CHAPTER 1

INTRODUCTION

The main goal of the service is to make your social life and that of your friends, more active and stimulating. Social network can help you both maintain existing relationships and establish new one by reaching out of people you have never met before. Before getting to know a forever member, you can even see how they are connecting you through the friend's network.

This software is provided as an online only resource so that it may be continually extended and updated.

In the early days of the web, in 1994 and 1995, several people were working on enabling email to be accessed on a web browser. In Europe, Soren Vejrum and Luca Mamuna released their "WWW Mail" and "Web Mail" applications, whereas in the United States, Matt Mankins wrote "Webex".

The term Webmail (or Web-based e-mail) is used to describe two things.

1. To describe a Webmail client
2. an email client implemented as a web enhanced via a web browser.
3. To describe a email service offered through a web site (a webmail provider) such as Hotmail, Yahoo! Mail, Gmail, and AOL Mail; Practically every webmail provider offers email access using a webmail client, and many of them also offer email access by a desktop email client using standard email protocols, while many internet service providers provide a webmail client as part of the email service included in their internet service package.
4. The benefits of social network include their ability to help people connect and stay in touch with family, friends, and new contacts; the opportunity they offer businesses to market their brands; their ability to spread useful, even vital, information instantly to individuals and institutions.
5. Web Automation is digital technology that allows the sharing of ideas and information, including text and visuals, through virtual networks and communities. Social media typically features user-generated content that lends itself to engagement via likes, shares, comments and discussion.

1.1: Key Features

- **Free web space:**

  Each member is provided free web space to publish content.

- **Free web address:**

  Each member gets a unique web address that becomes the identity of that individual or business. The members can then use their web address or URL to promote themselves or their business.

- **Build Profile:**

  Members are provided web space to build their profiles. The profiles serve a dual purpose: one, they allow friends or contacts to identify members from their profiles; and two, the data entered by the members is used by Social Networking Sites to connect with other members who have a similar background.

- **Upload content:**

  The Social Networking Sites allow members to upload text messages, photographs, audio and video files free of cost. All posts are arranged in descending order with the last post coming first. Further, all content is published in real time, and becomes visible instantly.

- **Build conversations:**

  Content posted by members can be browsed and commented upon by all members who form part of the community. Content can also be tagged from third party sites on subjects that interest the group.

- **Chat client:**

  Most Social Networking Sites have chat clients and members who can chat with each other in real time.

- **Create Pages:**

  Members are allowed to create pages where they can post articles or photographs related to a theme. The pages can also be used to promote businesses.

CHAPTER 2

LITERATURE SURVEY

There have been a decent number of previous works on Automation Testing. We have gathered several papers in order to analyze the testing tools and then reviewed the findings.

Neha Chaurasia et al. [1] presented a study with an aim of comparing and contrasting the principles, builds, and features of automated and manual testing. Furthermore, it emphasizes the significance of automated software testing. This paper focuses on the selenium testing method, and based on it they have identified them at the appropriate stage. They spoke about the different types of software testing and the differences between manual and automated testing. Prasad

Mahajan [2] et al. covered Test Automation and its pre-requisites, working measures, when to use automation testing, advantages over manual testing, and how to choose which test cases to automate in this document. At last they concluded that the test automation mechanism is used to reduce costs and overheads. The time spent on regression tests is decreased as a result of automation. However, the success of automation testing is dependent on choice of a suitable and compatible method.

Nisha Gogna [3] in her study discussed basic features of browser-based automated test tools WATIR and Selenium RC, Selenium IDE and Selenium GRID. The study concluded that to use WATIR one must know Ruby .She mentioned Selenium has its own integrated development environment (IDE) for running test cases. In this study it can be easily seen that scope of Selenium is more than that of WATIR when it comes to automated testing.

Harshali Patil [4] drew a comparison between Selenium and UFT testing tools to choose a testing method based on various factors like the type of application to be evaluated, the budget, reusability, language support, application support and the efficiency required. For test scripts based on web browser, it is better to use Selenium to reduce cost and for high quality software, we should use UFT for testing.

Inderjeet Singh et al. [5] analyzed and compared the three testing tools based on factors like execution time, recording capabilities, scripts generation, data driven testing, ease of learning and supplement features. In every department, Selenium stood out as the best tool for testing.

Paruchuri Ramya et al. [6] discussed about Selenium Web Drivers, which is advanced version of Selenium RC and its features. The authors have implemented and executed test cases in a Lawyer's Login Page with multiple test data. It can also include addition tools like Maven together with Selenium Web Driver. They have concluded that Selenium Web Driver is a very fast and easy tool for automating web application testing, and the results are more reliable. It encourages the use of additional resources for better results accuracy and usability.

Rigzin Angmo et al. [8] evaluated the performance analysis of the Selenium Suite. Execution speed is better in Selenium IDE as compared to Selenium Chrome Driver. Since Selenium Web Driver does not require any server, it is better than other selenium suite. They have also analyzed Watir-Web Driver and Selenium Web Driver using criterion such as execution speed, recording and playback, report generation, browser compatibility, platform compatibility, and language support and concluded that Selenium is more suited for general purpose in comparison to Watir-Web Driver, which is suitable under certain specific situation.

V Garousi et al. [9] found that major commercial or open-source software nowadays includes automated test suites to verify its functionality. This is specially the case for software projects which evolve through many versions since automated testing pays off the most in the case of regression and repetitive testing.

Authors conducted a survey for organizations and experts involved in software testing to identify the current practices and opportunities for improvements in software testing methods and tools. The survey results are supposed to be used to determine the necessity of the international standard for the capabilities of STMTs.

The Objective of this Paper is to find how to find a set of different emerging tools and methodologies to test a software system to ensure the quality constrain in developed product. We will do the comparison of different testing tools on the basis of existing literature and also do the comparative study of different automated testing methodologies which is helpful in the selection of testing tool and methodology which is helpful in terms of Cost and Time.

This paper provide a feasibility study for commercial and open source web testing tools helping developers or users to pick the suitable tool based on their requirements. In software engineering practice, evaluating and selecting the software testing tools that best fit the project at hand is an important and challenging task.

The paper discusses the concepts, optimized software testing, software testing types and comparative study of the performance testing tools. Performance tools can be considered as the best according to their applications.

Authors found that projects written in Go, PHP, and JavaScript are the ones that most adopt automated support, with adoption percentage ranging from 84.9% to 100% of the project corpus.

CHAPTER 3

FEASBILITY

Once the system objectives have been ascertained by initial investigation, we need to spell the various possible solutions to meet the various objectives. The feasibility study is conducted to check whether the candidate system is feasible. The system which is selected to be the best against the criteria is thereafter designed and developed. The feasibility study takes into consideration. The risks involved in the project development beforehand. Feasibility study includes seven distinct but inters related type of feasibility. All these feasibility study used by me.

There are: TECHNICAL FEASIBILITY

Focus is on establishing whether the technology needed for the proposed system is available and how this technology can be integrated within the organization.

Technologies include are:

- Hardware
- Software
- Application developed environment

3.1 Economic Feasibility

It is concerned with the returns or benefits of the organization are likely to derive from investment in the system. Estimated costs of new system development and operation must be balanced against projected tangible as well as intangible benefits.

3.2 Operational Feasibility

Operational feasibility is the measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development. The operational feasibility assessment focuses on the degree to which the proposed development project fits in with the existing business environment and objectives with regard to development schedule, delivery date, corporate culture and existing business processes. To ensure success, desired operational outcomes must be imparted during design and development. These include such design-dependent parameters as reliability, maintainability, supportability, usability,

producibility, disposability, sustainability, affordability and others. These parameters are required to be considered at the early stages of design if desired operational behaviours are to be realised.

3.3 Social Feasibility

The aspect of study is to check the level of acceptance of the system by the user. This includes the process of training the user to use the system efficiently. The user must not feel threatened by the system, instead must accept it as a necessity. The level of acceptance by the users solely depends on the methods that are employed to educate the user about the system and to make him familiar with it. His level of confidence must be raised so that he is also able to make some constructive criticism, which is welcomed, as he is the final user of the system.

CHAPTER 4

SYSTEM ANALYSIS

System Analysis and Design, is the process of gathering and interpreting facts, diagnosing problem and using the information to recommend improvement to the system. Before development of any project can be pursued, a system study is conducted to learn the details of the current business solution. Information gathered through the study forms the basis for creating alternative design strategies. Virtually all organizations are systems that interact with their environment through receiving input and producing output.

It is a management technique used in designing a new system, improving an existing system or solving problem. System analysis does not guarantee that the user will derive an ideal solution to a problem. This depends solely on the way one design a system to exploit the potential in the method To put it in another way, creativity is as much as must pre design the study and problem solving process and evaluates every successive step in the system analysis.

Taking all these factors into account and with the knowledge of the Inter -relationship between the various fields and section and their potential interactions, they are consider for developing the whole system in and integrated manner . The management technique is also helps us in develop and design of the new system or to improve the existing system.

System analysis aims to align technology solutions with business objectives, improve efficiency, and support strategic goals through a methodical and iterative process of investigation, design, and implementation.

The following Objectives are kept in mind:

- Identify the customer's need.
- Evaluate the system concept for feasibility.
- Perform economic and technical analysis.
- Allocate functions to hardware, software, people, database and other system elements.
- Establish cost and schedule constraints
- Create a system definition that forms the foundation for all subsequent engineering work.

4.1 HARDWARE & SOFTWARE SPECIFICATIONS

Software Specification:

Processor : Intel core i3

Hard disk : 180 GB

RAM : 2 GB

Hardware Specification:

Operating system	: Windows 7 &above
Front end	: Html & CSS
Back end	: Django, My SQL 5.3
User interface design	: HTML,CSS
Web Browser	: Mozilla, Google Chrome,IE8,OPERA
Programming Language	:Python Programming

CHAPTER 5

ARCHITECTURE

After gathering the requirements and determining that the proposed system is technically feasible, we will move further towards the designing issues. Here the main goal is to transform the requirements specification into a structure that is suitable for implementation in some programming language. Here we determine the individuals constraints to be used further as per requirements. These constraints are than mapped into DATA FLOW DIAGRAMS(DFD) & ENTITY RELATIONSHIP DIAGRAM(ER-DIAGRAM).

In this chapter we will present the DFDs and ER-DIAGRAMs of the entities like general detail of user, professional details, login details, personal details of user and many more

5.1 Data Flow Diagram(DFD)

Data flow-oriented techniques advocate that the major data items handled by a system must be first identified and then the processing required on these data items to produce the desired outputs should be determined. The DFD (also called as bubble chart) is a simple graphical formalism that can be used to represent a system in terms of input data to the system, various processing carried out on these data, and the output generated by the system. It was introduced by De Macro (1978), Gane and Sarson (1979).The primitive symbols used for constructing DFD's are:

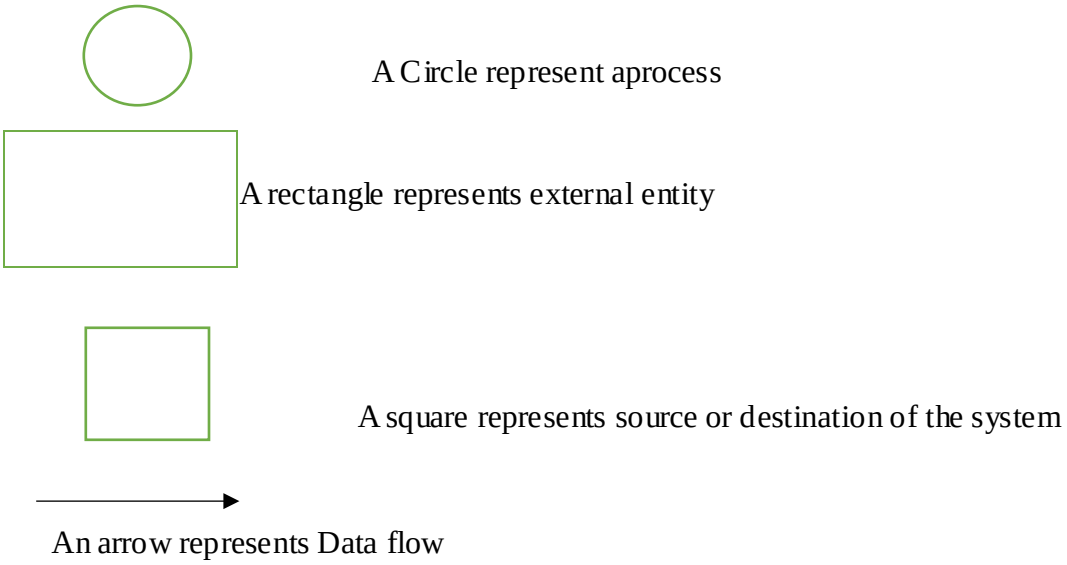

Fig 5.1: Symbols

4.2 Level 1DFD

A level 0 DFD, also called a fundamental system model or context diagram represents the entire software element as a single bubble with input and output data indicated by incoming and outgoing arrows, respectively.

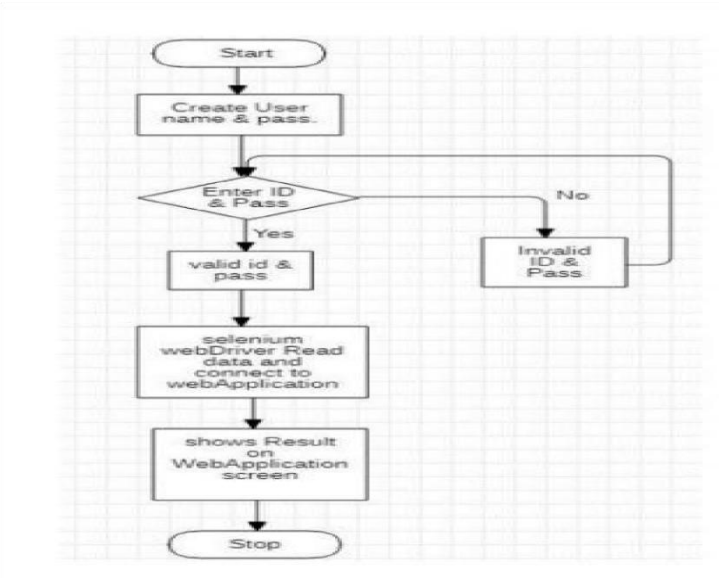

Fig 5.2: DFD for 0 level

5.3 Level 1 DFD :

This level of DFD provide more detailed structure.it provides a detailed view of requirements and flow of data from 1 bubble to another.

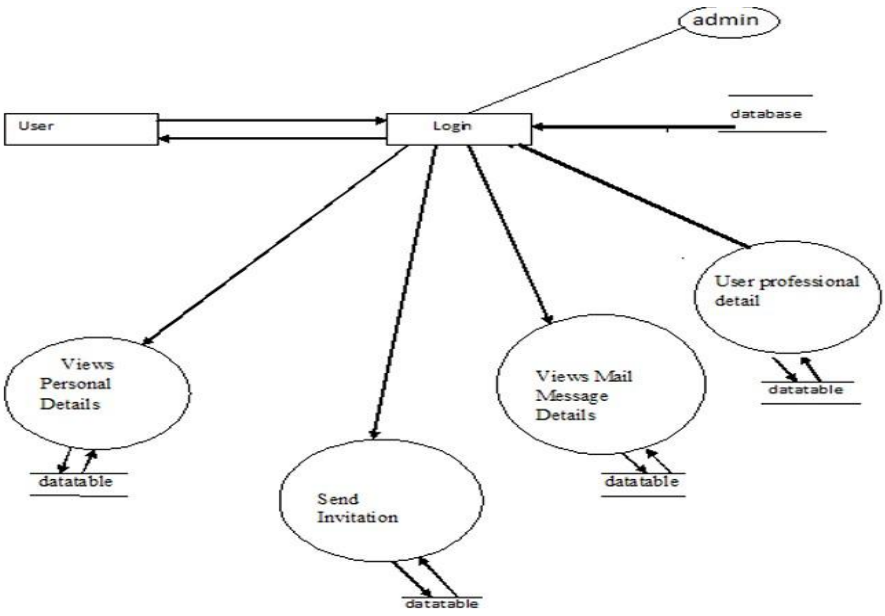

Fig 5.3 DFD of level 1

5.4 Entity Relationship Diagram

The entity relationship model is a high level data model. It is based on a perception of a real world that consists of a collection of basic objects, called entities, and of relationship among these objects. It was developed to facilitate database design by allowing specification of an enterprise schema, which represent the overall logical structure of a database.

Entity:

An entity is an object that has its existence in the real world. It includes all those "things" about which data is collected. An entity may be a tangible object such as a student, a place or a part. It may also be non-tangible such as an event, a job title or a customer account. For example, if we say that a customer buys goods, it means customer and goods are entities Diagrammatically, entities are represented in rectangles.

An Entity Set:

It is a set of entities of the same type that share the same properties, or attributes. The set of all persons who are customers at a given bank, example, can be defined as the entity set customer.

Attributes:

Attributes are units that describe the characteristics or properties of entities. In a database, entities are represented by tables and attributes by columns.

For example, a customer entity might have numerous attributes such as code, name and addresses. Similarly, the goods entity may have attributes like code and price. They are drawn in elliptical shapes along with the entity rectangles.

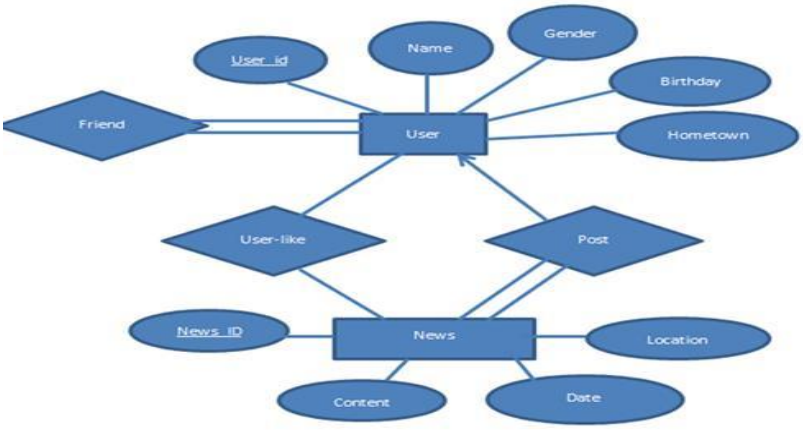

Fig 5.4 ER diagram

5.5 Database Design:

Database schema will vary depending on the specific requirements and the databasemanagement system used (e.g., relational, NoSQL).

This description provides a basic outline of a social media logger database. The actual implementation may differ based on specific use cases and requirements.

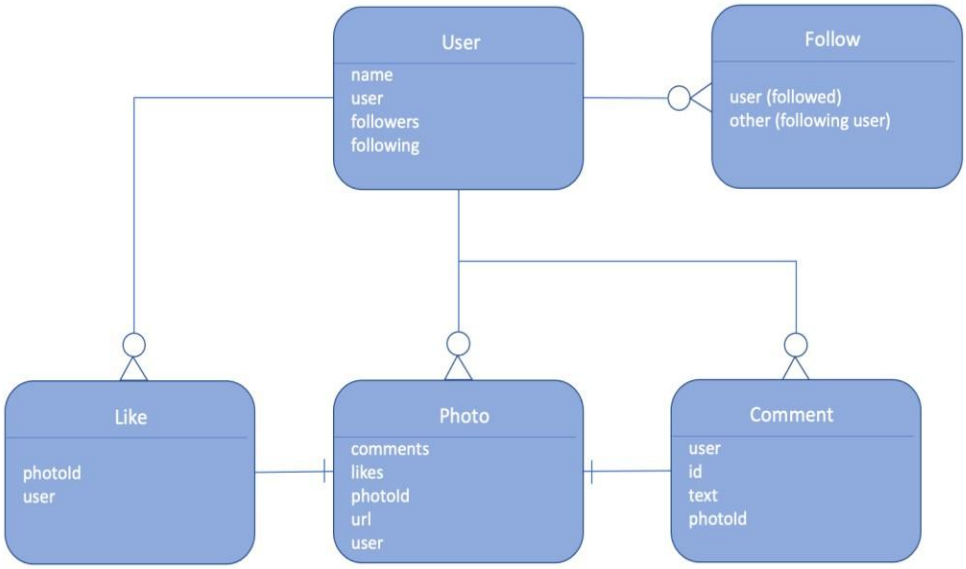

Fig 5.5 Database diagram

CHAPTER 6

TESTING

Testing is the process of running a system with the intention of finding errors. Testing enhances the integrity of a system by detecting deviations in design and errors in the system. Testing aims at detecting error-prone areas. This helps in the prevention of errors in a system. Testing also adds value to the product by conforming to the user requirements.

The main purpose of testing is to detect errors and error-prone areas in a system. Testing must be thorough and well-planned. A partially tested system is as bad as an untested system. And the price of an untested and under-tested system is high.

The implementation is the final and important phase. It involves user-training, system testing in order to ensure successful running of the proposed system. The user tests the system and changes are made according to their needs. The testing involves the testing of the developed system using various kinds of data. While testing, errors are noted and correctness is the mode.

Objectives Of Testing:

The objectives of testing are:

- Testing is a process of executing a program with the intent of finding errors.
- A Successful test case is one that uncovers an as- yet undiscovered error.
- Delivering the quality product
- Justification with Requirement
- Enhanced Growth

The various types of testing on the system are:

1. Unit testing
2. Integration testing
3. System testing
4. User Acceptance testing

6.1 Unit Testing:

Unit testing focuses efforts on the smallest unit of software design. This is known as module testing. The modules are tested separately. The test is carried out during programming

stage itself. In this step, each module is found to be working satisfactory as regards to the expected output from the module.

6.2 Integration Testing

Data can be lost across an interface. One module can have an adverse effect on another, sub functions, when combined, may not be linked in desired manner in major functions. Integration testing is a systematic approach for constructing the program structure, while at the same time conducting test to uncover errors associated within the interface. The objective is to take unit tested modules and builds program structure. All the modules are combined and tested as a whole.

6.3 System Testing

System testing is the stage of implementation. This is to check whether the system works accurately and efficiently before live operation commences. Testing is vital to the success of the system. The candidate system is subject to a variety of tests: on line response, volume, stress, recovery, security and usability tests. A series of tests are performed for the proposed system is ready for user acceptance testing.

6.4 User Acceptance Testing

User acceptance of a system is the key factor for the success of any system. The system under consideration is tested for the user acceptance by constantly keeping in touch with the prospective system users at the time of developing and making changes whenever required.

Validation:

At the culmination of the integration testing, Software is completely 0series of software test begin in validation testing. Validation testing can be defined in many ways, but a simple definition is that the validation succeeds when the software functions in a manner that is expected by the customer. After validation test has been conducted, one of the three possible conditions exists.

1. The function or performance characteristics confirm to specification and are accepted.
2. A deviation from specification is uncovered and a deficiency list is created.
3. Proposed system under consideration has been tested by using validation test and found to be working satisfactory.

- **Output Testing**

After performing the validation testing, the next step is output testing of the proposed system, since no system could be useful if it does not produce the required output in a specific format. The output format on the screen is found to be correct; the format was designed in the system design time according to the user needs. For the hard copy also; the output comes as per the specified requirements by the user. Hence output testing did not result in any correction for the system.

Login:

Here's a tabular format for the login form

Sl no	Input values	Test Case	Description	Result
1	Email	Empty	Please enter valid ID	Successful
2	Password	Empty	Please enter Password	Successful
3	Password	If Wrong Password	Please enter the valid Password	Successful

Table 6.1: Test case for login page Registration

Here's is a tabular format for the registration

Sl no	Input values	Test Case	Description	Result
1	First name	Empty	It must not be empty	Success
2	Last name	Empty	Last name not be empty	Success
3	Email	Empty	Enter the valid ID	Success
4	Password	Empty	Enter the valid Password	Success
5	Password	Length	Enter valid length password	Success
6	Confirm password	Empty	Password and confirm password must be same	Success
7	DOB	Select	Enter valid Date of birth	Success

Table 6.2: Test case for registration page

Edit Profile:

Here's is a tabular format for edit profile

Sl no	Input Values	Test Case	Description	Result
1	Gender	Select	Select your gender	Success
2	Birthday	Select	Enter the new Birthdate	Success
3	Contact	Old number	Enter the new number	Success
4	About Me	Blank	Edit the blog	Success

Table 6.3: Test case for edit profile page

Post Management:

Here's a tabular format for Post management

Sl no	Input Values	Test Case	Description	Result
1	List all Posts	View	List of all post	Success
2	View Posts	View	View each post	Success
3	Add Posts	Add	Add new post	Success
4	Delete Posts	Delete	Delete [[old or new post	Success

Table 6.4: Test case for post management page

Post Management:

Here a tabular format for Post Management

Sl no	Input value	Test Case	Description	Result
1	Post Images	View	View the new post	Success
2	Like or Unlike post	View	Like or unlike post	Success
3	Comment section	Empty	Text	Success

Table 6.5: Test case for post management

Member Management:

Here's a tabular format for Member Management

Sl no	Input values	Test Case	Description	Result
1	List all Member	View	View of all member	Success
2	Addnew Member	New	Add new member	Success
3	Delete member	Delete	Delete old member	Success
4	Friends List Page	View	View of list	Success
5	Confirm friend	Accept	Accepting a friend	Success
6	Decline friend	Delete	Delete a request	Success
7	Search user	Search	Search for new user	Success
8	Reconsider friend	Search	Re-request a friend	Success

Table 6.6: Test case for member management

CHAPTER 7

RESULT

7.1 Login Page:

Ensure that the login form function correctly, allowing users to log in with valid credentials and preventing access with invalid credentials.

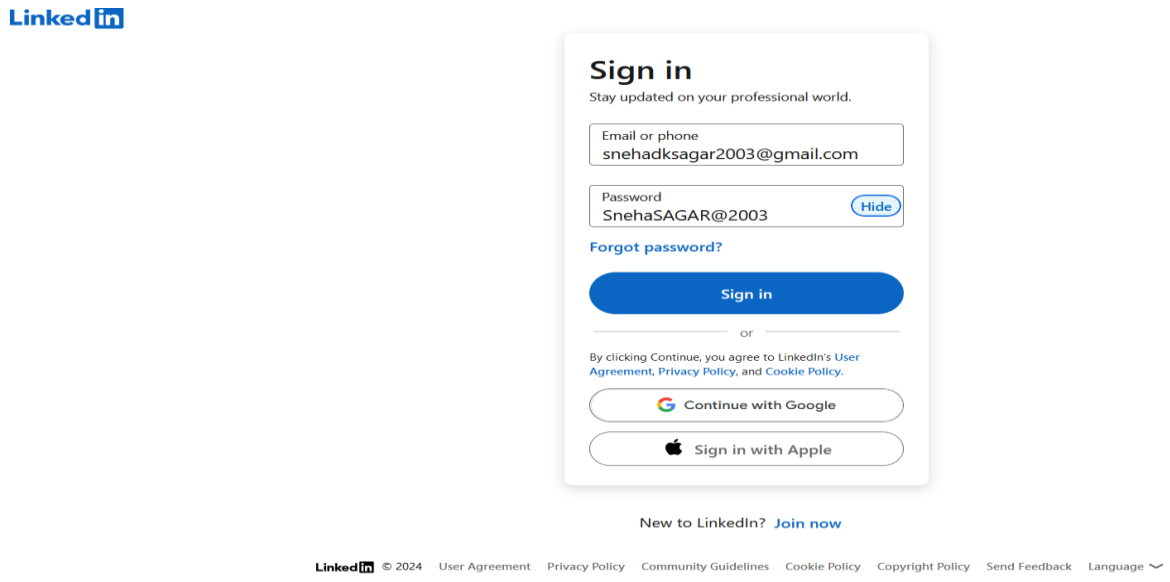

Fig 7.1: Login Form

7.2 Home Page:

Ensure that the home page displays all the elements correctly and functions as expected.

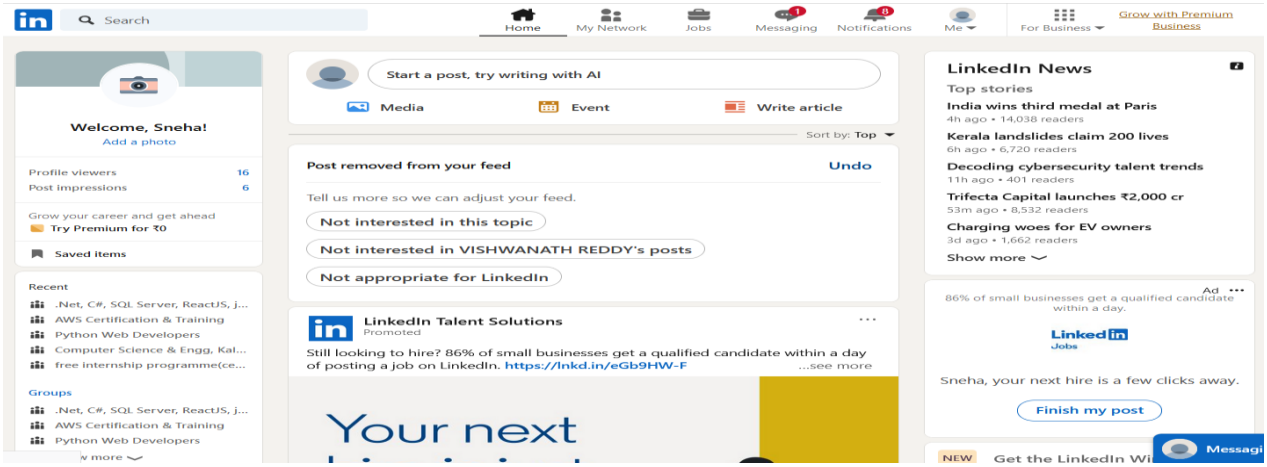

Fig 7.2: Home Page

7.3 Network List:

Ensure that the friend list page displays all friends correctly and allows for successful management of the friend list.

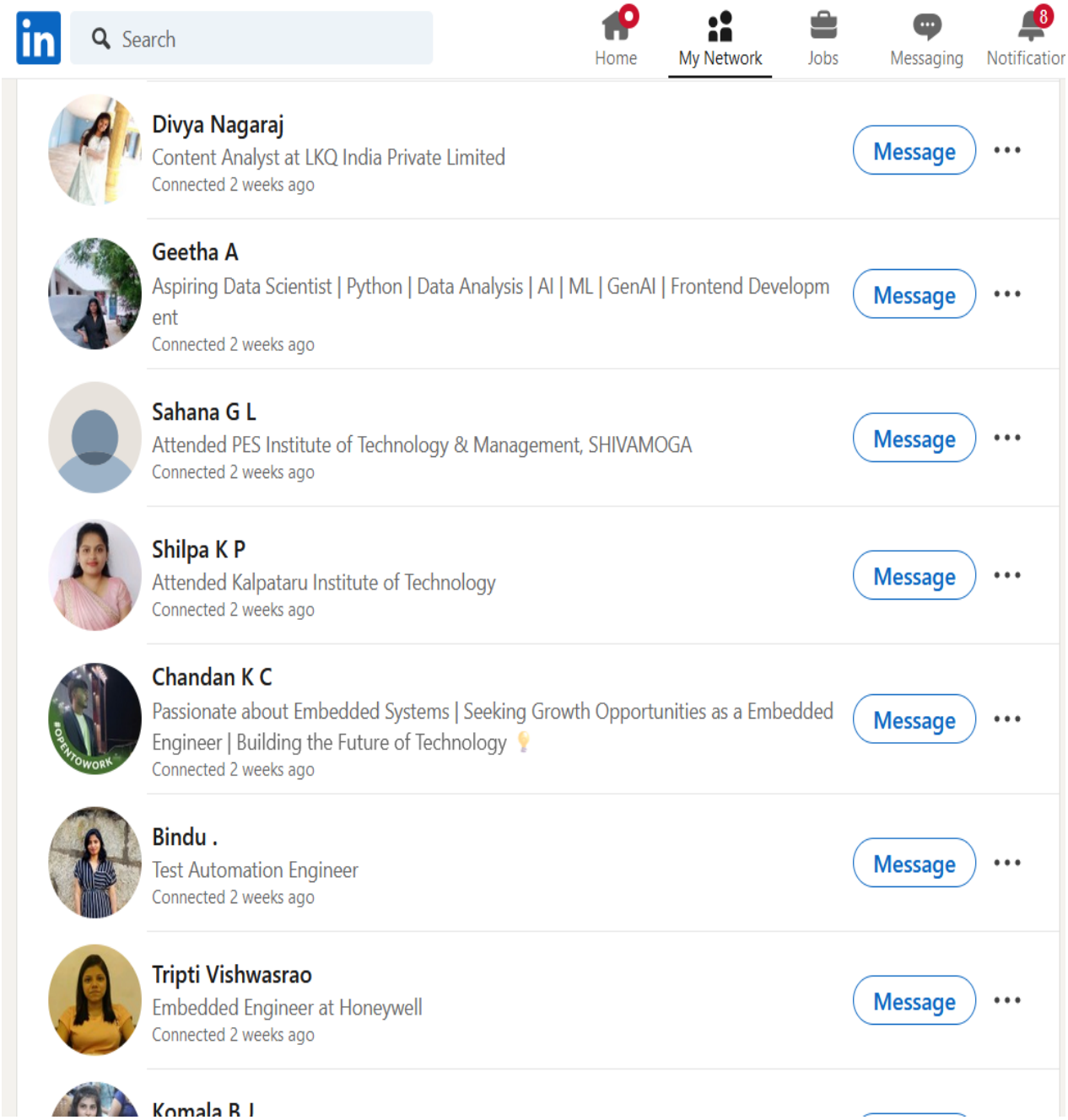

Fig 7.3: Network List Page

7.4 Profile Page:

Ensure that the profile page display all user information correctly and allows for successful updates

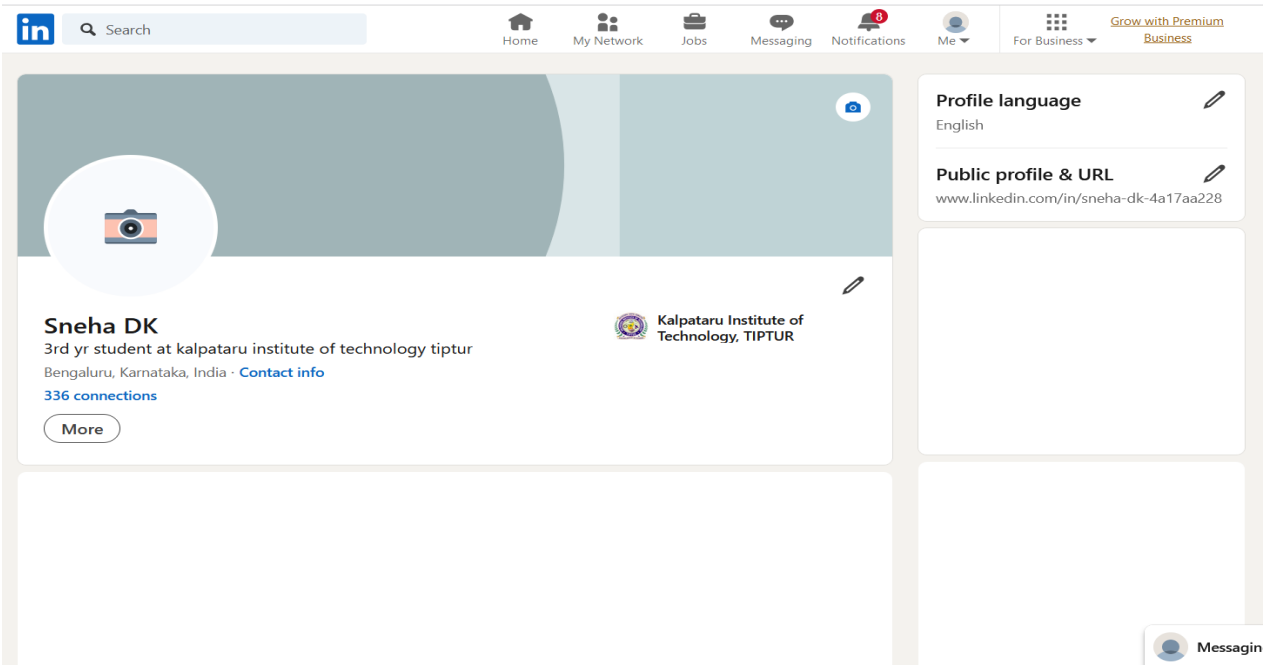

Fig 7.4: Profile page

7.5 Profile Dashboard:

Ensure that the profile dashboard display all user information and activity correctly and provides appropriate functionality

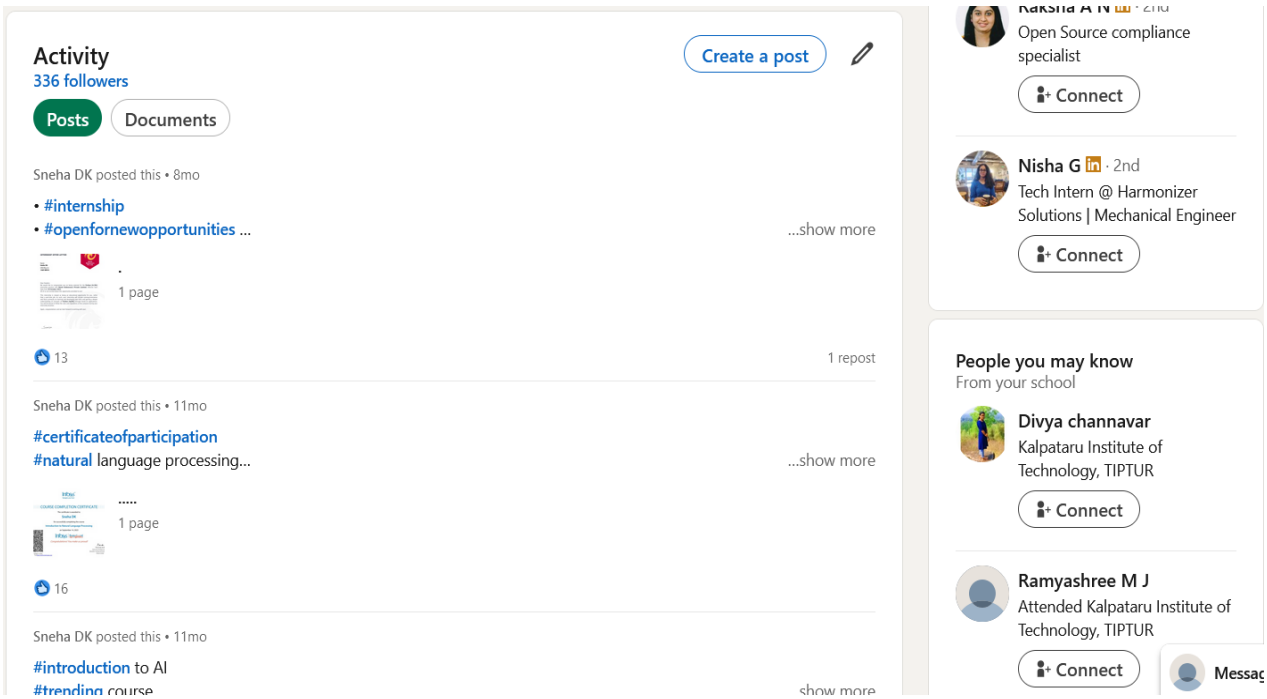

Fig 7.6: Profile Dashboard

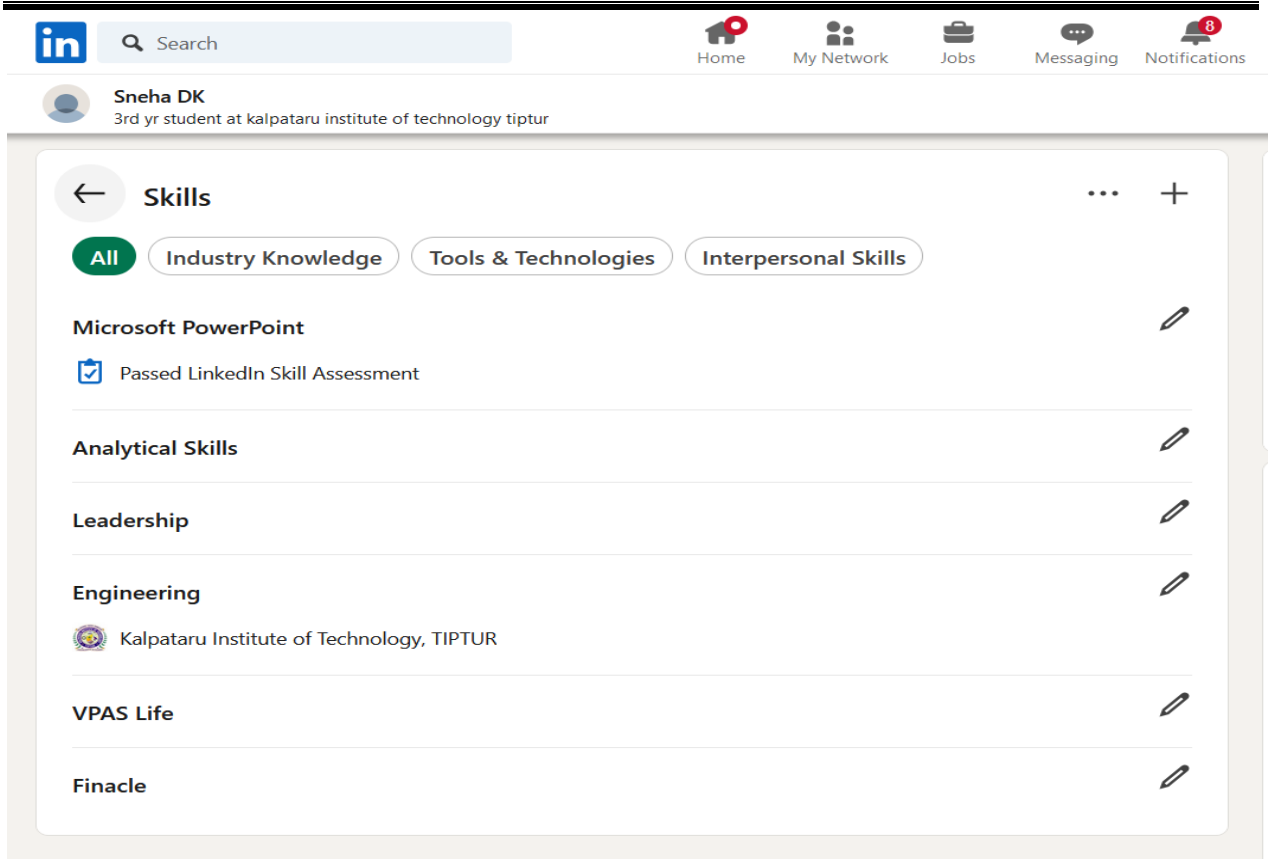

Fig 7.6: Profile Dashboard

CHAPTER 8

CONCLUSION

With the help of the appropriate driver software applications, selenium is an open-source tool which helps to interact with various browser applications. Now the selenium automation testing is leading the market. Using the selenium everything which can be done manually can be executed. Ensure to enhance your skills through selenium courses which are even available online as per your convenience.

The scope of job opportunities in selenium testing will be available at all times for skilled and training professionals. The testing automation developers will convert the written test cases into automation scripts. It requires adequate programming knowledge in languages like C, Perl, C#, and Java Python.

In summary, while integrating social media into software testing poses challenges, it also opens avenues for innovation and enhanced user experience. By adopting agile methodologies, embracing technological advancements, and prioritizing user-centric testing strategies, organizations can effectively navigate the complexities of social media-integrated applications and deliver software that meets both functional excellence and user expectations."

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