ABSTRACT

When in 3rd Year we were told to build a Minor-Project, the first thing which into my mind is to build an application which we use in our day-to-day lives, like Social Media Application. I always use them and wandered about their whole system works, like so many people use them. So I decided to build one.

Social Media is an Application which includes saving our life moments to the internet & sharing it to the world in the form of post and statuses. It makes people to connect to the world, like what whom is doing & making them to communicate over the internet. Allows authorized users to react & comment on their posts. Providing Saving some valuable posts which holds some value to us. We also can see what was going on all over the trending. It allows us to people connect to the ones they decided, and to control who are allowed to see our posts.

INTRODUCTION TO TECHNOLOGIES USED

(Tech-Stack)

The technologies which we used in building the "Social Media" web application are as follows:

1. HTML
2. CSS
3. JavaScript
4. React
5. NodeJS
6. ExpressJS
7. MongoDB

Introduction to Social Media Project

"Social Media" website is a fully-flashed application. It is a way to interact with family and friends. It provides the power to connect & share information to everyone on the earth, or with a large group of people/community simultaneously. It also enables users to send messages to their friends over the internet.

The feature which we include in our Social Media Project are as follow:

- ➢ Chatting
- ➢ Follow/Unfollow
- ➢ Block user Account
- ➢ Upload images and videos
- ➢ Fetching images and videos in sort of time of following users only.
- ➢ Search user Accounts
- ➢ Trending posts in accordance to most liked/commented.
- ➢ Like and commenting on photos

The main feature of the website is that is user friendly, fast & formal.

Other pages that the website will have been included are:

- ➢ Landing Page
- ➢ Home Page
- ➢ Trending
- ➢ Search Accounts
- ➢ User Profile Page
- ➢ Chat
- ➢ Settings

System Requirements

Hardware & Software Requirements

Hardware Requirements of the Software

Processor   :   Intel i3 or Later

RAM   :   4 GB or More

Hard disk   :   50GB or more

Monitor   :   Any Compatible Monitor

Keyboard & Mouse   :   Any QWERTY Keyboard and compatible Mouse

Software Requirements are as follows

Front-End   :   HTML, CSS, JavaScript, Bootstrap, ReactJS

Backend   :   ExpressJS, NodeJS

Database   :   MongoDB

IDE   :   VS Code

Web-Browser   :   Mozilla Firefox, Google Chrome, Microsoft Edge

Window   :   Linux, Windows 7 & later supporting NodeJS.

Data Modelling Description

A data model is the conceptual representation of the data structures of that are required by a database. It defines primary data objects, composition, of each data object and attributes of the project, relationships between each object and other object and between objects and processes.

List of Tables

1. Users
2. Post
3. Comments
4. Likes
5. Saved
6. Following/Friends

1. Users

Name	Type
Uid	Varchar(255)
Username	Varchar(255)
Email	Varchar(255)
password	Varchar(255)

2. Post

Name	Type
PID	Varchar(255)
Uid	Varchar(255)
File	Boolean
Desc	Varchar(255)
Date-time	Datetime(255)

3. Comments

Name	Type
Pid	Varchar(255)
Uid	Varchar(255)
cid	Datetime
Is-reply	Boolean
Reply-to	Boolean
Comment	Varchar
time	datetime

4. Likes

Name	Type
Pid	Varchar(255)
Users	Varchar(255)
Total	Varchar(255)

5. Saved

Name	Type
Sid	Text
Pid	Text
datetime	time

6. Following/Friends

Name	Type
First Uid	Varchar(255)
Second Uid	Varchar(255)
accepted	Boolean

7. Messages

Name	Type
From	Varchar(255)
To	Varchar(255)
Time	Varchar(255)
Message	Varchar(255)

Main Description of the module

All the above mentioned data are stored in the backend and will be used by the designed algorithms.
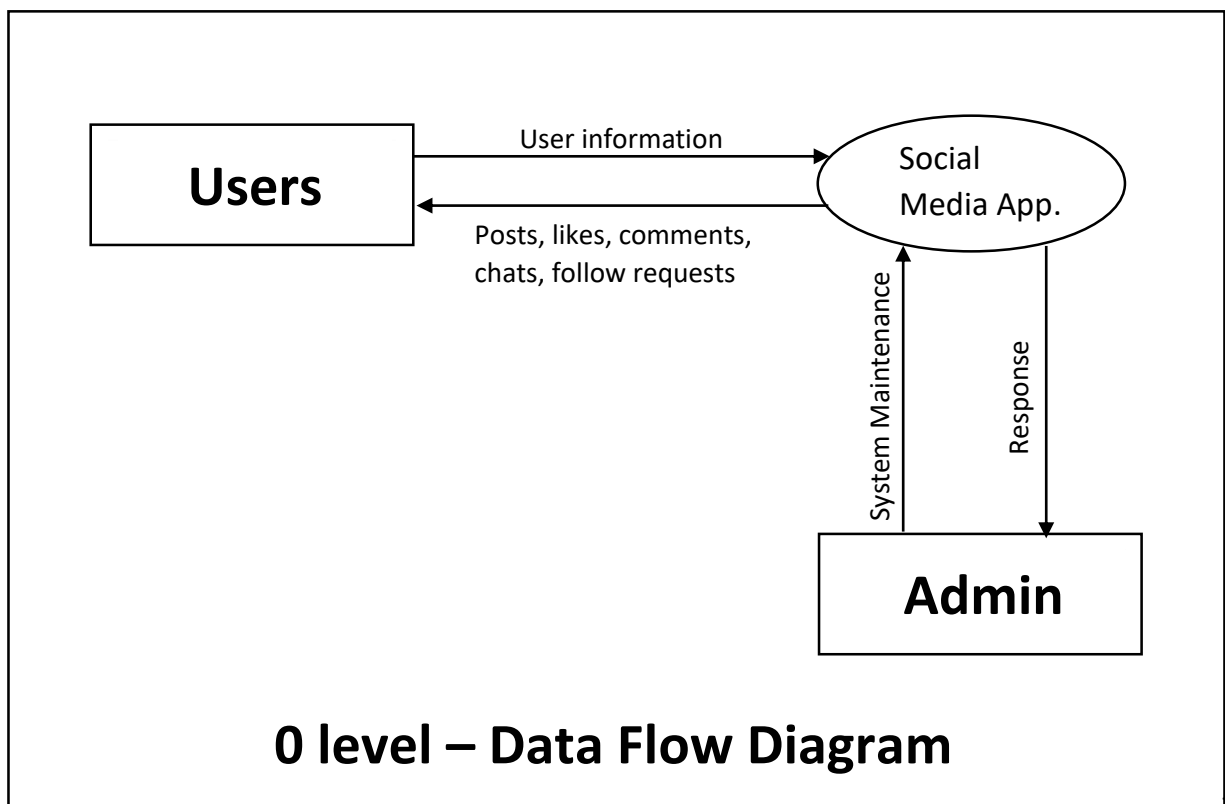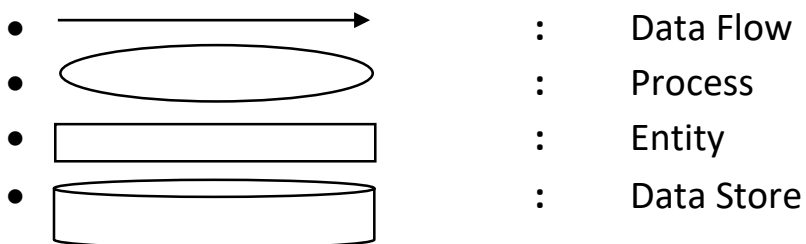
ER-Diagram

An entity-relationship diagram (E-R diagram) is an abstract and conceptual representation of data. Entity-relationship modelling is a database modelling used to provide a type of conceptual schema or semantic data model rule of a system.
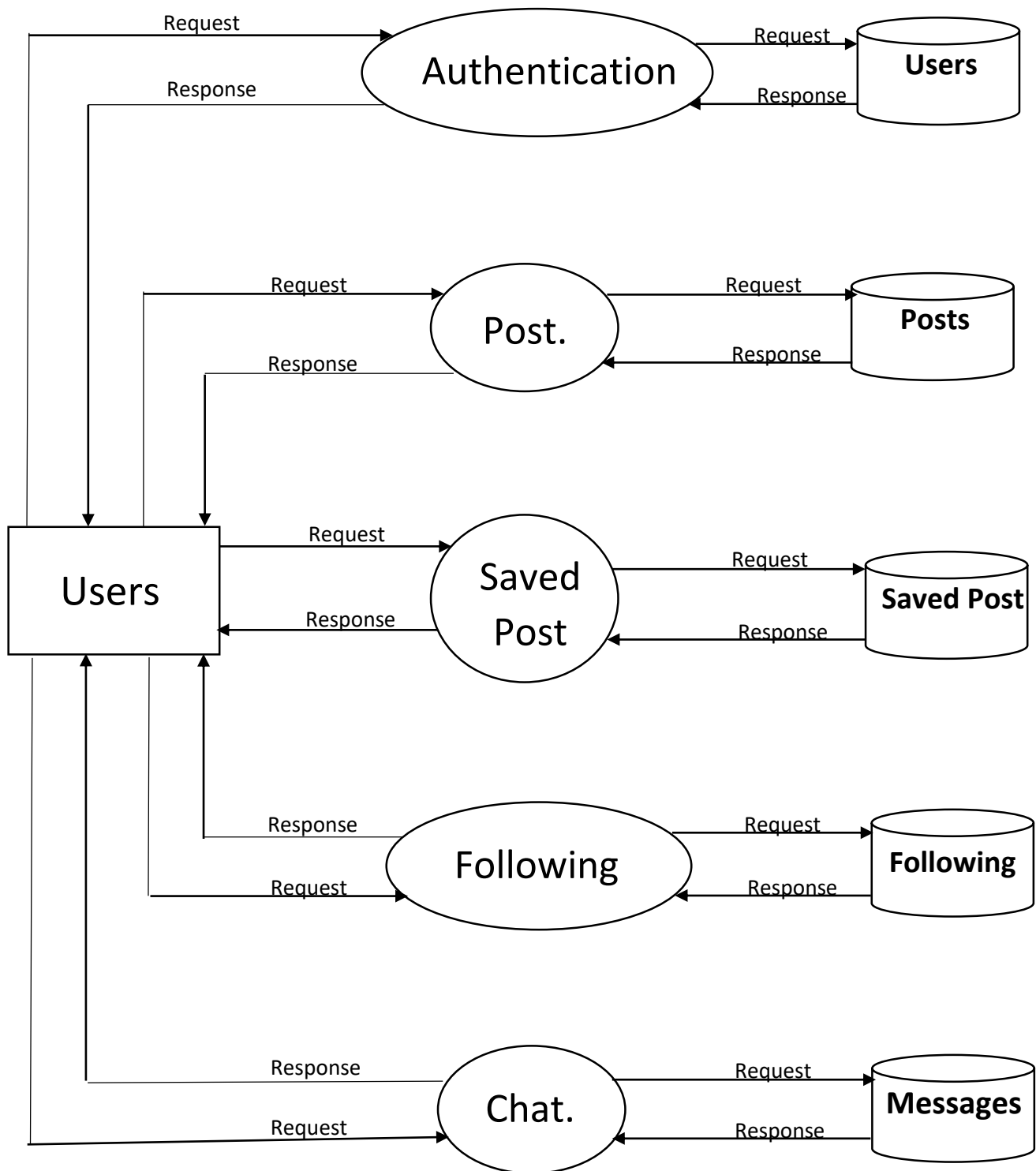
An entity may be defined as a thing which recognized as being capable of independent existence and which can be uniquely identified.

Data Flow Diagram

Data flow diagrams (DFD) are part of a structed model in the development of software. They are a graphical technique that depicts information flow and the transforms that are applied as data move from input to output. Basically, the function of DFDs is to show the user a graphical analysis of a software system. It is like a flowchart, except DFDs show the flow of data throughout the system.

Data Flow Diagram Symbols

- ───────► : Data Flow
- ⬭ : Process
- ▭ : Entity
- ⬭ : Data Store

Users ──User information──► (Social Media App.)

◄── Posts, likes, comments, chats, follow requests

System Maintenance | Response

Admin

0 level – Data Flow Diagram

1 level – Data Flow Diagram

List of limitations which is available in the Social Networking Site:

- Excel export has not been developed for Users, Friends due to some criticality.

- The transactions are executed in off-line mode, hence on-line data for Posts, Shares capture and modification is not possible.

- Off-line reports of Users, Photos, Posts cannot be generated due to batch mode execution.

Conclusion of the Project Social Networking Site:

Our project is only a humble venture to satisfy the needs to manage their project work. Several user friendly coding have also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the school. The objective of software planning is to provide a frame work that enables the manger to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.