



# CHANDIGARH UNIVERSITY

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## MINOR PROJECT

### Rubrics II

## TITLE: SOCIAL NETWORKING SITE

### MCA CC & DEVOPS

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## **I. Abstract**

Social networking sites (SNSs) are online communities where users can make public profiles of themselves, communicate with friends in real life, and connect with others who share their interests.

The largest worldwide information platform available on the Internet nowadays is social media. As more individuals spend time online socialising, they have grown to be an essential part of our daily life. As they have become more commonplace in our lives, they have seen an increase in their collective fortunes. These technologies have ingrained themselves deeply into popular culture. Making online social networks, nevertheless, poses privacy issues with potential abuse.

## **II. Introduction of the Project:**

A social networking service includes each user (often a profile), and it focuses on websites that enable communication or relationships between real-life people with comparable interests, hobbies, backgrounds, and connections. a symbol of the interpersonal relationships and myriad other services More social networking platforms appear, offering consumers online communication tools like email and instant messaging.

Online connectivity and technology are required for online social networking. Smartphones, tablets, and PCs can all be used by users to browse interactive websites. The majority of social networking sites, which are found at the bottom of search results, organise, store, and retrieve data using sophisticated programming languages like Python.

The major goal of this service is to strengthen and enhance your relationships with your friends. By reaching out to people you have never met before, the social network can assist you in maintaining current relationships and establishing new ones.

### **III. Client Identification and Recognition of Need**

The particular requirements of a social networking site will change depending on its target audience, goal, and features. However, by being aware of the client's requirements, the developers may design a website that lives up to their expectations and accomplishes their objectives.

Here are some examples of specific needs that a social networking site can address:

- Connecting with friends and family
- Finding and making new friends
- Sharing photos and videos
- Networking with professionals
- Learning new things
- Finding support groups
- Getting involved in social causes
- Promoting businesses or products

## **IV. Problem Statement**

This project seeks to provide an online social media platform experience for users in order to make new friends or connection all over the world. It is easy to connect with people with the help of internet. Physical barriers to communication have been reduced by recent technology advancements, such as smartphones, computers, and the Internet, which enable people to interact via a worldwide network. Social networking is the assembling of people into certain groups, such as neighbourhood subdivisions or small rural communities. Even if it is feasible to socialise in person, particularly at work, at colleges, and in high schools, it is more common online. The rivalry from new and upcoming social media platforms is getting stronger for the established platforms. These new platforms are luring consumers with creative marketing strategies while providing greater features and functionality.

### **Solution:**

The social media platform should put its attention on giving users a distinctive and diverse experience. Among the characteristics that could be present are:

- A significant emphasis on privacy and security
- A focus on community building and involvement
- A commitment to social responsibility
- A focus on user experience and design

### **Benefits:**

By resolving this issue, the social media platform will be able to:

- Increase engagement and activity on the platform
- Enhance user experience and make platform more enjoyable to use
- Establish a strong brand reputation and become a leader in the social media industry

## **V. Feasibility Study**

A feasibility study is conducted to determine whether the project will, upon completion, fulfil the objectives of the organisation in relation to the work, effort, and time invested in it. A feasibility study enables the developer to predict the project's usefulness and potential future.

A system proposal's workability, which includes the influence on the organisation, capacity to satisfy user needs, and efficient use of resources, is the basis for a feasibility study. As a result, before a new application is accepted for development, it often undergoes a feasibility assessment.

Social networking sites, which have hundreds of millions of monthly members, have become the largest application platforms in the world as a result of extending their API (Application Programme Interface) to outside developers. In August 2009, there were 122 million visitors to Facebook, 56 million to MySpace, and 24 million to Twitter, according to a site comparison of the three largest SNSs (Compete 2009).

Such a large user base presents an infinite number of business obstacles and opportunities. In a dramatic shift, those application developers on the war of social networking site platforms become business owners. Therefore, the first duty for the prospective "entrepreneur" is to locate, investigate, and then choose an alluring business opportunity. Returning to the developers' perspective, an opportunity could signify a good idea for creating a specific application that could meet a need from users and merits spending money or effort to develop.

The OETHL feasibility study stands for feasibility studies in five different fields with regard to operational, economic, technical, human factors and legal respectively. We now describe each of the five categories in turn.

The degree to which the proposed application fits with the social context, such as the multicultural culture and buddy network, is the main emphasis of the operational feasibility study. The goal of the economic feasibility evaluation is to evaluate the organization's ability to reap positive economic advantages from the proposed application by identifying all anticipated costs and benefits. Understanding the developers' current technological resources and how well they fit the anticipated requirements



of the proposed application is the main goal of the technical feasibility study. The end users, who are the most crucial elements of a successful programme installation, are the focus of the human factors feasibility assessment.

### **The OETHL feasibility study of the Social Networking website**

<b>Operational</b>	<ul style="list-style-type: none"> <li>• Is their sufficient support for the user?</li> <li>• Give users a modern reflection, flicking and glassy experience.</li> </ul>
<b>Economical</b>	<ul style="list-style-type: none"> <li>• Use the social networks photo resources, save own server space costs, even for free.</li> <li>• The cost of hardware and software</li> </ul>
<b>Technical</b>	<ul style="list-style-type: none"> <li>• Does the existing technologies sufficient for the suggested one.</li> <li>• Can the system expand if developed?</li> </ul>
<b>Human Factor</b>	<ul style="list-style-type: none"> <li>• Will the proposed system cause harm?</li> <li>• The developer is capable of web 2.0 techniques.</li> </ul>
<b>Legal</b>	<ul style="list-style-type: none"> <li>• No patent or copyright violations.</li> <li>• No privacy policy violations.</li> </ul>

## **VI. Objectives**

The Objective of this project is to establish a suitable technique for SNS (social networking sites) application development. As a result, it can be used as a manual in the future development work of SNS application developers and potential SNS application developers.

Developers are more likely to finish the applications for SNSs with less time, less money, and more interactive aspects if they use this methodology for implementation. This is possible because the technique appropriately addresses the elements of both the system development life cycle and social networking sites.

Here are some of the Objectives of Social Networking site project:

- To connect people: Any social networking website's main goal is to bring people together. By enabling users to make profiles, interact with friends, and exchange material, this can be accomplished.
- To build Community: Websites for social networking can also be used to foster community. Users can be encouraged to join in conversations and activities by setting up groups and forums.
- To share Information: Information sharing on social networking platforms is possible. Posting status updates, uploading images and videos, and linking to articles and other information are all effective ways to achieve this.
- To promote Business: Social media platforms can be used to advertise businesses. Create pages for businesses, run advertisements, and interact with users to do this.
- To raise awareness: Social media platforms can also be utilised to spread awareness of significant topics. Sharing news stories, videos, and other materials on the problem can do this.

## **VII. Project Identification**

An online or social networking community created to make social life more-lively and exciting is the social networking website. By connecting with people you've never met before and sharing films and dispatches, the social network can help you keep your relationships strong. The most important global information platform currently available on the Internet is social media. They have evolved into a need in our day-to-day activities as people spend more time online interacting. They have seen how their cooperative fortunes have improved as they have become more commonplace in our lives.

These technologies have ingrained themselves deeply into popular culture. However, building online social networks raises concerns about protecting businesses from potential exploitation. Product seeks to provide a reputable web-based social networking platform.

A well-established web-based social networking system is what the product aims to give. This outlines the scope, functions, needs, and viability of a networking system. This project intends to create a website that facilitates network communication and functions very similarly to social networking sites like Facebook, Orkut, etc.

## **VIII. Task Identification**

### **System Design of Social Networking Site:**

This stage involves creating a logical system that satisfies the specifications. In the design phase of software development, the client's needs are transformed into a logically sound solution. In most cases, design is carried out in the following two steps:

#### **1. Primary Design Phase:**

The system is designed at the block level at this phase. The blocks are made using the analysis carried out during the problem identification stage. Different blocks are made for various purposes, with a focus on reducing information flow between blocks. As a result, those activities that demand more interaction are grouped together in a block.

#### **2. Secondary Design Phase:**

In the secondary phase the detailed design of every block is performed. The general tasks involved in the design process are the following:

- Design various blocks for overall system processes.
- Design smaller, compact and workable modules in each block.
- Design various database structures.
- Specify details of programs to achieve desired functionality.
- Design the form of inputs, and outputs of the system.
- Perform documentation of the design.
- System reviews.

### **Organisation of the report:**

System analysis: This includes the Project planning, feasibility study, identification of need, software and hardware requirements and the data models which consists of technical diagrams like Data flow diagram and Entity relationship diagram.

System design: System design consists of data integrity and constraints, database design and user interface design.

Coding: The coding section includes the whole project code including the comments, parameters calling/passing and validation checks. The screenshots of the system are also included here.

Testing: This section has screenshots of all the implementation i.e. user interface and their description.

Documentation: This section consists of cost estimation of the project, prerequisite for project installation and limitations of the project.

Conclusion: This includes the conclusion, future scope and further enhancements of the food ordering management system

## **IX. Software Requirement Specification:**

- Operating System: No particular OS required because Python is platform independent
- Front-end: HTML, CSS, JAVASCRIPT, BOOTSTRAP
- Back-end: Python Django, PostgreSQL
- Integrated Development Environment (IDE): Visual Studio Code

## **X. SWOT and PESTEL analysis :**

In order to build up a proper Social Networking website for a business, there must have to be some implementations of these analyses as follows:

**SWOT:** SWOT analysis is a strategic planning tool that helps organizations identify their strengths, weaknesses, opportunities, and threats.

1. **Strength(S)**- Internal attributes that are helpful to the organization to achieving its objectives. Strength includes:
  - Large and engaged user base
  - Active community
  - Diverse content
  - Effective moderation
2. **Weaknesses(W)**- Internal attributes that are harmful for the organization achieving its goals. Weakness includes:
  - Fake news and misinformation
  - Cyberbullying and harassment
  - Data privacy concerns
  - Algorithmic bias
3. **Opportunities(O)**- External factors that help the organization to achieve its aims & objectives. Opportunities includes:
  - Expansion into new markets
  - Development of new features
  - Increased monetization
  - Partnerships with other brands and organizations
4. **Threats(T)**- External factors that help the organization to achieve its aims & objectives. Threats includes:
  - Declining user engagement
  - Emergence of new social media platforms
  - Regulatory changes
  - Security breaches

**PESTEL:** PESTEL analysis is a strategic planning tool that helps organizations understand the external factors that can impact their business.

1. Political- The potential change of government, as well as the changes in the policies & priorities and the introduction of a new government initiative could be major political factors. It includes:

- Government regulations on data privacy and content moderation
- Trade restrictions on the transfer of data across borders

2. Economic- Economic factors may also be limited to the home country but as global trade continues to grow, economic difficulties in one nation would tend to have a broad impact overall. It includes:

- Economic growth and disposable income
- Inflation and currency fluctuations

3. Socio-cultural- Socio-cultural factors are those that arise from customers or probable customers. It includes:

- Changing demographics and cultural trends
- Increasing demand for mobile-friendly platforms

4. Technological- This area is all about those that are related to the uprising developments on the uses of technology.

- The rise of artificial intelligence and machine learning
- The development of new social media platforms and features

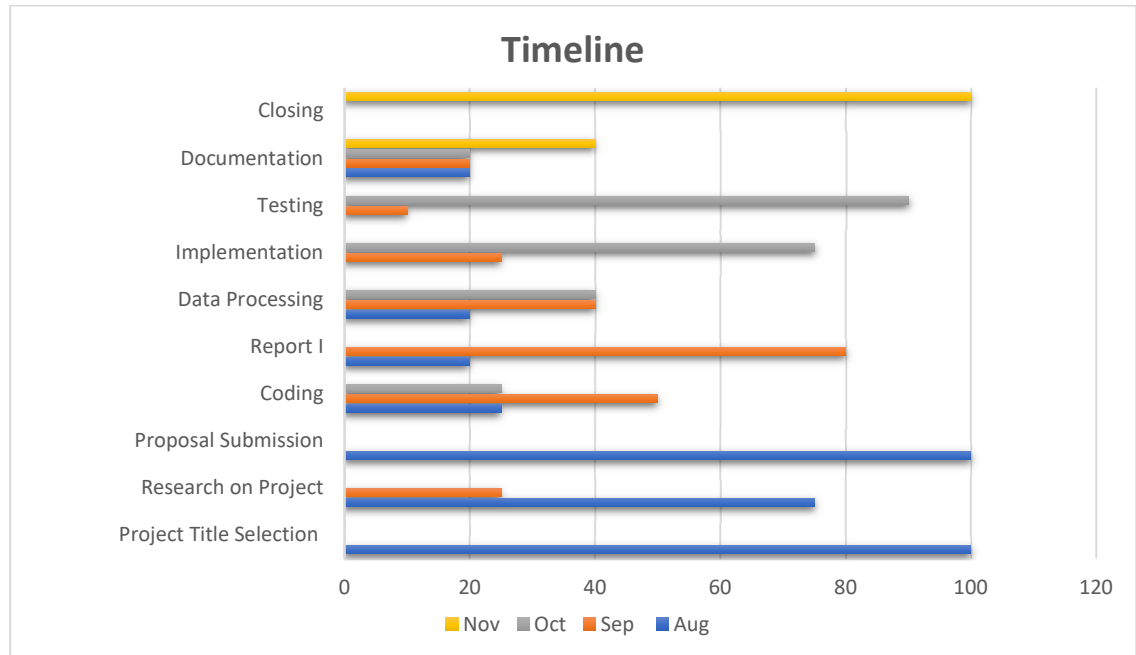
5. Legal- It is very important to take into accounts the factors arising from changes to the law. It includes:

- Data protection laws
- Copyright laws

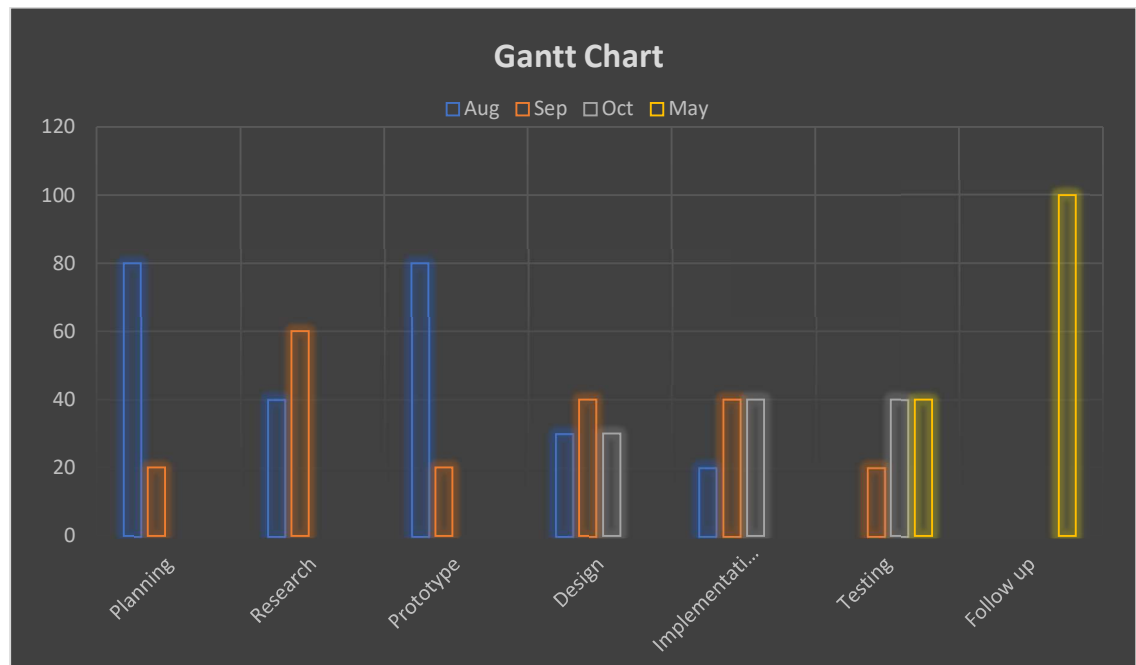
6. Environmental- The factors arising from the concerns about the natural environment, in other words the 'green' issues. It includes:

- The increasing demand for sustainable social media platforms
- The impact of social media on climate change

## XI. Timeline of the Project :



## XII. Gantt Chart of the Project:





### **XIII. Literature Review**

In the early 2000s, when people found and embraced social networking services, the Internet significantly increased in intimacy. Web-based services that allow people to create public or semi-public profiles within a constrained framework are referred to as social networking sites. List of users they have connections with, and the ability to browse and traverse both their own list of connections inside the network as well as those formed by other users. From one site to another, these relationships' nature and conditions could be different. Instead of allowing people to meet strangers, social networking websites are special because they give users the ability to express and display their social networks.

Individuals can first register for a xyz.com account. Following the submission of some personal data, like name, birthdate, gender, email address, etc. After creating a password, the new user is granted account access. On a social networking website, members can watch short-form video, talk live, post comments, share photos, and link to news or other interesting online material. The two most crucial pages of the account are home and profile. User profiles serve as their own personal brand. A modest profile photo complements the page's enormous cover image. Users are alerted of status updates and other activities, such as joining groups or becoming fans of, on the home page, commonly known as the "news feed."

Businesses can strengthen their relationships with current and potential consumers and increase word-of-mouth by using social media platforms. Particularly, social media has an impact on an organization's operations, marketing, sales, and services departments. The main commercial goals of using social media platforms are marketing, branding, and involving stakeholders. Social capital, impression management, knowledge sharing, knowledge management, and social media were the main concepts that emerged from this grouping. Business communication, which is closely tied to social presence, company performance, and the hiring process, is improved by social media activities. The cautious deployment of social media by organisations is advised by academics. Mismanagement of social media interaction may cause people to have a bad impression of you. Organisations may solicit the assistance of their devoted clients during times of distress.

## **XIV. Scope and Limitations**

### **Scope:**

A "social networking site" is a website that will be available online and that users will be able to access from their home computers. A "social networking site" is created to enable friends to contact with one another and obtain online assistance. Additionally, a "social networking site" offers chat, message, for friends, video songs and movies, audio songs, poetic images, e-books, etc., all of which are accessible from anywhere in the globe. Limited facilities are available to unregistered users, whereas registered users have access to all of the administrator's features.

In order for this project to be successful, stronger user service will come first. With time, the project will be improved to give consumers better amenities. Additionally, new work is occasionally completed. There are limits to this project. To make this initiative viable and media-competitive, more effort must be done on it in the future. The user can also start a group, search for groups, ask to join groups, and post information to the group's wall. The group's creator may edit or remove the group.

### **Limitations:**

- Scalability
- Data Security or Privacy
- Performance
- Accessibility
- Localization
- Content Moderation

## **XV. Conclusion:**

Social networking websites are a ground-breaking concept with a very promising future and plenty of opportunity for development. Numerous organisations are embracing this medium to enhance their procedures due to the vast alternatives it offers. Organisations are no longer dependent on the media to spread their message or promote them. Using social networks, they can market or communicate more successfully. For instance, Starbucks has introduced a highly successful programme that allows anyone in the globe to log into a website, post comments, and engage in discussion about various topics.

Even with all the benefits, there is still the issue of information load and security. In contrast to traditional media, social networks don't follow a set protocol for when and how vital information should be shared. Information that is too significant could confuse drug users. Security could be yet another area of concern where information on a stoner could be obtained unlawfully. Although social networking appears to have a bright future, it must yet work through its issues.

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