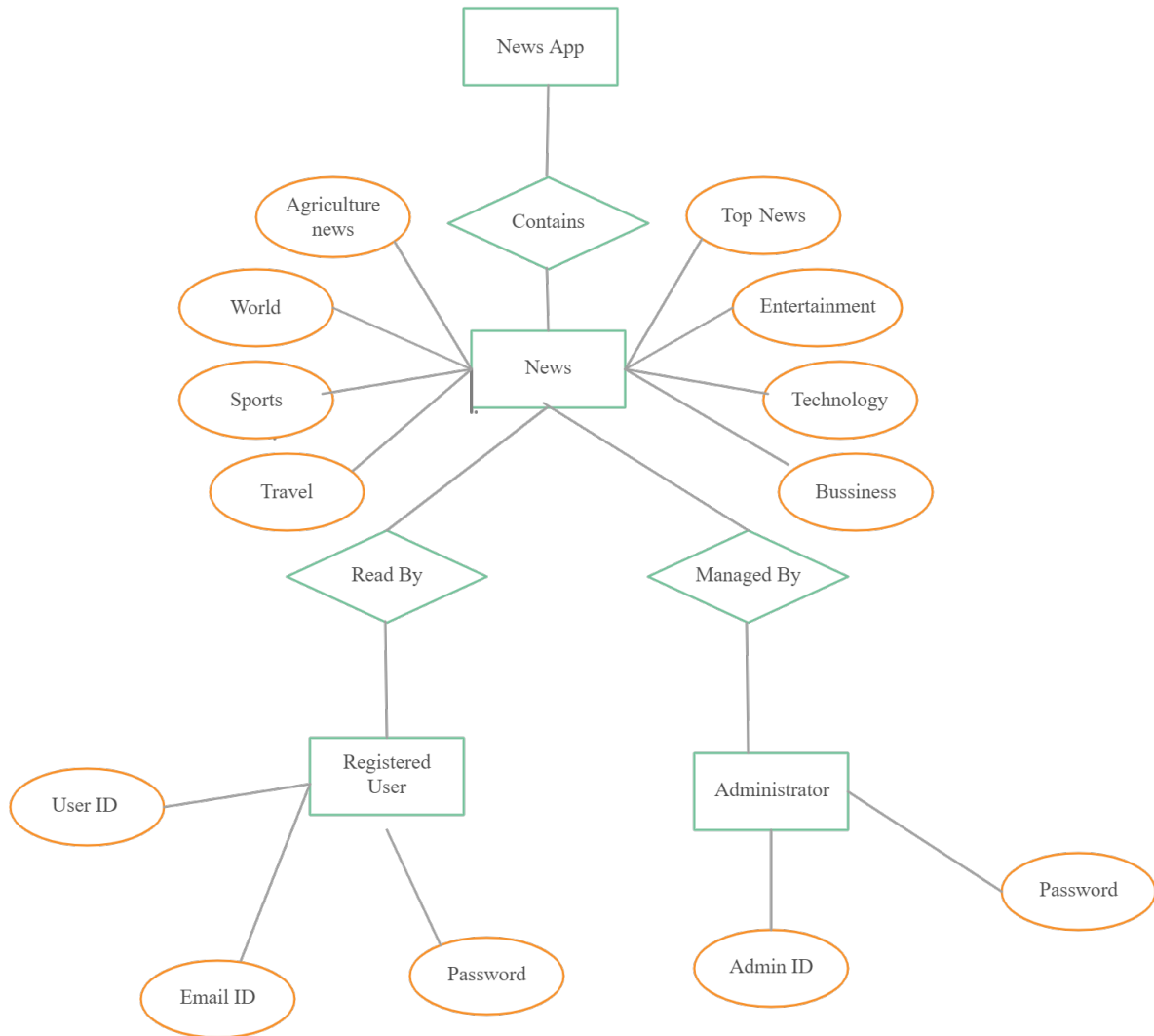
8.1.Level 0 DFD



8.2.Level 1 DFD



9. Entity Relationship Diagram



10. Data Dictionary

10.1.tbl_admin:

Field Name	Data Type	Size	Constrain	Description
id	Int	11	Primary Key	Unique Id of User
Username	Varchar	15	Not Null	Name of User
password	Text	-	Not Null	Password of the User
email	Varchar	100	Not Null	Email of the user
Full_name	Varchar	255	Not Null	Full name of the user
User_role	Enum	100/101	Not Null	Checks role of the user or admin

11.2.tbl_category:

Field Name	Data Type	Size	Constrain	Description
cid	Int	11	Primary key	Category id
Category_name	Varchar	255	Not Null	Name of the category
Category_image	Varchar	255	Not Null	Image of the category

10.3.tbl_comments”

Field Name	Data Type	Size	Constrain	Description
Comment_id	Int	11	Primary Key	Comment id of user
nid	Int	11	Not Null	Name id User
User_id	Int	11	Not Null	User’s id
Date_time	timestamp	-	Not Null	Date and time of commented posted

content	text	-	Not Null	Information about content
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10.4.tbl_fcm_template

Field Name	Data Type	Size	Constrain	Description
id	Int	11	Primary Key	Template id
Message	Text	-	Not Null	message showed to admin
image	Varchar	255	Not Null	Image showed in admin panel
link	Varchar	500	Not Null	-

10.5.tbl_fcm_token

Field Name	Data Type	Size	Constrain	Description
id	Int	11	Primary Key	Token id
token	Text	-	Not Null	-

10.6.tbl_news:

Field Name	Data Type	Size	Constrain	Nam
nid	Int	11	Primary Key	Name id of user
Cat_id	Int	11	Not Null	Category id
news_title	Varchar	255	Not Null	Title of the news
News_date	Timestamp	-	Not Null	Date od the news published
News_description	Text	-	Not Null	Full name of the user
News_image	Varchar	255	Not Null	Checks role of the user or admin
Video_url	Varchar	500	Not Null	url link of the video
Video_id	Varchar	255	Not Null	Video id
Content_type	Varchar	45	Not Null	Content type of video

size	Varchar	255	Not Null	Size of the video
-------------	----------------	------------	-----------------	-------------------

10.7.tbl_news_gallery:

Field Name	Data Type	Size	Constrain	Description
id	Int	11	Primary key	Category id
nid	Int	11	Not Null	Name of the category
Image_name	Varchar	255	Not Null	Image of the category

10.8.tbl_fcm_template

Field Name	Data Type	Size	Constrain	Description
id	Int	11	Primary Key	Setting id
App_fcm_key	Text	-	Not Null	Fcm server key
Api_key	Varchar	255	Not Null	News api key
Privacy_policy	Text	-	Not Null	Info. about privacy policy

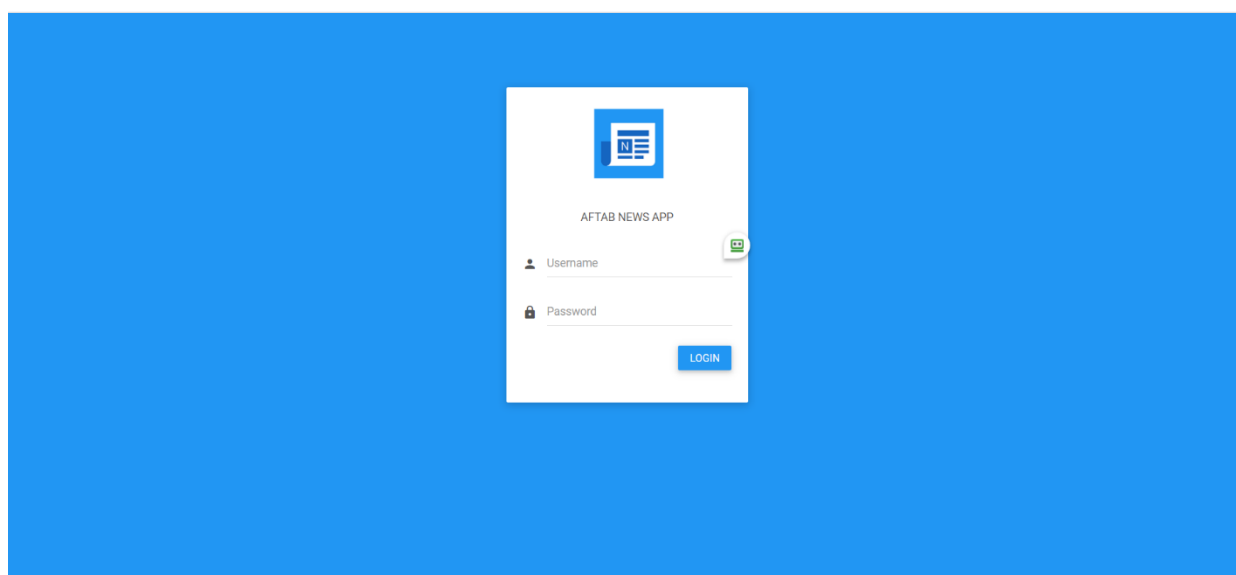
10.9.tbl_users:

Field Name	Data Type	Size	Constrain	Nam
id	Int	11	Primary Key	Name id of user
User_type	Varchar	255	Not Null	Category id
name	Varchar	255	Not Null	Title of the news
email	Varchar	255	Not Null	Date od the news published
Password	Varchar	255	Not Null	Full name of the user
Confirm_code	Varchar	255	Not Null	Checks role of the user or admin
status	Varchar	255	Not Null	url link of the video
imageName	Varchar	45	Not Null	Video id

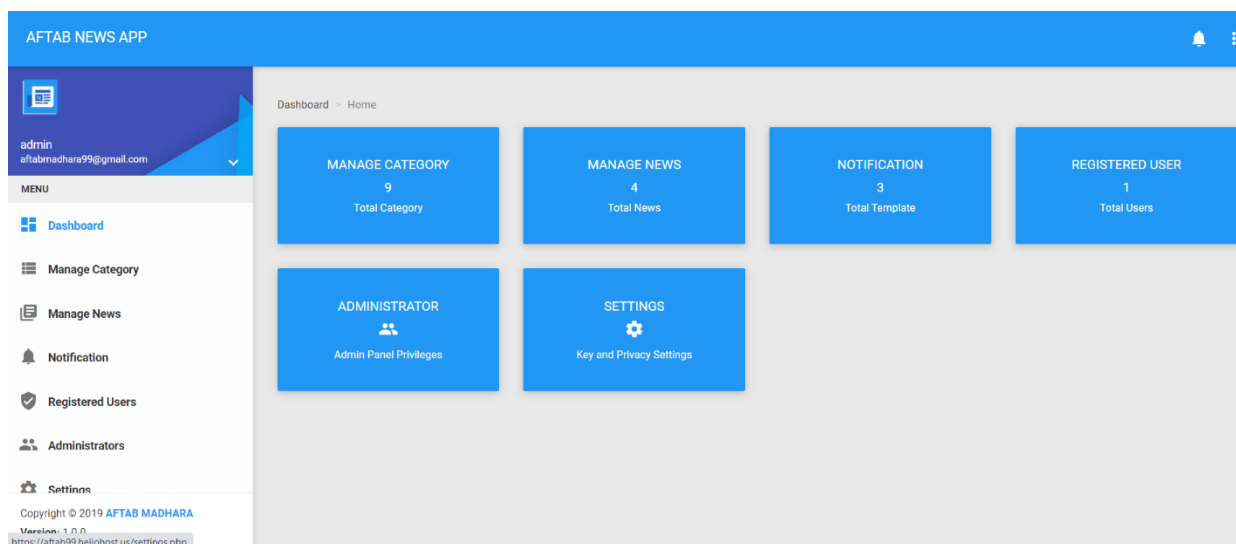
11. Screenshots

- ADMIN SIDE :-

11.1. Login Screen



11.2. Admin Dashboard



11.3. Manage Category

MANAGE CATEGORY

Search by category name...

Category Name	Category Image	Action
AGRICULTURE NEWS		
World		
Entertainment		
Top News		
Sports		

ADD NEW CATEGORY

11.4 Manage news

MANAGE NEWS

Search by title...

News Title	News Image	Date	Category	Type	Action
India scraps local trials for "well-established" imported COVID-19 vaccine Coronavirus Vaccination		May 28, 2021 20:49:16	AGRICULTURE NEWS	VIDEO	
Government buys record wheat crop of over 400 lakh ton at MSP for Rs 79,088 crore Read more at: https://economictimes.indiatimes.com/news/economy/agriculture/government-buys-record-wheat-crop-of-over-400-lakh-ton-at-msp-for-rs-79088-crore/articleshow/830		May 27, 2021 20:43:42	AGRICULTURE NEWS	NEWS	
OnePlus Nord CE 5G Specifications Tipped, Could Come With Snapdragon 750G SoC; Pre-Orders From June 11		May 02, 2021 20:39:43	AGRICULTURE NEWS	NEWS	
India Looks To Vaccinate 1 Crore People Daily by July End": AIIMS Chief		May 29, 2021 20:29:32	Health	NEWS	

ADD NEW NEWS

Activate Windows

11.5. Manage notifications

The screenshot displays the 'MANAGE NOTIFICATION' page in the AFTAB NEWS APP. The sidebar menu on the left includes options like Dashboard, Manage Category, Manage News, Notification, Registered Users, Administrators, and Settings. The main content area features a search bar and a table with the following data:

Message	Url	Action
Heeh	Hehe	[Bell icon] [Pencil icon] [Trash icon]
hello this app is developed ny aftab madhara	aftab	[Bell icon] [Pencil icon] [Trash icon]
world no 1 app	no_url	[Bell icon] [Pencil icon] [Trash icon]

At the bottom right, there is a pagination control showing '1' and '(total 3)'. An 'Add New Template' button is located in the top right corner of the notification management area.

11.6. Registered Users

The screenshot displays the 'REGISTERED USERS' page in the AFTAB NEWS APP. The sidebar menu on the left includes options like Dashboard, Manage Category, Manage News, Notification, Registered Users, Administrators, and Settings. The main content area features a search bar and a table with the following data:

Name	Email	Profile	Status	Action
aftab	aftabmadhara99@gmail.com	[Profile icon]	ENABLED	[Pencil icon]

At the bottom right, there is a pagination control showing '1' and '(total 1)'. The 'ENABLED' status is highlighted in a green box.

11.7.Settings

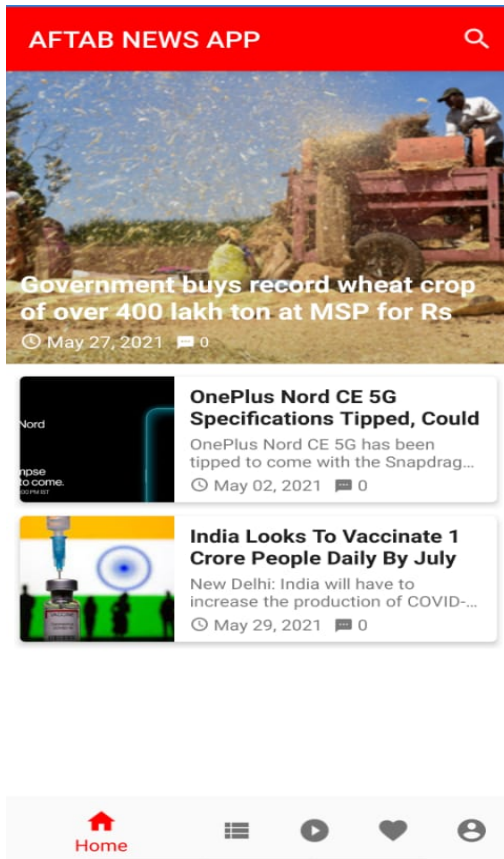
The screenshot shows the 'SETTINGS' page of the AFTAB NEWS APP admin dashboard. The page has a blue header with the app name and a notification bell. A left sidebar contains a menu with options: Dashboard, Manage Category, Manage News, Notification, Registered Users, Administrators, and Settings. The main content area is titled 'SETTINGS' and includes a 'Save Settings' button. It contains three sections: 'Your Server Key' with an FCM Server Key value, 'Your API Key' with an API Key value and a 'Change API Key' button, and 'Privacy Policy' with a text area containing a privacy policy statement. The footer of the dashboard shows copyright information for 2019 AFTAB MADHARA and version 1.0.0.

- USER SIDE :-

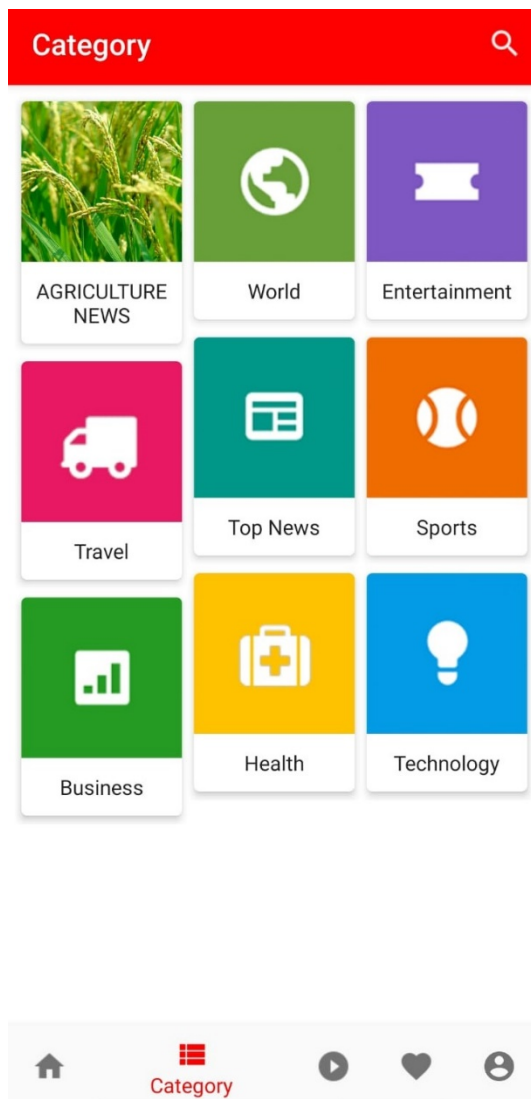
11.8. App start page



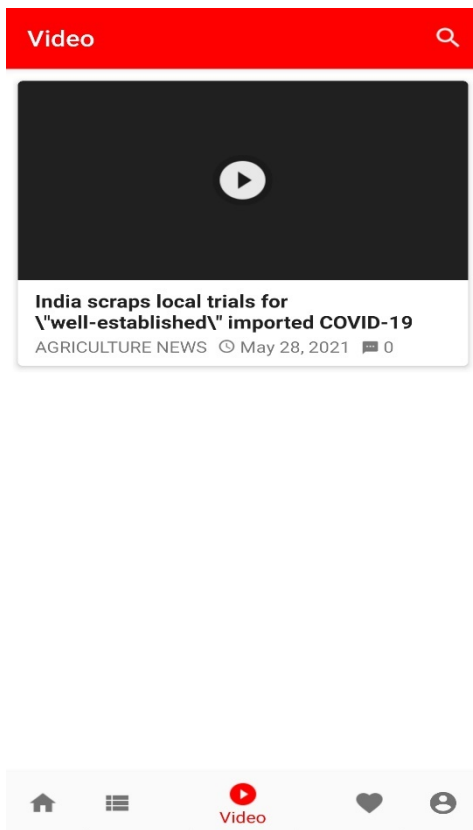
11.9. Home



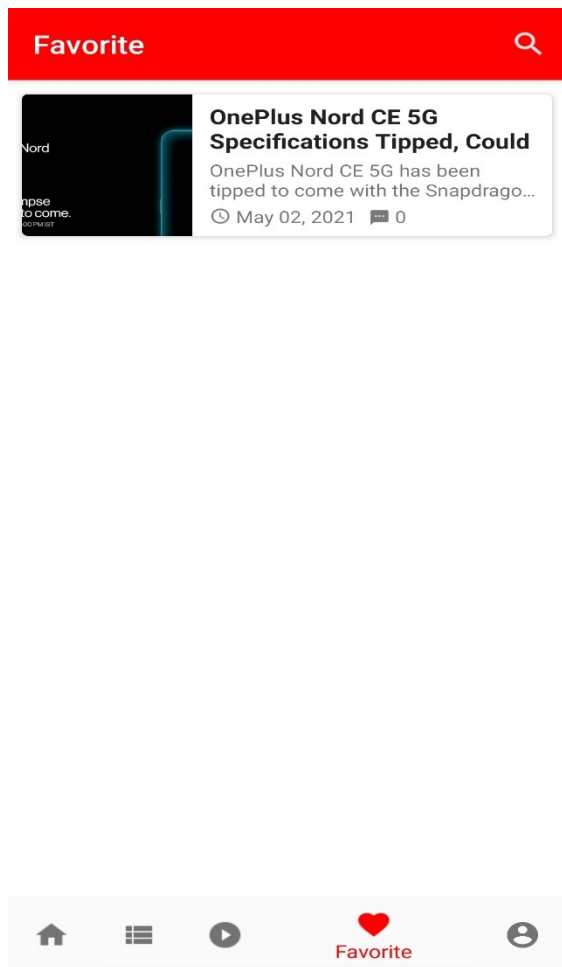
11.10.Category




11.11.Video




11.12.Favourite





11.13.Profile







aftab EDIT
aftabmadhara99@gmail.com





 **Privacy Policy**
App Terms & Policies

 **Rate**
Give your rate and feedback

 **More**
More apps from developer

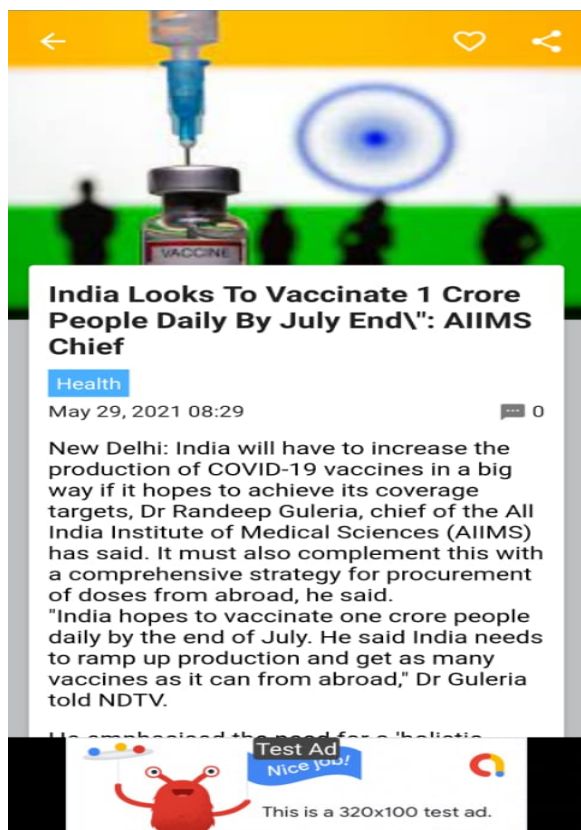
 **About**

[Logout](#)



Profile

11.14.News detail

A screenshot of a news article on a mobile device. The background image shows a syringe drawing vaccine from a vial, with silhouettes of people and a target symbol. The article title is "India Looks To Vaccinate 1 Crore People Daily By July End\": AIIMS Chief". It is categorized under "Health" and dated "May 29, 2021 08:29". The text discusses the need to increase COVID-19 vaccine production and procurement. At the bottom, there is a red cartoon character and a "Test Ad" box with the text "Nice juu!" and "This is a 320x100 test ad.".

India Looks To Vaccinate 1 Crore People Daily By July End\": AIIMS Chief

Health

May 29, 2021 08:29

New Delhi: India will have to increase the production of COVID-19 vaccines in a big way if it hopes to achieve its coverage targets, Dr Randeep Guleria, chief of the All India Institute of Medical Sciences (AIIMS) has said. It must also complement this with a comprehensive strategy for procurement of doses from abroad, he said.

"India hopes to vaccinate one crore people daily by the end of July. He said India needs to ramp up production and get as many vaccines as it can from abroad," Dr Guleria told NDTV.

Test Ad
Nice juu!
This is a 320x100 test ad.

11.15.Comments

← Comments



aftab (you)

2 hours ago

hii llll djddbd jdhsb



12.References

- Got great help from youtubers
- Online android courses
- Online friends and mentors
- <https://www.udemy.com>
- <https://www.lynda.com>
- <https://code.tutsplus.com/articles/best-android-news-app-templates--cms-31510>

Conclusion

"All the training I have done with Quriousclick had been very helpful. I thoroughly enjoyed my internship this summer and now have very valuable experience under my belt. I know this will help when looking for jobs and needing references. For this I am very much thankful to deep sir who has guided me in each and every step towards completion of my project. Apart from project completion the very best thing I learnt from company is leadership skills and communication skills."