

## 1. Company Profile:



### Wappnet Systems is available for support 24\*7.

- Wappnet Systems Pvt. Ltd. is a leading software development company. Re-energize your business by creating an unforgettable online presence. Wappnet Systems Pvt. Ltd. is a visionary leader in the web and mobile application development industry. It has creative ideas that produce captivating and optimized websites. For smart designs, creative solutions, and exceptional products, depend on our web development organisation.
- Wappnet Systems Pvt. Ltd. specialists in delivering all kinds of applications involving complex and smart integration and provide innovative, solutions, making it easy for you to realise your business goals. It mainly focus on Web, Mobile and Blockchain Based solutions. Wappnet Systems Pvt. Ltd. offer blended trending technologies to best meet your needs.
- Wappnet Systems Pvt. Ltd. Serve customers across Blockchain world, Healthcare, Media, Financial Services, Entertainment, Engineering, Retail, Software Product Houses and Independent Software Vendors. It is committed to make use of the latest tools and technologies to deliver the best solutions to our clients globally.
- It has experience of developing and maintaining successful software products, eCommerce portals, marketplaces, social networks, real-time business analytics and composite sync and integrations. Company supplies these services through their dedicated website "[www.wappnet.com](http://www.wappnet.com)" that is easy to use for their Android & IOS users. Wappnet Systems Pvt. Ltd. deliver latest trending technology services to meet your business and IT priorities and help allocate valuable IT resources effectively to contribute to business outcomes and fulfill your dreams.

## 2. Project Profile

### 2.1 Project Definition:

- Digital Media Times

### 2.2 Project Description:

- Digital Media Times is an android based news application. This application will show the news about the world. This is better than old conventional newspapers as you can see news anytime and anywhere now. This will also have live updates. This app will have some other features like adding your own news as an editor. The main focus of this application is to connect news articles from all around the world and deliver it to user as fast as possible in best visualize way User can view latest news category wise like sports, events, courses etc. This system can have many features like user can register and comment for news receive email etc.
- The purpose of the project is to develop an application which will display news articles and videos verified and approved at backend. User can browse news articles and videos through various categories. App will enable user to view news details, images, and video. Users can also bookmark any news article/video for future use. User can also include any news article/video in the favorite list.
- The application will have two type of user's at backend one will be admin manager with having full access to backend features including user and content management. Whereas the other users will be reporters and editors will have limited access to backend features.
- The goal is to create a News Feed app which gives user regularly-updated news from the internet related to a particular topic, person, or location.

### 2.3 Existing / Legacy System:

- In the existing Online News portal project in android, if a person wants to get some news about the world or what is going on around him/her, then he /she needs to go through the newspaper. It is a very long process. First to buy the newspaper and then to go through every page of the paper. If someone is looking for some specific sector news, then it got tough for them to get the news directly.

### 2.4 Problem Statements:

- Newspaper is one of the most popular and required assets of our daily lives. And, in today's hectic world, reading newspaper has become one of the traditional ways of reading the news. With the news being created every minute and relayed through TV, radio and internet, the updated news is already old by the next morning. And, that's why newspaper and magazine publishers are struggling to keep-up with the pace. Change is needed and publishers must embrace mobile.

## 2.5 Needs for New System:

- The main focus of this application is to connect news articles from all around the world and deliver it to user as fast as possible in best visualize way. Android provides simple application structure and requires Java and Mark-up languages knowledge to work with. In this fast moving world where people find little time to spend with their own family, it is difficult to find time to read newspaper and stay updated with the current affairs. Reading newspaper might sometimes be time taking considering the size of the article. Sometimes people give the article a skip due to lethargy if it is too long. Information through listening and visuals is quickly perceived compared to reading. To make things easier, the NewsApp android application can be used to scan the headlines from the newspaper and fetch relevant videos from the World Wide Web.

## 2.6 Proposed System

- In the proposed system user needs to install the application in his android device and give the necessary permissions to the application. Once the application is installed it is ready to be used. The user needs to focus on the newspaper headline which upon scanning by the camera, gives a block of text which is done by Optical Character Recognition(OCR). This block of text upon clicking gives a text view, which again is clickable and upon clicking gives us the results of most relevant videos based on the number of views, date of publishing the video and length of the video. This allows the user to watch the videos instead of reading the whole article which is a bit time consuming.

## 2.7 Scope

- Less time is consumed compared to newspaper reading. Easy to use and fast.
- Information through videos can be easily understood.
- Time Saving
- Can replace
  - Newspapers
  - Magazines
- Appealing user interface

## 2.8 Outcomes

- This project is to develop a mobile application which will display news articles and videos verified and approved at backend. User can browse news articles and videos through various categories. App will enable user to view news details, images, and video. Users can also bookmark any news article/video for future use.
- Our Project Digital Media Teams Successfully created a user-friendly environment for the scheme management process. This Project is flexible and changes can be incorporated easily. Easy for further Modification Saves a lot of time by doing most of the processes online.

## 2.9 Tools & Technologies used in system ::

### 2.9.1 Android Studio

- Android is an open source and Linux-based operating system for mobile devices such as smartphones and tablet computers. Android was developed by the Open Handset Alliance, led by Google, and other companies.
- 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.
  - 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
- 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
- Android SDK Platform-Tools is a component for the Android SDK. It includes tools that interface with the Android platform, primarily adb and fastboot. Although adb is required for Android app development, app developers will normally just use the copy Studio installs.

### 2.9.2 PHP

- The PHP Hypertext Preprocessor (PHP) is a programming language that allows web developers to create dynamic content that interacts with databases. PHP is basically used for developing web based software applications. This tutorial helps you to build your base with PHP. PHP is a recursive acronym for "PHP: Hypertext Preprocessor".
- PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites. It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server.
- PHP is an open-source, interpreted, and object-oriented scripting language that can be executed at the server-side. PHP is well suited for web development. Therefore, it is used to develop web applications (an application that executes on the server and generates the dynamic page.).

### 2.9.3 Java :

- **JAVA** is a programming language which is used in Android App Development. It is class based and object oriented programming whose syntax is influenced by C++. The primary goals of JAVA is to be simple, object-oriented, robust, secure and high level. JAVA gives the best option for development of mobile applications that are based on Android, as Android consist of its own APIs and JAVA libraries. So, for Android applications, you use android APIs as well as JAVA to write code for Android apps.
- Java is one of the powerful general-purpose programming languages, created in 1995 by Sun Microsystems (now owned by Oracle). Java is Object-Oriented. However, it is not considered as pure object-oriented as it provides support for primitive data types (like int, char, etc).
- Java is one of the most popular and widely used programming languages and platforms. A platform is an environment that helps to develop and run programs written in any programming language. Java is fast, reliable, and secure. From desktop to web applications, scientific supercomputers to gaming consoles, cell phones to the Internet, Java is used in every nook and corner.
- The mobile edition of Java is called Java ME. Java ME is based on Java SE and is supported by most smart phones and tablets. The Java Platform Micro Edition (Java ME) provides a flexible, secure environment for building and executing applications that are targeted at embedded and mobile devices. The applications that are built using Java ME are portable, secure, and can take advantage of the native capabilities of the device. Java ME addresses the constraints that are involved in building applications that are targeted at mobile devices. In essence, Java ME addresses the challenge of executing applications on devices that are low on available memory, display, and power.

### 2.9.4 SQLite :

- SQLite is a software library that implements a self-contained, serverless, zero-configuration, transactional SQL database engine. SQLite is the most widely deployed SQL database engine in the world. The source code for SQLite is in the public domain.
- SQLite is an in-process library that implements a self-contained, serverless, zero-configuration, transactional SQL database engine. It is a database, which is zero-configured, which means like other databases you do not need to configure it in your system.
- SQLite engine is not a standalone process like other databases, you can link it statically or dynamically as per your requirement with your application. SQLite accesses its storage files directly.
- SQLite does not require a separate server process or system to operate (serverless).
- SQLite comes with zero-configuration, which means no setup or administration needed.
- A complete SQLite database is stored in a single cross-platform disk file.
- SQLite is very small and light weight, less than 400KiB fully configured or less than 250KiB with optional features omitted.

### 2.9.5 Mysql :

- MySQL is a relational database management system based on the Structured Query Language, which is the popular language for accessing and managing the records in the database. MySQL is open-source and free software under the GNU license. It is supported by **Oracle Company**.
- Mysql includes all topics of MySQL database that provides for how to manage database and to manipulate data with the help of various SQL queries. These queries are: insert records, update records, delete records, select records, create tables, drop tables, etc. There are also given MySQL interview questions to help you better understand the MySQL database.

### 2.10 Project Plan

Sr. No.	Description	Last Submission Date
1	Company Profile	12.11.2022
2	Project Profile	12.11.2022
3	Requirement Analysis	26.11.2022
4	Design	10.12.2022
5	Implementation	28.01.2023
6	Testing	11.02.2023
7	Future Enhancement	11.02.2023
8	Bibliography	11.02.2023

Table 1 : Project Plan

### 3. Requirement Analysis:

#### 3.1 Feasibility Study

- **Operational feasibility of Digital Media Times**

This project is to develop a mobile application which will display news articles and videos verified and approved at backend. User can browse news articles and videos through various categories. App will enable user to view news details, images, and video. Users can also bookmark any news article/video for future use. This Application is easy to operate any of the users, So we can say that this app is operationally feasible.

- **Technical Feasibility of Digital Media Times**

This feasibility deals with technicality of the system instead of reading news paper and magazines user in manual way this system is fully automated. No efficient manpower is required to handle the system. Here to develop this application we have used android development tools because using it we can easily develop an application. Both developers having knowledge about technology.

- **Economical Feasibility of Digital Media Times**

This study is carried out to check the economic impact that the system will have on the organization. The amount of fund that the company can pour into the research and development of the system is limited. The expenditures must be justified. Thus the developed system as well within the budget and this was achieved because most of the technologies used are freely available. Only the customized products had to be purchased. In economical feasibility we can say this application is feasible because there is no big cost for development.

- **Social Feasibility**

Newspaper is one of the most popular and required assets of our daily lives. And, in today's hectic world, reading newspaper has become one of the traditional ways of reading the news. With the news being created every minute and relayed through TV, radio and internet, the updated news is already old by the next morning. And, that's why newspaper and magazine publishers are struggling to keep-up with the pace. And this system is socially feasible because user can easily show any news freely and easily.

### 3.2 Users of the System:

This system can have two users of the system: -

- Admin
- User

- **Admin :**

“**Digital Media Times**” is news based application. But whenever if any user having a problem that time, we need one person who can solve their problem. So, administrator will be that person who is going to solve user problems. If, any illegal content will be search from user side then administrator can take strict action on it and he/she can disable that particular user. Administrator can manage all users and watch all activity in this application. Administrator can see all comments of users for seeing on any news. Administrator can manage all categories and also he/she can edit and delete any category. Administrator can add any news in application and he/she can also delete and edit any existing news.

- **User :**

“**Digital Media Times**” is mainly developed to solve user’s problem. Users are very important user of this application. In this system first User can register using Name, Email ID and Password then user can login into the application and then only have a look for News. Also, user can search any news in this application. User can also find category wise news like Sports, Technology, Travel, Health, and Entertainment. So it will be very useful those user who want to see any particular news only. So for those users “Digital Media Times” is very useful application.

### 3.3 Modules of the System (User)

- **Registration and login**

Registration module can include all information about user like name, Email ID and Password. This module is mandatory for login module. Because if user wants to login this application, then user must have to registered them self in this application first. Login module include authentication of application user. So for login user must have an Email ID and password which is registered.

- **Search News**

Here, To see any particular sector News User can search any news then see easily in this application from search news module. This module is very important because at a time we can have many news in “Digital Media Times”. So, for finding particular news can be easy and time saving for user using search book module. We can also set font size like Extra small, Medium, Large, and Extra Large. User can also added to the favorites any news then user can directly see particular news after selected to the favorite menu in the application. User can also directly share any news of the application.



- **Category**

Here, To see any particular category wise News User can go to the category option and select any categories like Sports ,Entertainment ,Travel ,Health ,Technology ,Business and see any news of the particular field easily in this application from category module. This module is very important because at a time we can have many news in “Digital Media Times”. So, for finding particular category wise news can be easy and time saving for user using search book module.

- **News Videos**

Here, User can see video of the any news of the application instead of television. This module is very important because we can see full video of particular news like cricket match or any accidental news. We don't need to start television. So, for seeing full video this can be easy for user using news videos module.

- **Favorite**

Here, User can see all videos which he/she added to the favorites in the application. This module is very important because we can see directly our favorite news instead of searching again and finding particular news in the application. So, for seeing our favorite news can be easy and time saving for user using favorite module.

- **Edit Profile**

Here, User can easily update his/her Profile Picture, Name, Email ID and password which is entered in register page of the application. User can also convert to the application in dark mode which is used to save power of battery. User can also change the size of text in the application. Also, User can manage notification in the application. User can clear search history in this application. User can also share this application to any other person.

- **Logout**

Here, User can logout from the application. Then user have to login again in the application.

## **Admin Modules :**

- **Login**

Login module can include all information Username and Password. This module is mandatory for Admin. The Administrator should login into the system with unique his/her username and password. If the username and password is validated then he/she can gain access to the system.

- **Manage Category**

Admin can easily manage all news categories wise like insert update and deleting news. Then User can see particular news field wise. Admin can also search any category of the application.

- **Manage News**

Admin can easily add any updated news through this module. Also, Admin can edit and delete news in the application. Admin can see comment details which are written by users on the particular news. Admin can see total numbers of viewers are seen particular news in the application.

- **See Registered Users**

Admin can see total registered users in the application.

- **User Comments**

Admin can see total all user comments which are written by user in the application.

- **Manage Admin**

Admin can add new admin and edit particular admin records.

- **Settings**

Here This modules are describes setting of all application.

- **Logout**

Here, Admin can logout from the application. Then Admin have to login again in the System.

### 3.4 Process Model:

The Software process model chosen for the project is the “Agile Model”.

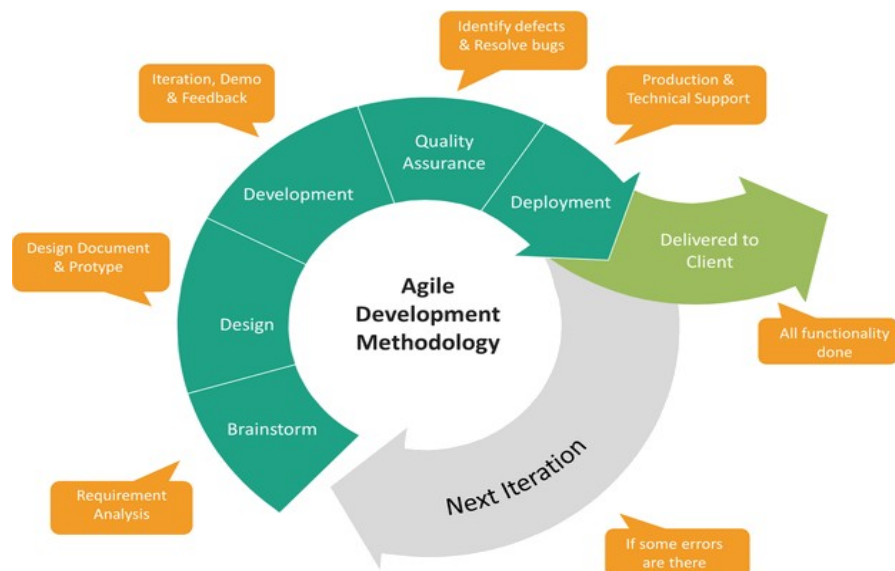


Figure 2 : Project Plan

- **Requirements gathering :**

In this phase, Business requirements and system requirements are being gathered from the client.

- **Design the requirements :**

UI will be prepared first and then implement and learn angular for design for compatibility with OS.

- **Construction/ iteration :**

According to Client requirements it will be prepare Testing: UI Testing done for design checking in the Smart devices.

- **Deployment:**

UI with xml.

- **Feedback:**

Feedback from the tester, sellers and buyers from the client-side.

- **Advantages of Agile Model**

- Frequent Delivery
- Face-to-Face Communication with clients.
- Efficient design and fulfils the business requirement.
- Anytime changes are acceptable.
- It reduces total development time.

- **Disadvantages of Agile Model**

- The shortage of formal documents, creates confusion and crucial decisions taken throughout various phases can be misinterpreted at any time by different team members.
- Due to the lack of proper documentation, once the project completes and the developers allotted to another project, maintenance of the finished project can become difficult.

- **First week scrum master**

Story	To do	In progress	To verify	done
Require analysis	-Meeting with client - Requirement verification -Map the financial requirements	-Manage time for meeting -Match all requirement with client -Estimate costing of development	-The expected response time. -The quote for the next story	-Meeting arranged with client -Receive the internal client's approval for the requirement -Set up all hardware and software requirement for cost estimate

Table 2: First week scrum master

### 3.5 Hardware & Software Requirements

- **Developer-Side Configuration**

#### Hardware

RAM	4GB
SSD	Needed

Table 3: Hardware Requirements

#### Software

Operating System	Windows 10
Database	SQLite, Mysql
Backend	Java
Front-End	Xml
Tool	Android studio

Table 4: Software Requirements

- **Client -Side Requirements**

#### Hardware

RAM	1GB or higher
Device	Android smart phone

Table 5: Hardware Requirements

#### Software

Operating System	Android
Application runner	APK
Connection	Internet (WIFI, ethernet)

Table 6: Software Requirements

### 3.6 Use Cases

We have mainly two actors in this android application: -

- **Admin**

- Login
- Manage Category
- Manage News
- See Registered Users
- Users Comments
- Manage Admin
- Settings
- Logout

• User

- Registration And Login
- Search News
- Category
- News Videos
- Favorite
- Edit Profile
- Logout

### 3.7 Use case Diagram:

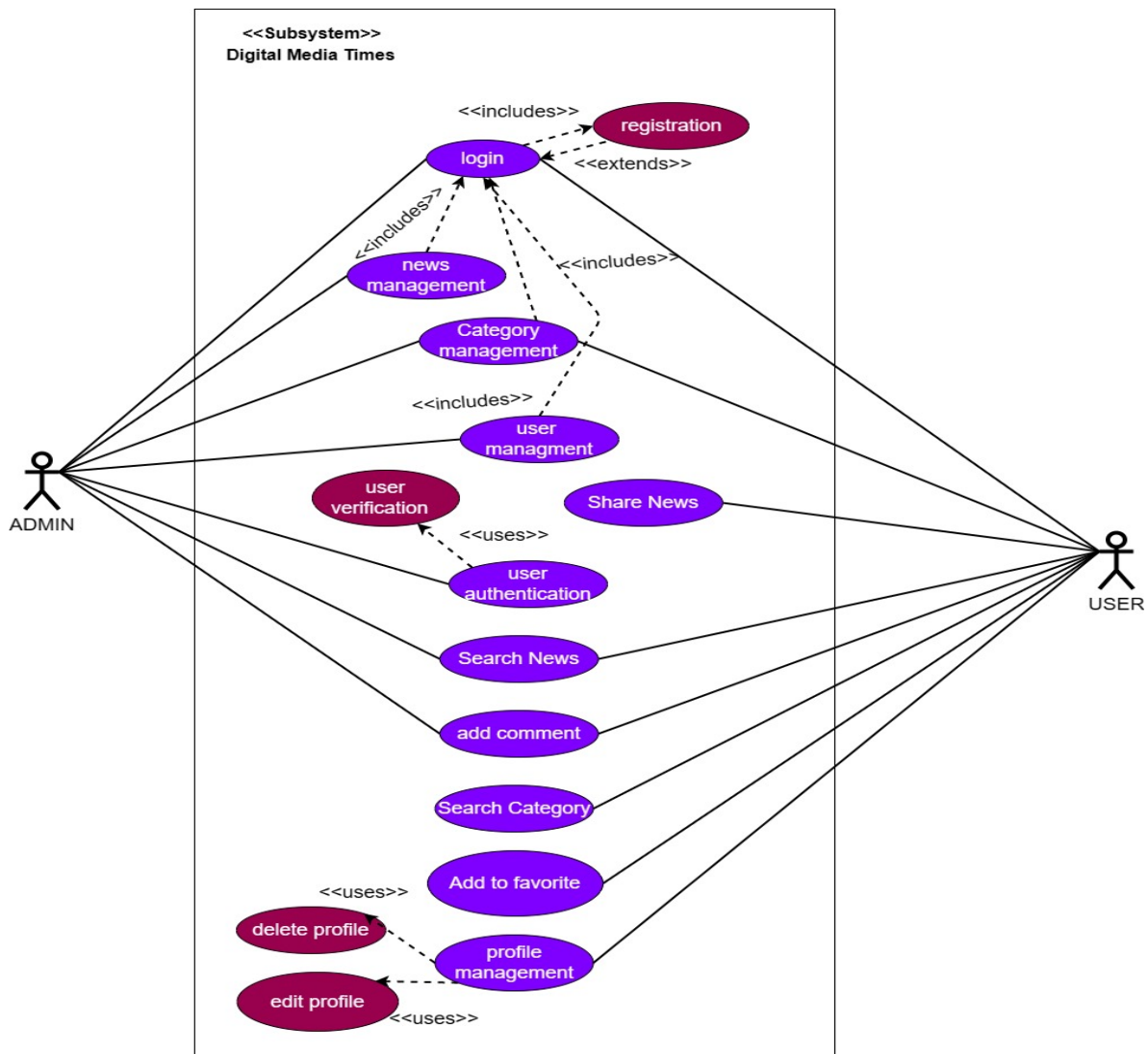


Figure 2 Use Case Diagram

## 4. Design

### 4.1 Use Case Scenarios

Use case Id	UC001
Use case Title	Users Login
Actor	Admin, User
Description	User can login into system by their user id and password
Pre-condition	User must have registered with system.
Post-condition	After successful login user must be redirect to the it's respective dashboard.
Basic Flow	User will open its login page and enter user Id and password field and click on login button. If both are correct then user will redirect to dashboard otherwise system will give error

Table 7: Use Case Scenarios for User Login

Use case Id	UC002
Use case Title	Digital Media Times
Actor	Admin
Description	Admin can login into system and can Manage whole system.
Pre-condition	Admin must have login the systems
Post-condition	After successful login Admin can manage user, news activity, category activity, profile, app settings.
Basic Flow	Admin will login into system then click on users and perform add, remove and edit operations.

Table 8 : Use Case Scenarios for Admin Login

## 4.2 Diagrams

### 4.2.1 Class Diagrams

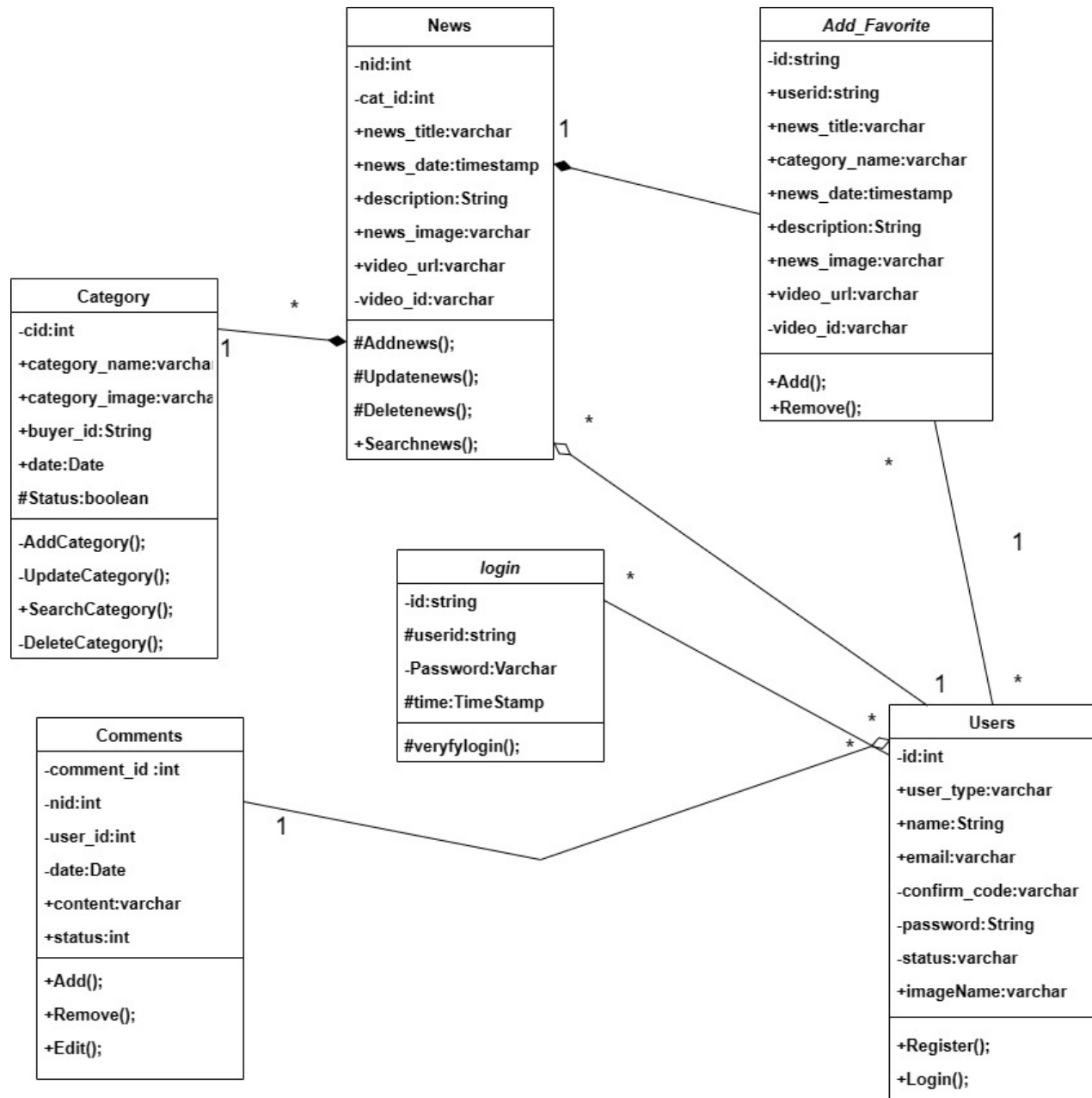


Figure 3 : Class Diagram Of Digital Media Times

#### 4.2.2 Sequence Diagram

- Admin Side

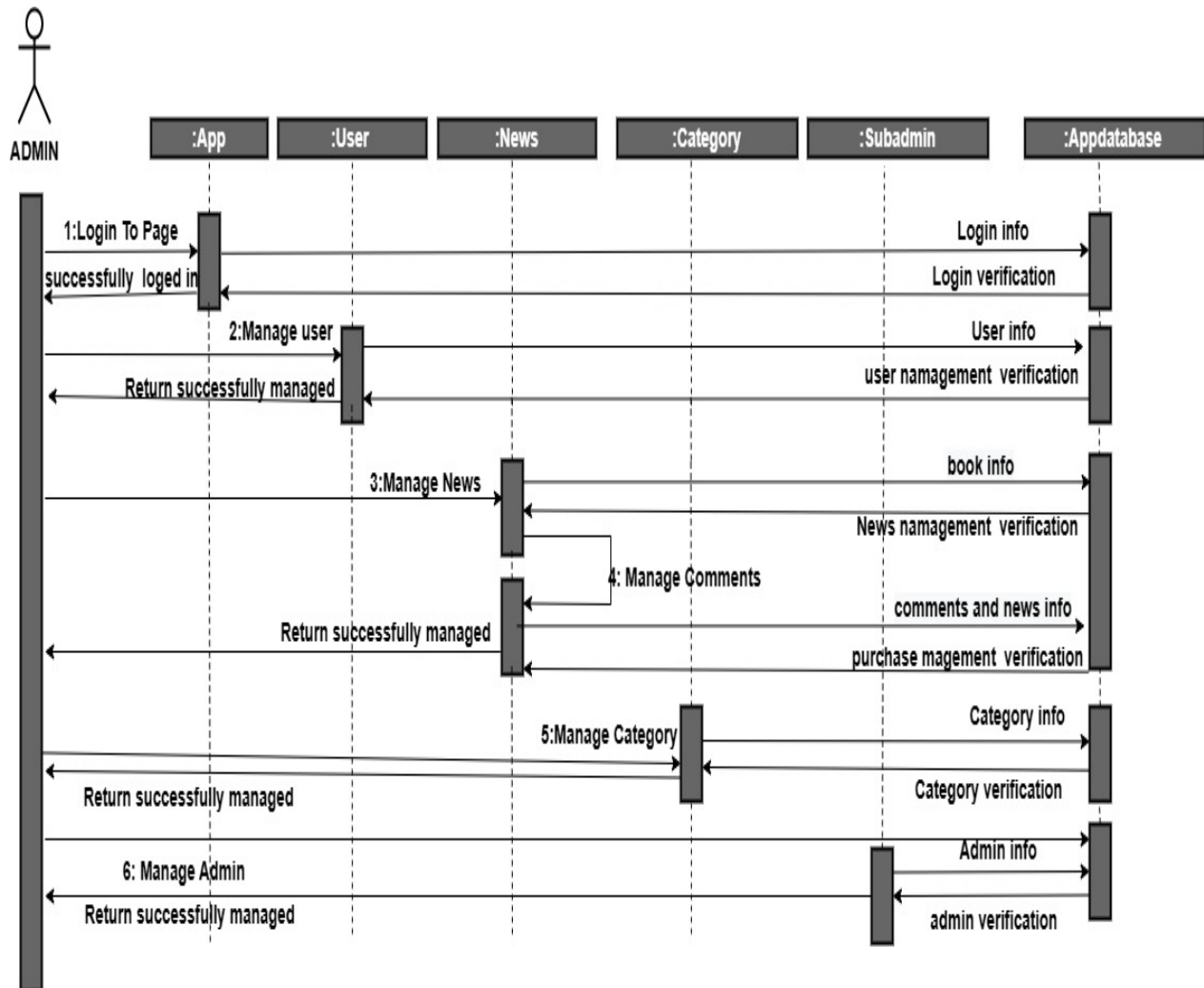


Figure 4 : Sequence Diagram Of Admin Side



## • User Side

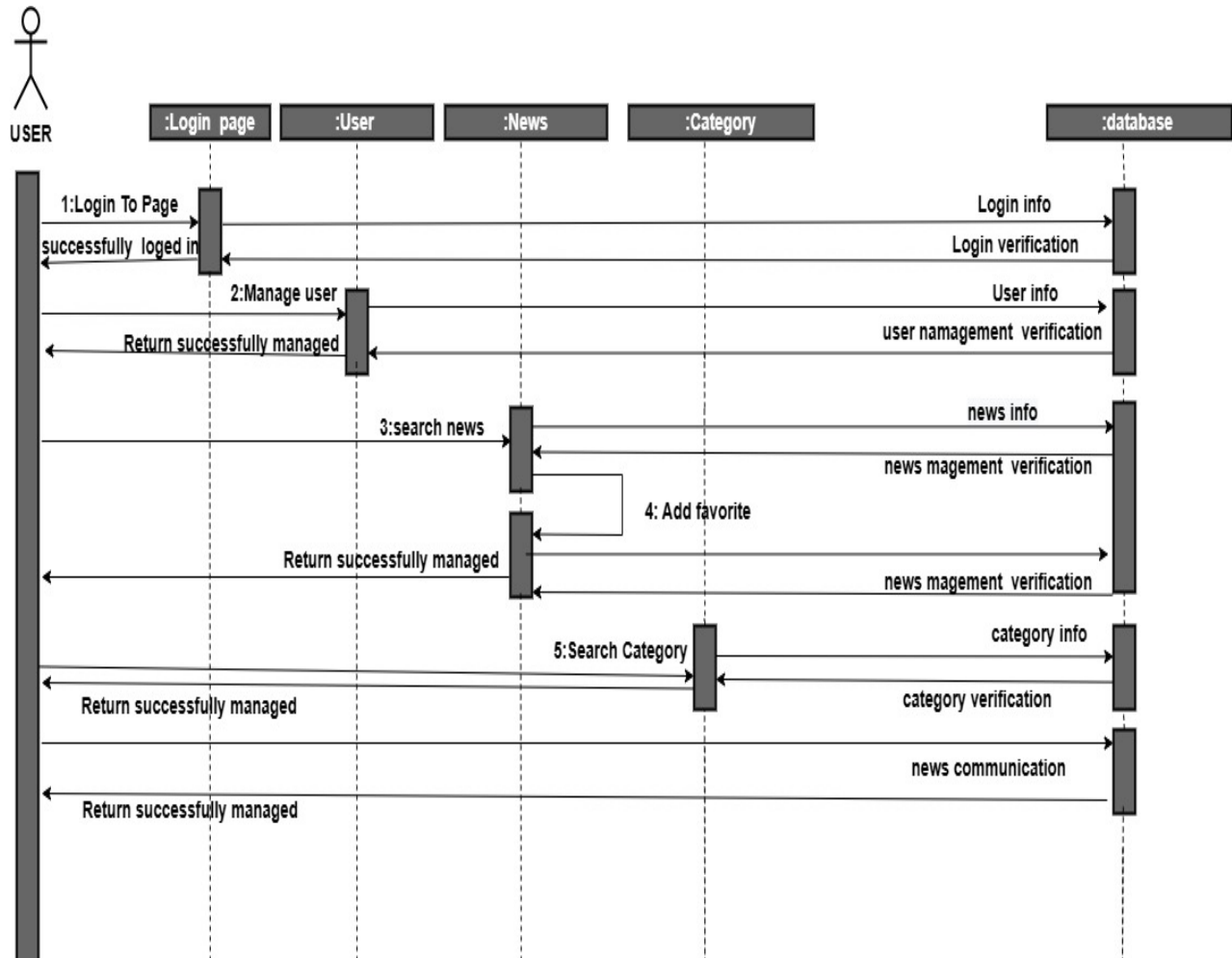


Figure 5 : Sequence Diagram Of Login Side

### 4.3 Activity Diagram

- User Side

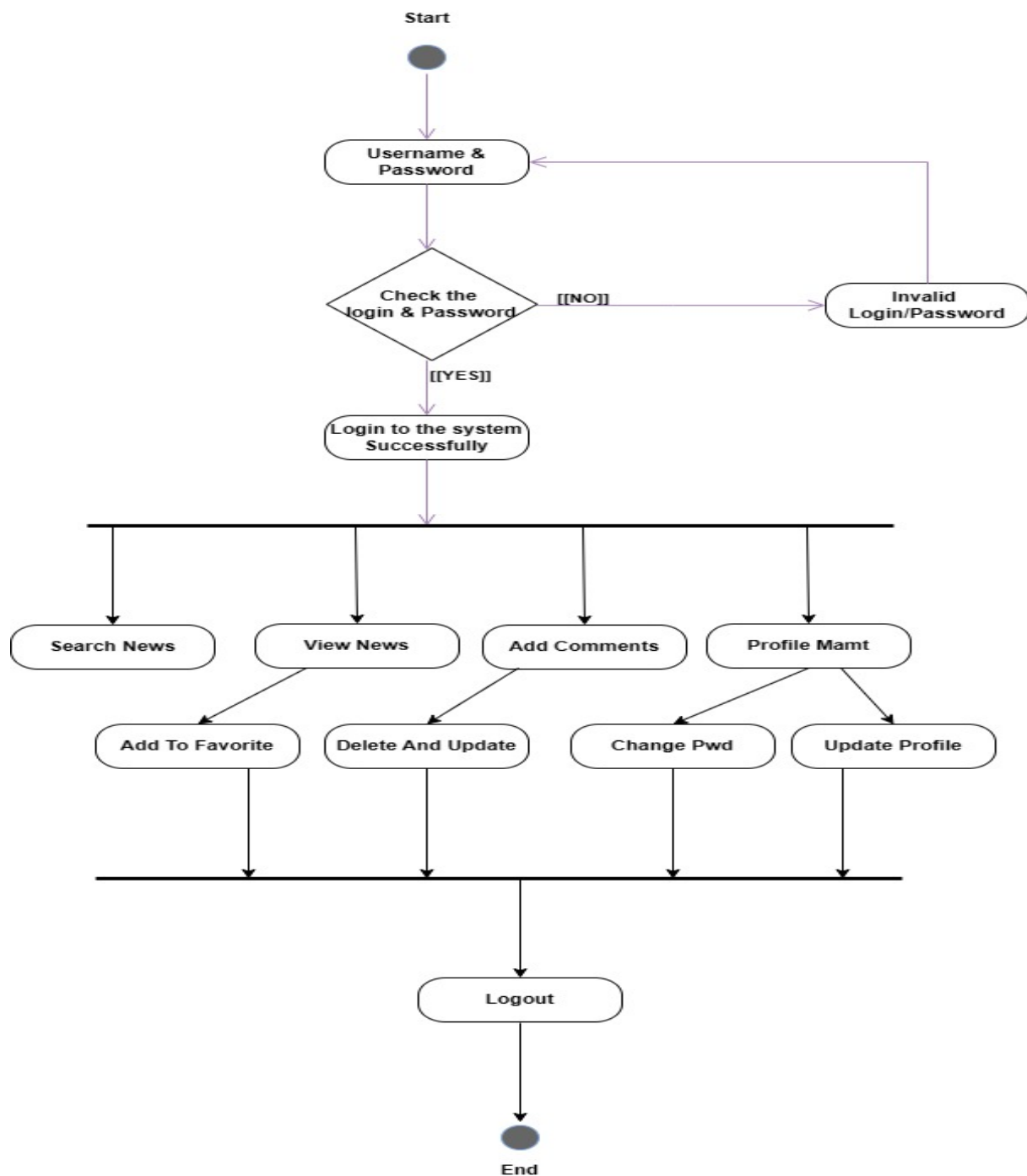


Figure 6 : Activity Diagram Of User Side

- Admin Side

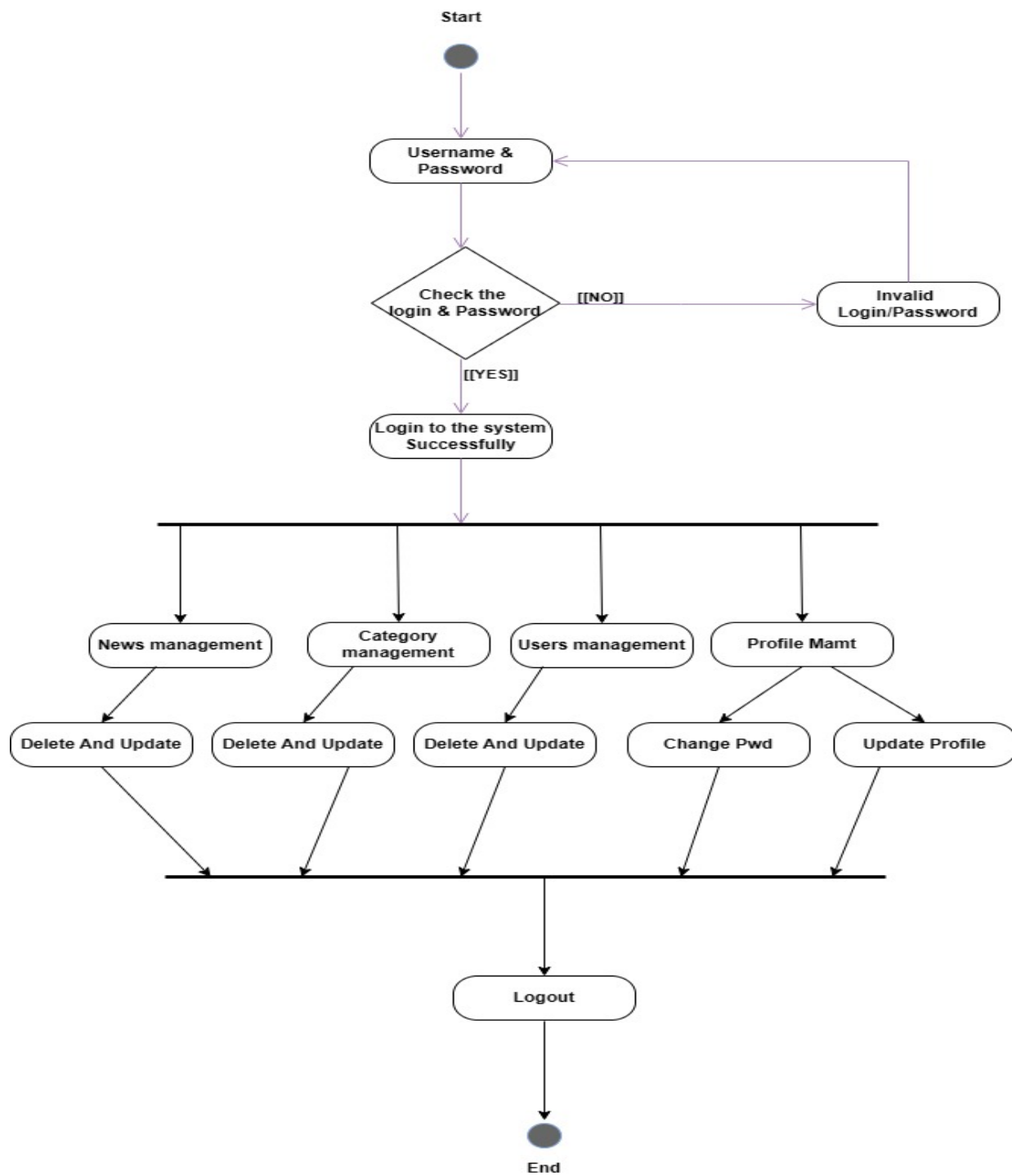


Figure 7 : Activity Diagram Of Admin Side

#### 4.5 Collaboration Diagram

- Admin Side

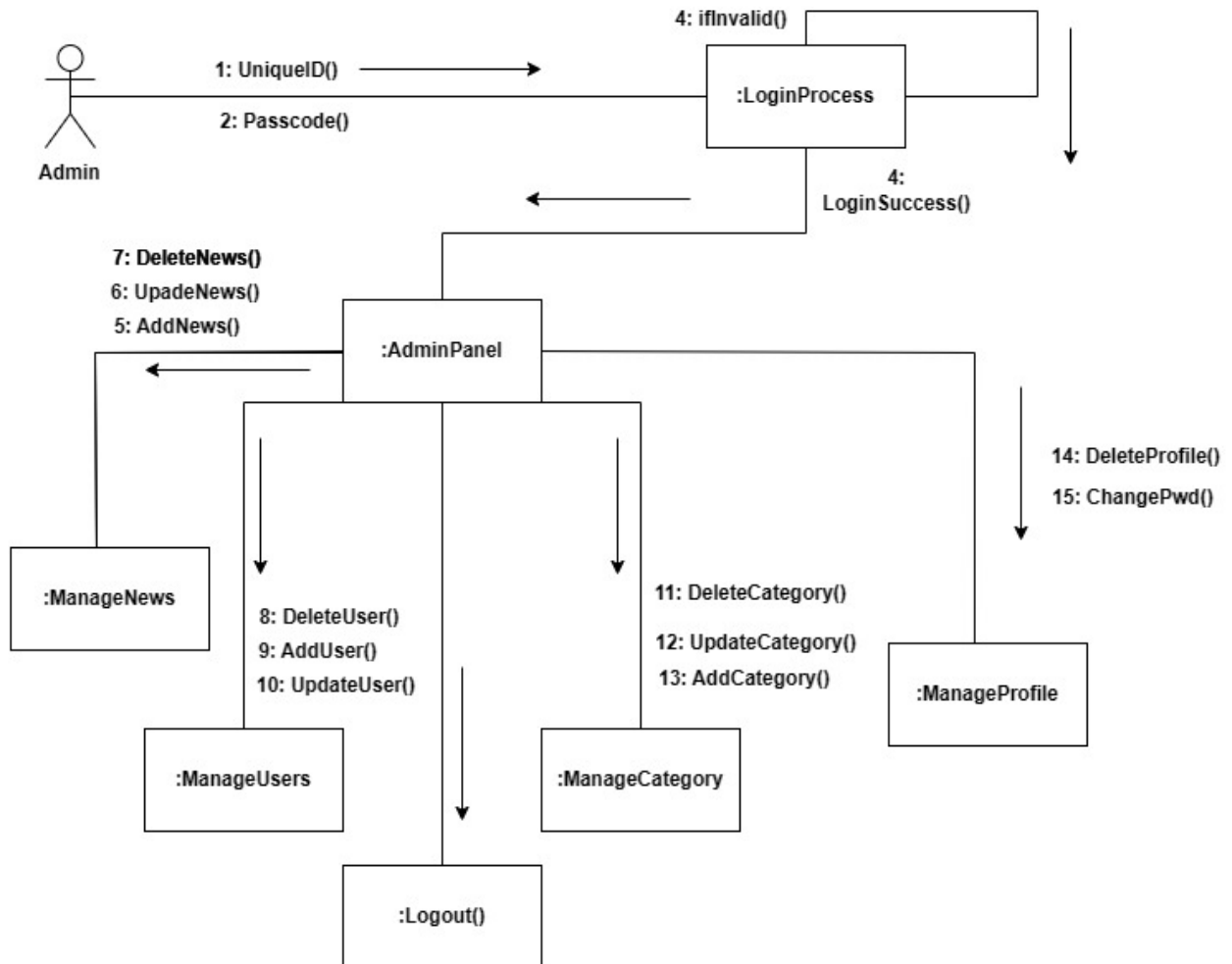


Figure 8 : Collaboration Diagram

- User Side

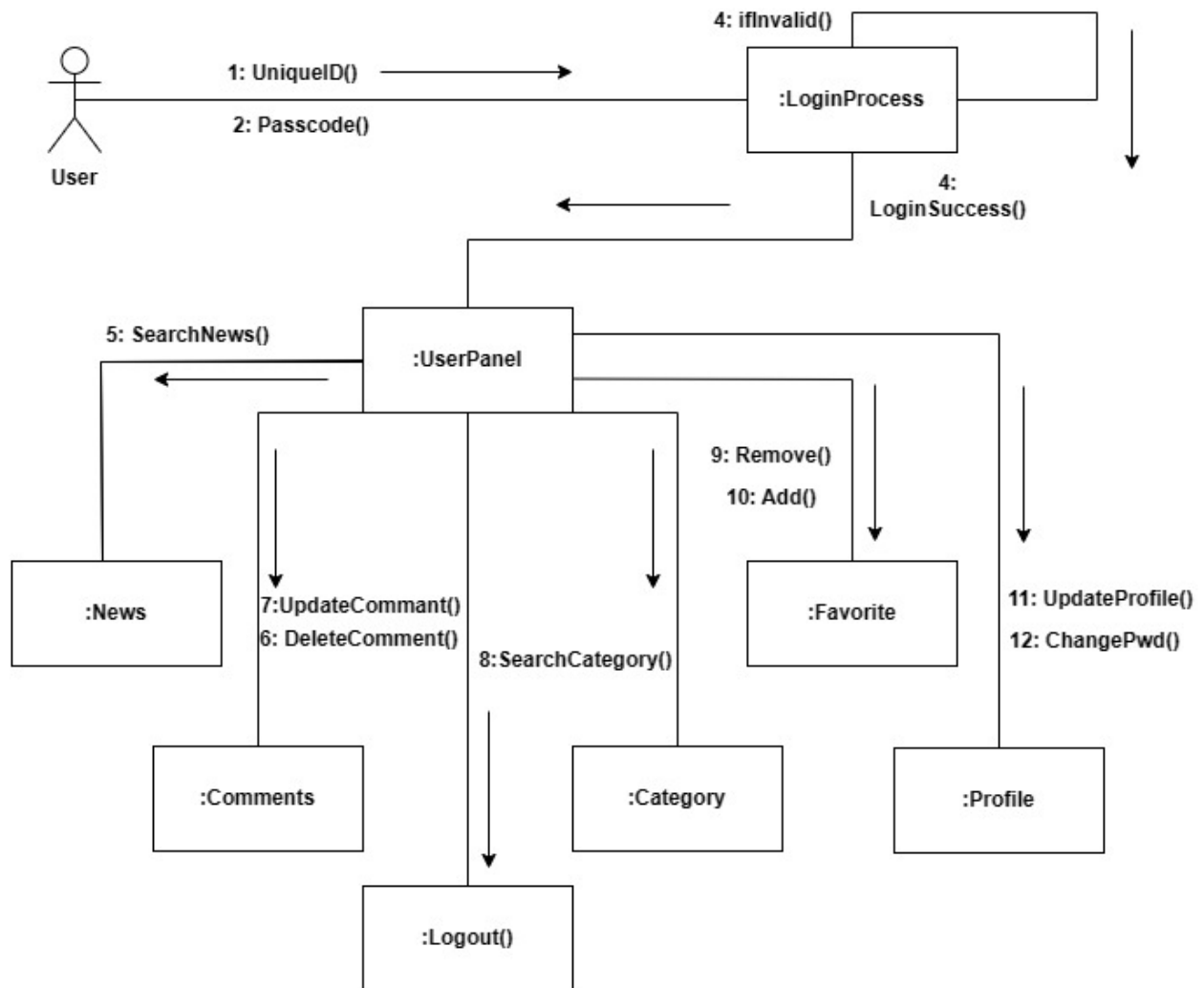


Figure 9 : Collaboration Diagram For Admin Side

#### 4.6 Package Diagram

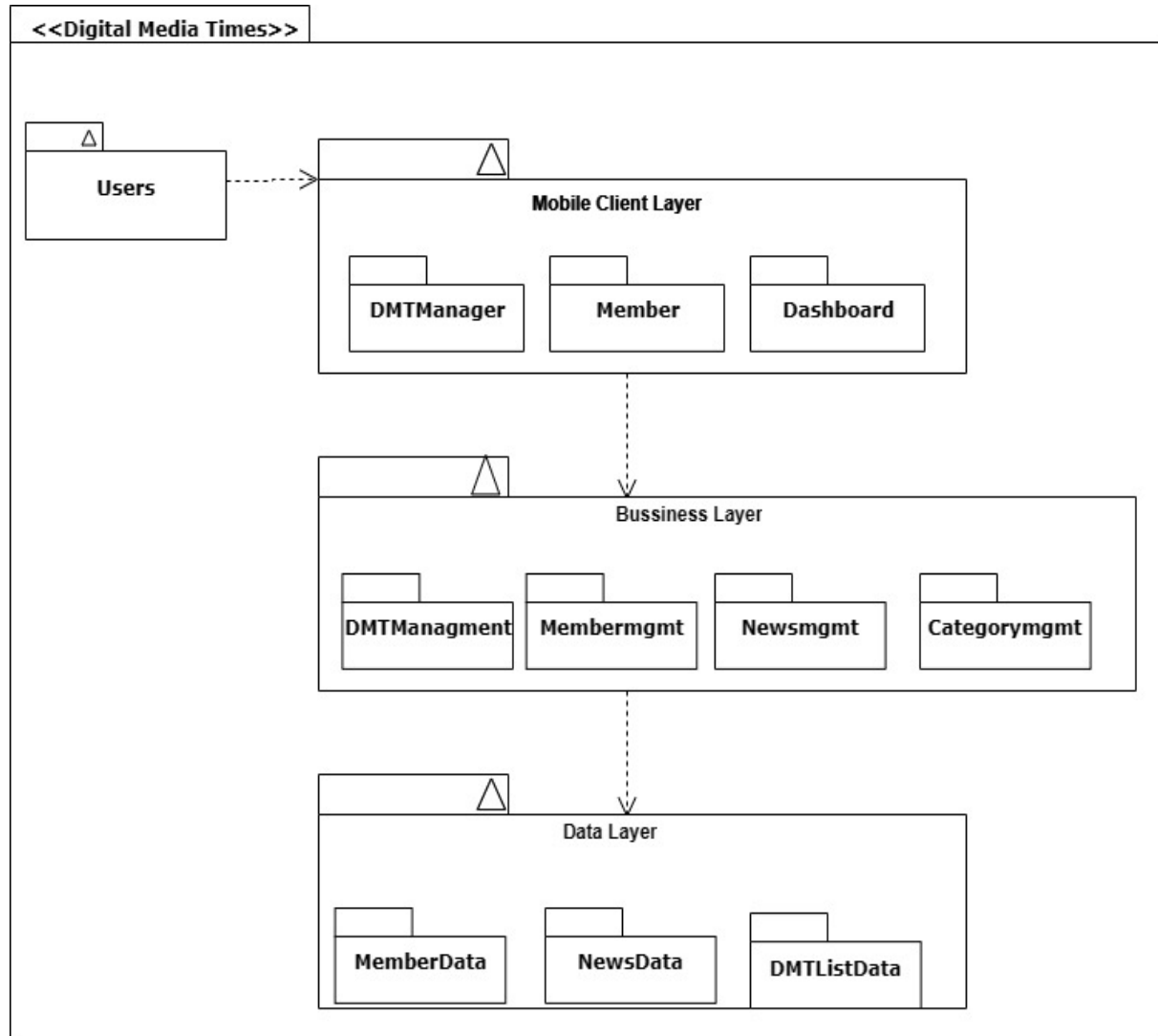


Figure 10 : Package Diagram Of Digital Media Times

#### 4.6 Deployment Diagram

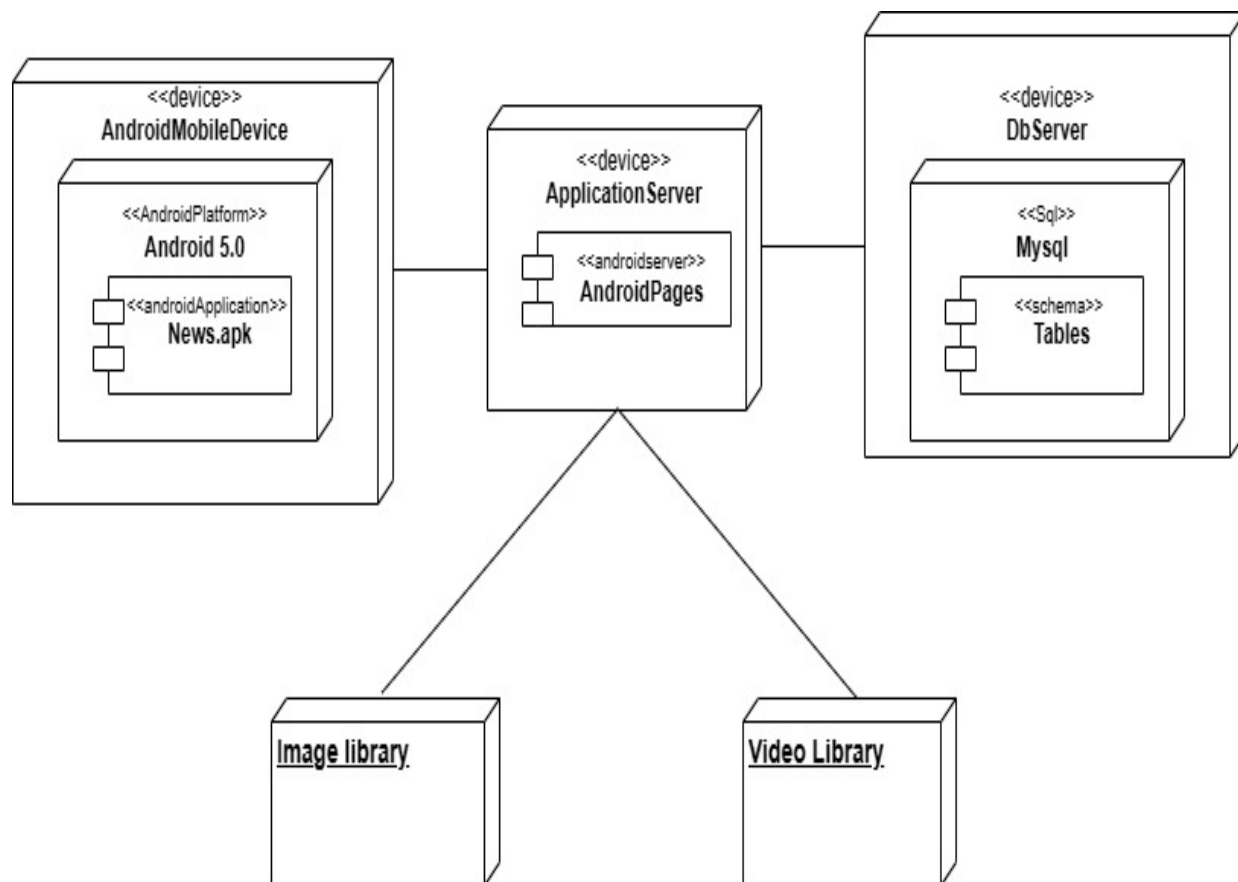


Figure 11 : Deployment Diagram Of Digital Media Times

### 4.3 Entity Relationship Diagram

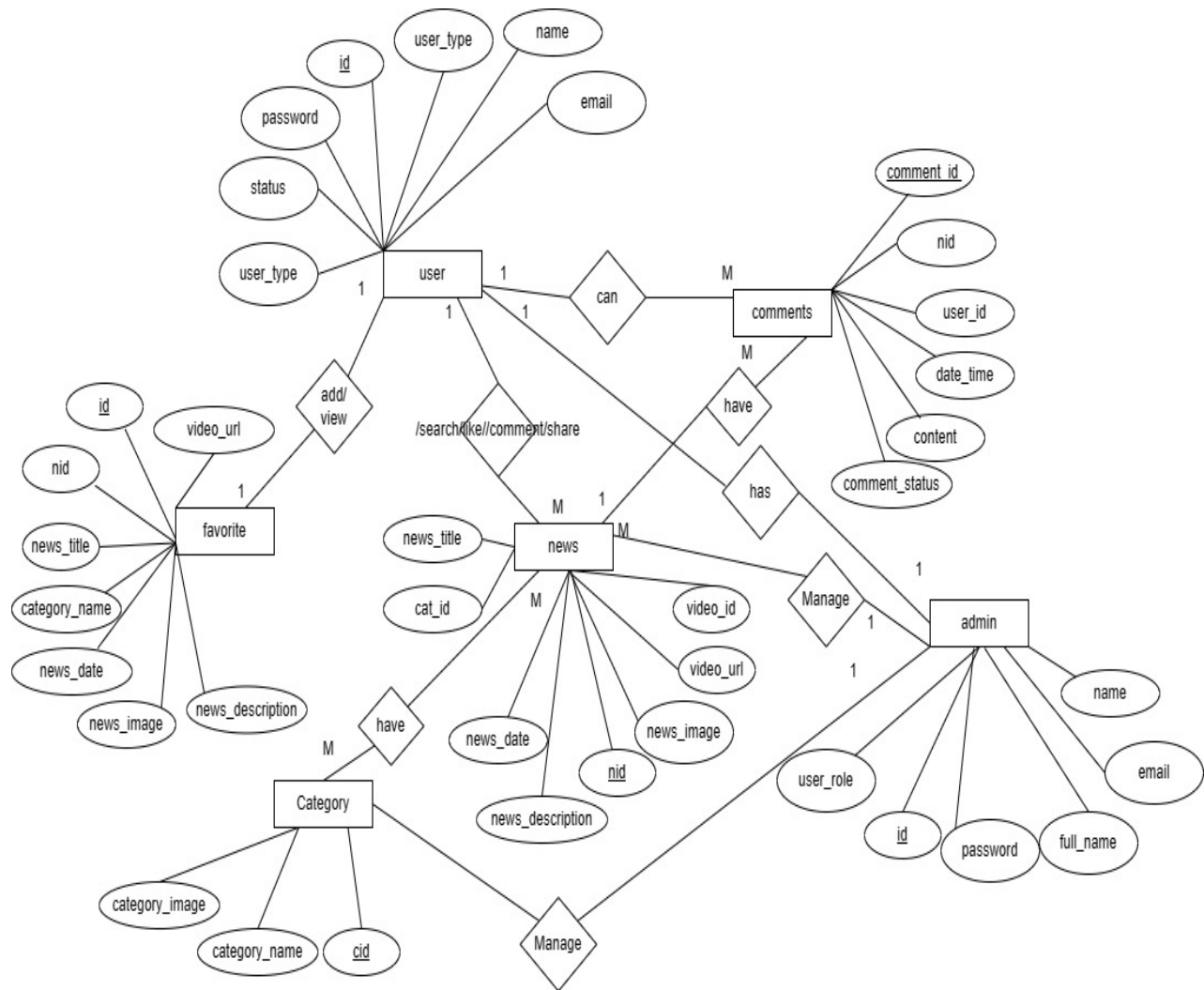


Figure 12 : E R Diagram Of Digital Media Times

### 4.4 Data Dictionary ::



**4.4.1 tbl\_users**

Fields	Constraints	Datatype(size)	Description
Id	Primary key	Int(11)	id of user
user_type	Not null	varchar(255)	User type of user
Name	Not null	varchar(255)	Name of user
Email	Not null	varchar(255)	Email id of user
Password	Not null	varchar(255)	Password of user
confirm_code	Not null	varchar(255)	Confirm code of user
Status	Not null	varchar(255)	Status of user
imageName	Not null	varchar(255)	User profile image

Table 9 : Users Table

**4.4.2 tbl\_admin**

Fields	Constraints	Datatype(size)	Description
Id	Primary key	Int(11)	id of admin
Username	Not null	varchar(255)	Name of admin
Email	Not null	varchar(255)	Email id of admin
Password	Not null	varchar(255)	Password of admin
full_name	Not null	varchar(255)	Full name of admin
user_role	Not null	varchar(255)	role of user

Table 10 : Admin Table

**4.4.3 tbl\_category**

Fields	Constraints	Datatype(size)	Description
cid	Primary key	Int(11)	id of category
category_name	Not null	varchar(255)	Name of category
category_image	Not null	varchar(255)	Image of category

Table 11 : Category Table

**4.4.4 tbl\_comments**

Fields	Constraints	Datatype(size)	Description
comment_id	Primary key	Int(11)	id of comment
Nid	Foreign key	Int(11)	News id
user_id	Foreign key	Int(11)	User id
date_time	Not null	timestamp	Time of comment
Content	Not null	varchar(255)	Description of comment
comment_status	Not null	int(11)	Commentstatu

Table 12 : Comments Table

**4.4.5 tbl\_news**

Fields	Constraints	Datatype(size)	Description
nid	Primary key	Int(11)	id of news
cat_id	Foreign key	Int(11)	Category id
news_title	Not null	varchar(255)	Store news title
news_date	Not null	timestamp	Store news date
news_description	Not null	varchar(255)	Store news description
news_image	Not null	varchar(255)	Store news image
video_url	Not null	varchar(255)	Store news video url
video_id	Not null	varchar(255)	Store news video id

Table 13 : News Table

**4.4.6 tbl\_news\_gallery**

Fields	Constraints	Datatype(size)	Description
Id	Primary key	Int(11)	id of newsgallery
Nid	Foreign key	Int(11)	id of news
Image_name	Not null	varchar(255)	Image of news

Table 14 : Gallery Table

**4.4.7 tbl\_favorite**

Fields	Constraints	Datatype(size)	Description
Id	Primary key	Int(11)	id of favorite news
Nid	Not null	varchar(255)	Store news id
news_title	Not null	varchar(255)	Store news title
category_name	Not null	varchar(255)	Store news category
news_date	Not null	varchar(255)	Store news date
news_image	Not null	varchar(255)	Store news image
news_description	Not null	varchar(255)	Store news description
content_type	Not null	varchar(255)	Store content_type
video_url	Not null	varchar(255)	Store news video url
video_id	Not null	varchar(255)	Store news video id
comments_count	Not null	varchar(255)	Store news comment count

Table 15 : Favorite Table