

Full Stack Project Report
(2022-2023)

TalkLime



Institute of Engineering and Technology

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Declaration

We here by declare that the work which is being presented in the Full Stack Project “TALKLIME”, in partial full fillment of the requirements for Full Stack Project viva voce, is anauthentic record of our own work carried under the supervision of **Md.Farmanual Haque, Technical Trainer, GLA University, Mathura.**

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Certificate

This is to certify that the project entitled “TalkLime” carried out in Full Stack Project is the work done by Shashank, Rohit Shakya, Snigdha Gupta, Kuhoo Saxena and Monu Sharma and is submitted in partial full fillment of the requirements for the award of degree Bachelor of Technology (ComputerScience and Engineering).

Signature of Supervisor:

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Date:

Acknowledgement

It gives us a great sense of pleasure to present the synopsis of the B.Tech mini project undertaken during B. Tech III Year. This project is going to be an acknowledgement to the inspiration, drive and technical assistance will be contributed to it by many individuals. We owe special debt of gratitude to Md. Farmanual Haque, Technical Trainer, for providing us with an encouraging platform to develop this project, which thus helped us in shaping our abilities towards a constructive goal and for his constant support and guidance to our work.

His sincerity, thoroughness and perseverance has been a constant source of inspiration for us. We believe that he will shower us with all his extensively experienced ideas and insightful comments at different stages of the project & also taught us about the latest industry-oriented technologies. We also do not like miss the opportunity to acknowledge the contribution of all faculty members of the department for their kind guidance and co-operation.

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Abstract

The study described in this research report focused on variables which were posited to capture students' experiences on the internet. We as a University found that there is low/less interaction with our seniors or the respected faculty members. But as we know nowadays students as well as seniors/faculties everyone is using the internet and knows the basics of social media whether it is Instagram or WhatsApp. Our research says approx. 80% of students of GLA University have not cleared their doubts because they do not find the right person for the university to whom they ask. So, Our Project Talk Lime creates a platform where almost all the university students as well as Alumni and Faculties can connect with each other. Students get some doubt they posted their query on Talk Lime platform if anyone who knows about the queries, they can answer the question. Our main focus is to increase the university level interaction and make communication easy. In the 2.5 years of Education here at GLA University we did not find any right person who can solve our query. There was a direct positive relationship between academic self-efficacy and students' academic grades. The implications of these results and directions for future research are discussed in this report.

Table of Content

Acknowledgement	.....	Page 4
Abstract	.....	Page 5
1. Introduction	.....	Page 6
1.1 Objective		
1.2 Motivation		
1.3 Problem Statement		
2. Software Requirement	.....	Page 7
2.1 Hardware Requirements		
2.2 Software Requirements		
3. Project Description	.....	Page 8-
4. Implementation	.....	Page 9
5. References	.....	Page 11

Chapter-1

Introduction

1.1. Overview

Social media and social networks, from Facebook to Snapchat to Twitter and beyond, are an increasingly important part of how we communicate and connect day to day. They are key for staying in touch and up-to-date as well as contributing to our world and being creative. Many teachers find social networking a great way to expand their personal learning network and to discover resources. Just about all students rely on social media of some kind as a part of their daily routine. So how do you bring social media and social networks into the classroom? And how do you decide what will work for you and your students? Here's a collection of the best and most interesting social networks and social media apps and websites we've looked at to help you decide

1.2. Motivation

Bring social media and social networks into the classroom. Letting scholars make good connection and forming a network of people with Alumni faculties.

1.3. Project Plan

1.3.1. Objective

To build Website MERN Technology is used. As virtual culture is on boost, nowadays many people use can use the platform for sharing purposes but also their response/reply, chat. So here will be this project will provide them the great smooth ongoing platform to connect and interact and share their thoughts as well.

1.3.2. Scope

User can get connected with everyone and can create a huge network. Open for everyone who would love to .

Chapter-2

Software Requirement Analysis

2.1. Requirements

<u>S.No</u>	<u>Hardware/Software Required</u>	<u>Version</u>
1	NodeJS	14
2	Express JS	4.12
3	AWS(Amazon Web Services)	
4	EJS	
5	Ubuntu	20.04
6	MongoDB	6

2.2. Software Requirements

- **System Software**
 - **Operating System:** Windows 10
- **Application Software**
 - **Tools:** GitHub, VS Code

2.3. Installation of VS Code

VS Code is a free code editor, which runs on the macOS, Linux, and Windows operating systems.

VS Code is lightweight and should run on most available hardware and platform versions. You can review the System Requirements to check if your computer configuration is supported.

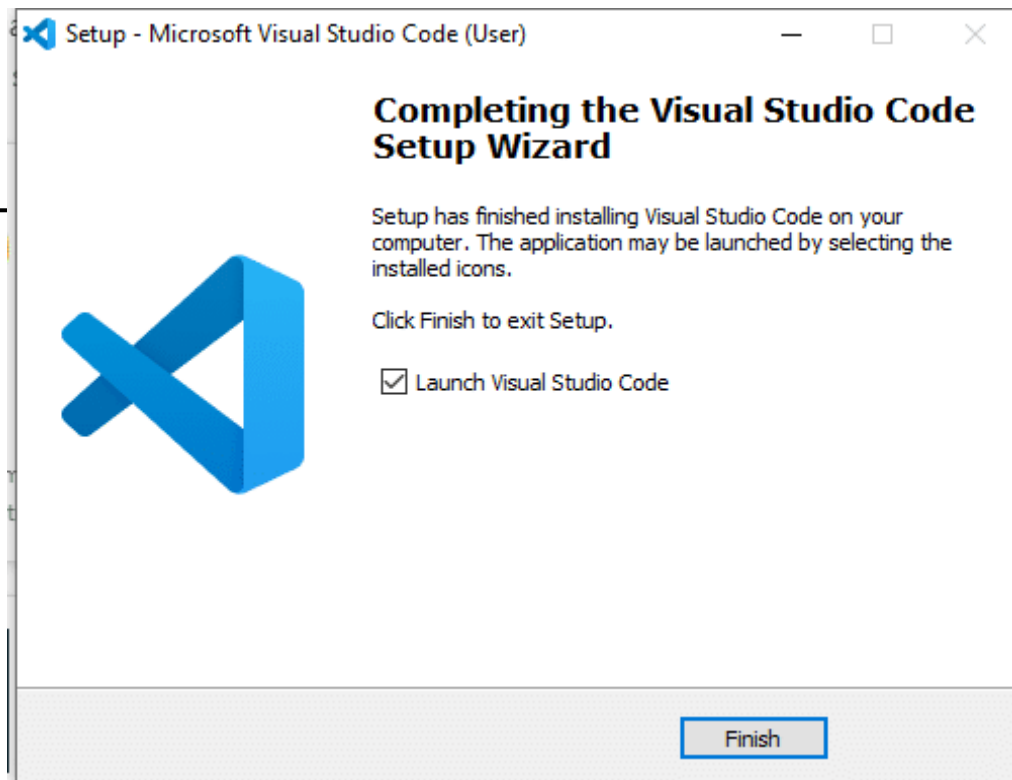


Fig1. Finish up Installing.

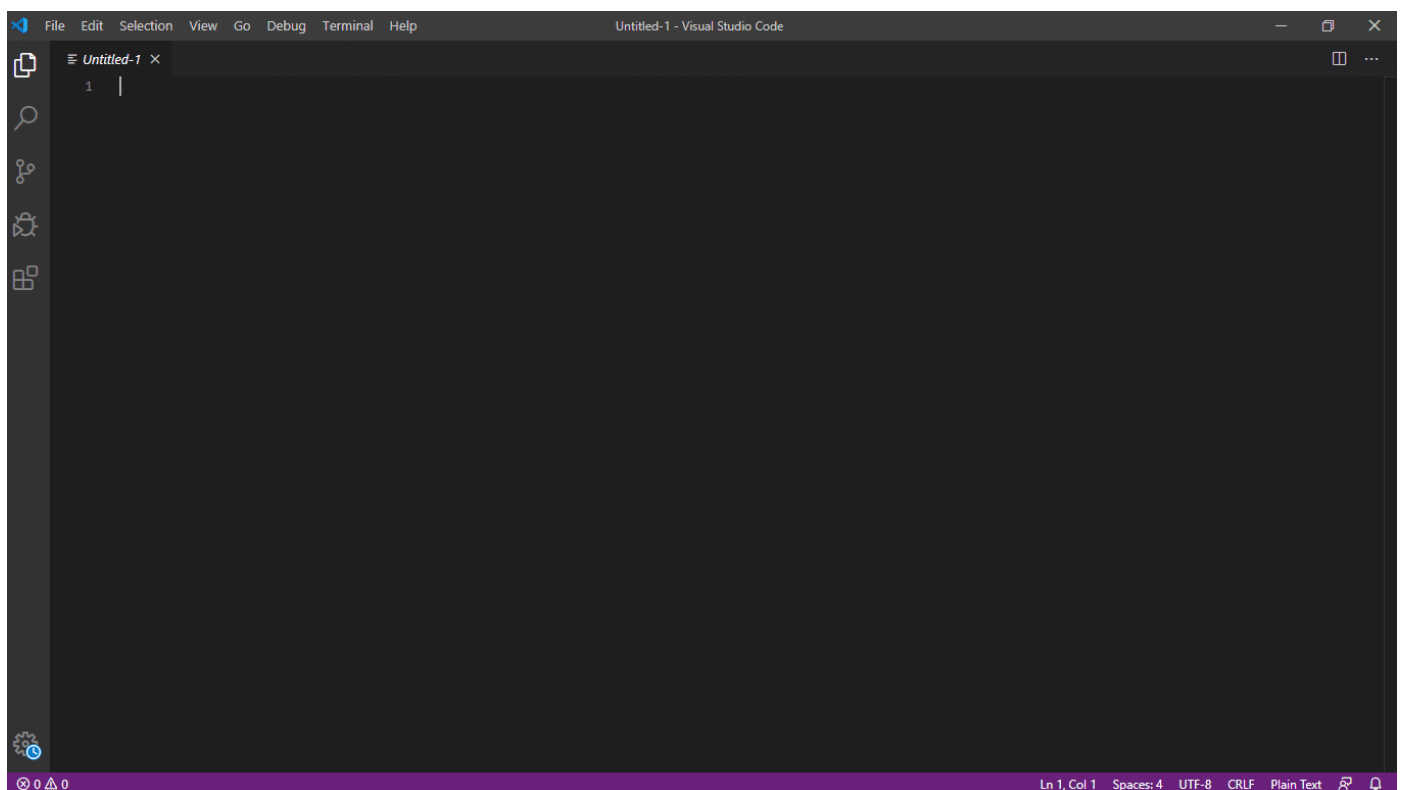


Fig2. VS Code Window.

2.4. Specific Requirements

2.4.1 Languages Used

HTML:

HTML stands for **Hyper Text Mark-up Language**, which is the most widely used language on Web to develop web pages. HTML was created by Berners-Lee in late 1991 but "HTML 2.0" was the first standard HTML specification which was published in 1995. HTML 4.01 was a major version of HTML and it was published in late 1999. Though HTML 4.01 version is widely used but currently we are having HTML-5 version which is an extension to HTML 4.01, and this version was published in 2012.

I will list down some of the key advantages of learning HTML:

- **Create Web site** - You can create a website or customize an existing web template if you know HTML well.
- **Become a web designer** - If you want to start a career as a professional web designer, HTML and CSS designing is a must skill.
- **Understand web** - If you want to optimize your website, to boost its speed and performance, it is good to know HTML to yield best results.
- **Learn other languages** - Once you understand the basic of HTML then other related technologies like java script, php, or angular are become easier to understand.

CSS:

Cascading Style Sheets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.

CSS handles the look and feel part of a web page. Using CSS, you can control the colour of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, layout designs, variations in display for different devices and screen sizes as well as a variety of other effects.

CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the mark-up languages HTML or XHTML.

- **CSS saves time** – You can write CSS once and then reuse same sheet in multiple HTML pages. You can define a style for each HTML element and apply it to as many Web pages as you want.

- **Pages load faster** – If you are using CSS, you do not need to write HTML tag attributes every time. Just write one CSS rule of a tag and apply it to all the occurrences of that tag. So less code means faster download times.
- **Easy maintenance** – To make a global change, simply change the style, and all elements in all the web pages will be updated automatically.
- **Superior styles to HTML** – CSS has a much wider array of attributes than HTML, so you can give a far better look to your HTML page in comparison to HTML attributes.
- **Multiple Device Compatibility** – Style sheets allow content to be optimized for more than one type of device. By using the same HTML document, different versions of a website can be presented for handheld devices such as PDAs and cell phones or for printing.

JavaScript:

JavaScript is a lightweight, interpreted programming language. It is designed for creating network-centric applications. It is complimentary to and integrated with Java. JavaScript is very easy to implement because it is integrated with HTML. It is open and cross-platform.



Fig3. HTML vs CSS vs JAVASCRIPT

What is Amazon Web Service?

AWS stands for Amazon Web Services, it needs no formal introduction, given its immense popularity. The leading cloud provider in the marketplace is Amazon Web Services. It provides over 170 AWS services to the developers so they can access them from anywhere at the time of need.

AWS has customers in over 190 countries worldwide, including 5000 ed-tech institutions and 2000 government organizations. Many companies like ESPN, Adobe, Twitter, Netflix, Facebook, BBC, etc., use AWS services.

For example, Adobe creates and updates software without depending upon the IT teams. It uses its services by offering multi-terabyte operating environments for its clients. By deploying its services with Amazon services, Adobe integrated and operated its software in a simple manner.

Chapter-3

Software Designs

3.1 Use Case diagram

A **use case diagram** is a dynamic or behaviour diagram in UML. Use case diagrams model the functionality of a system using actors and use cases. Use cases are a set of actions, services, and functions that the system needs to perform.

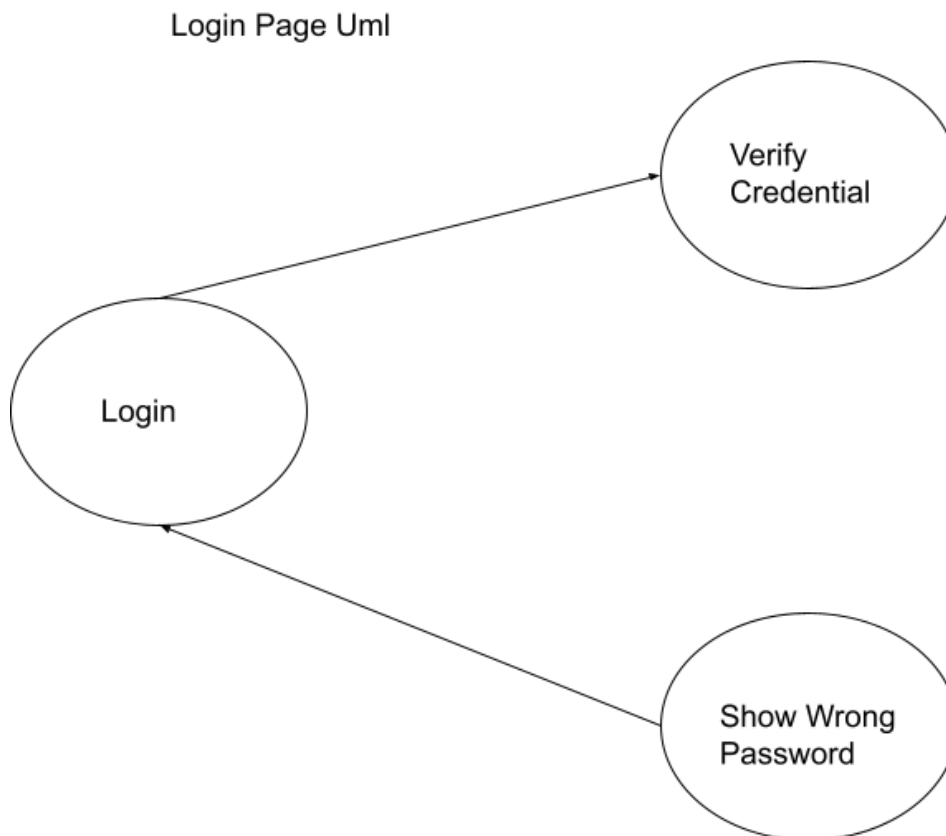


Fig 3.1 Use Case diagram

Verify credential

So the above diagram represents the point of view of the new user, the registered user, and the developer and the arrows to each module show the interactivity of the person. The New user will first be required to create a new account so will interact with the “sign-up module” and fill up all the details that will be stored in the database. The next user will land into the dashboard where there will be a “search bar” where the user can enter the book he desires to buy or any related keyword to the item. The list of items will appear on the screen and the new user will interact with the “select the item” module. Then the user can interact with the “Description of the item” module to buy more about the items. For the registered user, the user will have the credentials to login and will interact with the “login module” and then the user will enter into the dashboard where there will be “search bar” where the user can enter the item he desires to buy or any related keyword to the item. For the developer he can connect with each and every module mentioned in the use case diagram. Apart from the modules mentioned in the use case diagram there are modules like profile, sign out, FAQ and about us section that every registered user can access.

Chapter-4

Project

Description

The purpose of this project is to develop a server site application with the help of node js and API framework i.e. express js. Project contains end user experience and users can like, comment, and share posts on their profile. There is a dedicated news feed for the other user where users can connect with each other. Developing this project for the university students so some profiles are verified by our team that the profile is of well-known users in the university i.e. VC sir, HOD Office, CEO, Chairman sir, Dean, etc.

The project is divided into 3 modules – student/faculties, organization (Clubs) and administrator. The roles of the modules are as follows:

- **Student:**

The user can create a profile in Talk Lime platform and start building their profile by completing some profile questions. After completing the profile, students can send connection requests to the other users and start talking with them. Students can post their queries and faculties can share the announcements on their fields. Users can also apply for verification of their profile so Talk Lime team can review their profile and if we found no issue in the profile or the profile belongs to the real identity who is well known in the university campus and the profile meets our verification standards then the profile got the verification badge on their profile.

- **Organization (Clubs) :**

College clubs played an important role in the campus. Clubs can create business profiles in Talk Lime and start to grow with others. Clubs can promote their events on Talk Lime and if they want they can use our ads facility to increase the reach of their events and gain more followers on Talk Lime.

- **Administrator:**

Administrator is the main admin of Talk Lime. where admin watches the activities on talk lime platform so users can not violate the terms and conditions of talk lime and admin also watches the statistics of the user on talk lime platform.

Rationale

Social media is becoming a ‘normal’ part of student life, as well as academic practice,¹ and increasingly it is also being used in teaching.²

We wish to investigate if social media can enhance student learning experiences, as well as their sense of ‘belonging’ to the academic community within and beyond our subject area.

Politics & IR has a large student cohort at both UG and PG levels, and a particular problem with student satisfaction (as measured by the NSS). Social media is therefore important as a potential way of building community among our diverse student body, and also a way of adding value to our academic offerings.

For lecturers, the use of social media may save time – it is easier to tweet a link than to set up a hyperlink in a course, or across multiple courses in a VLE. Students have also anecdotally reported a preference for Facebook over Learn forums.

The proposed research was undertaken to assist us in assessing how effectively social media contributes to achieving our teaching and learning objectives, and ways in which we might strengthen our offering

IMPLEMENTATION

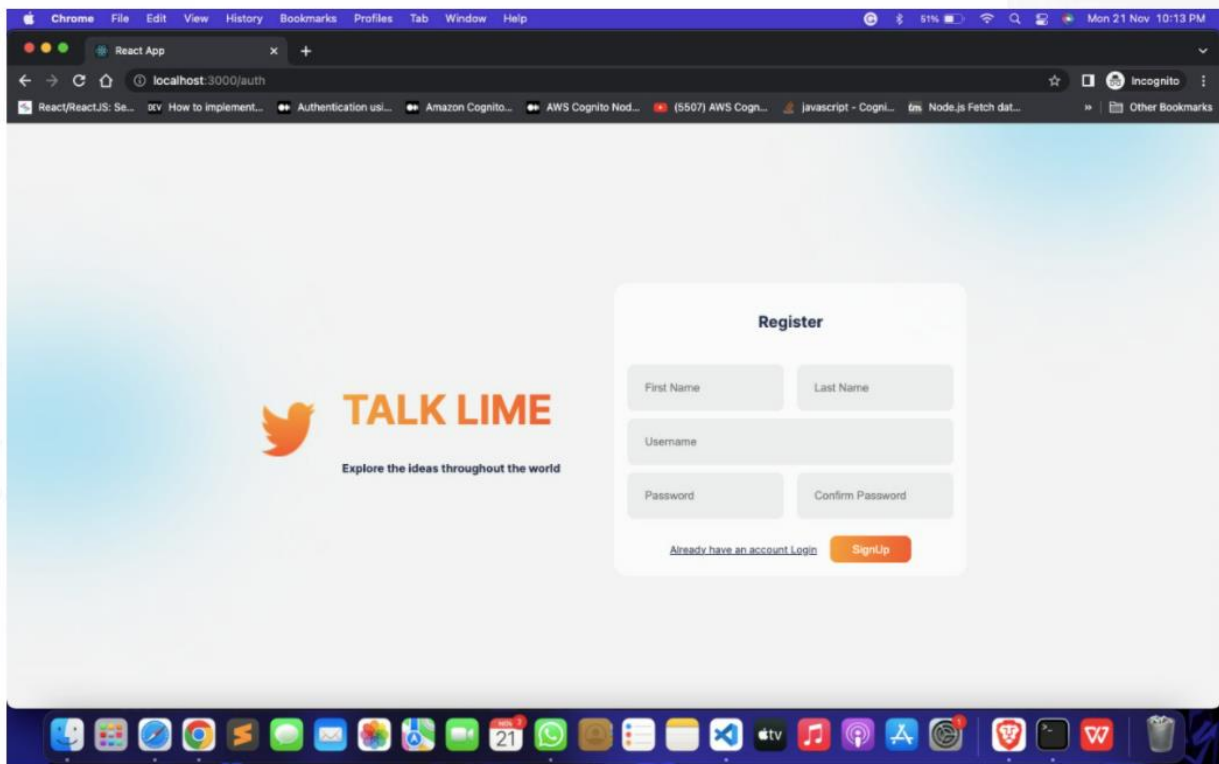
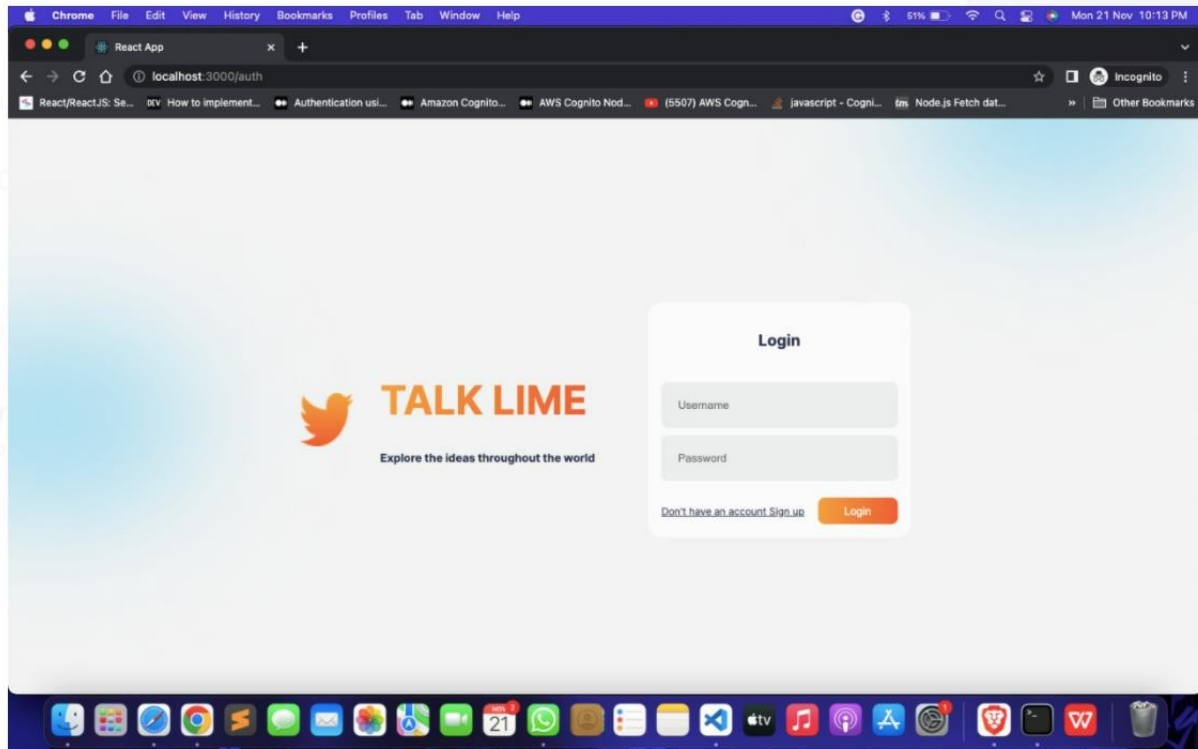
Node.js is a server-side platform built on Google Chrome's JavaScript Engine (V8 Engine). Node.js was developed by Ryan Dahl in 2009 and its latest version is v0.10.36. The definition of Node.js

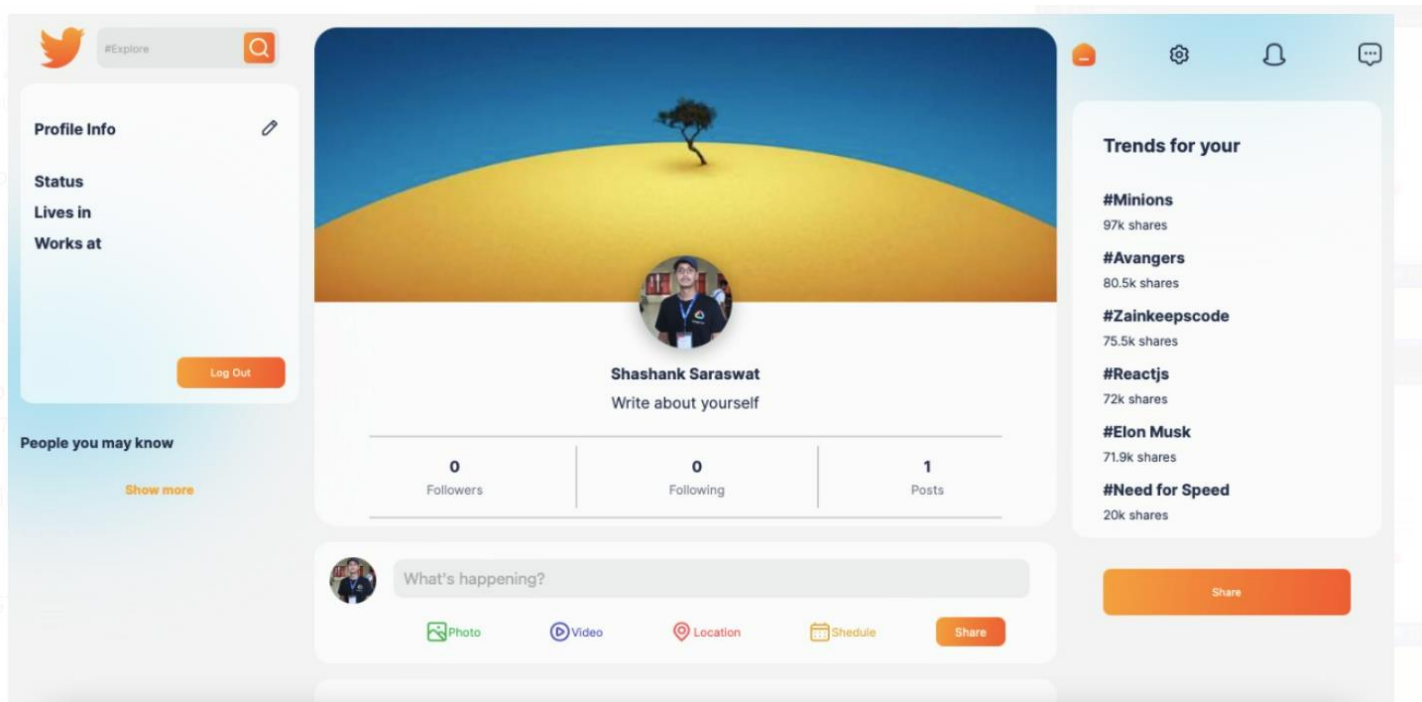
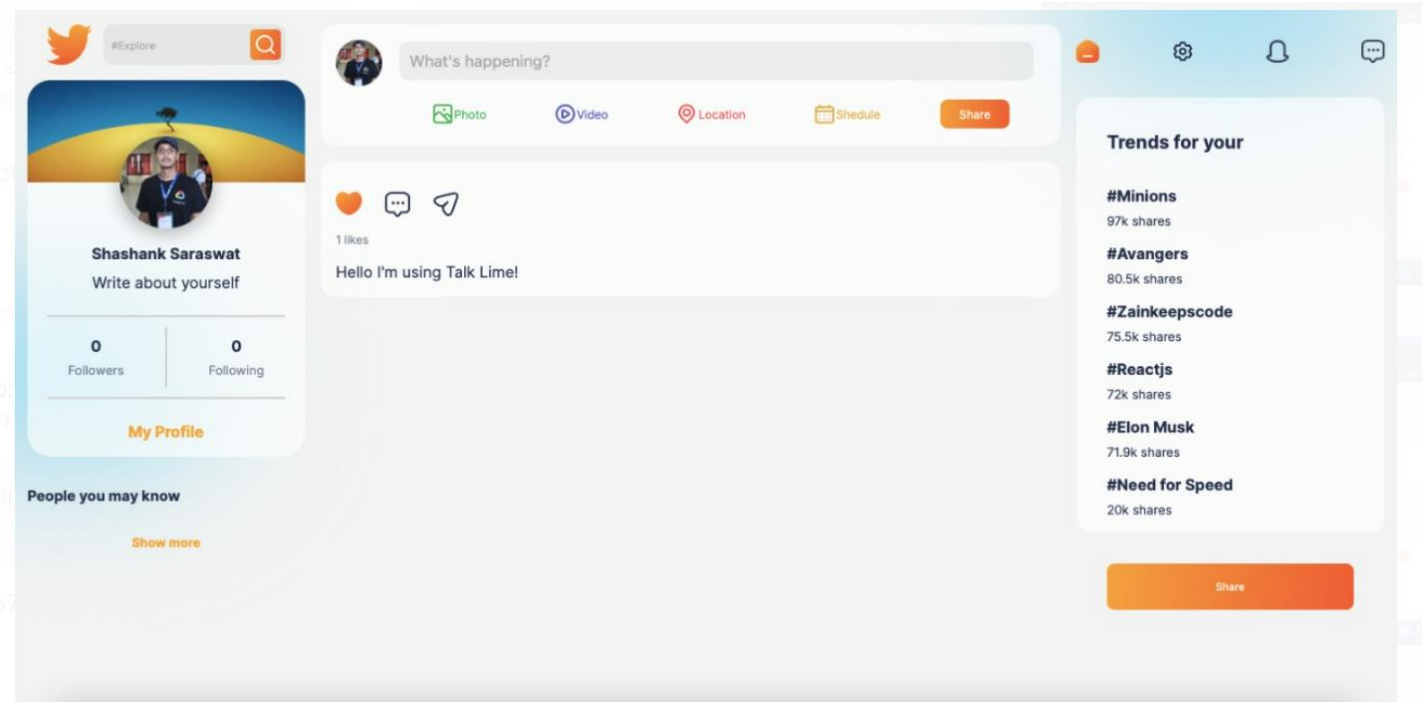
Node.js is an open source, cross-platform runtime environment for developing server-side and networking applications. Node.js applications are written in JavaScript, and can be run within the Node.js runtime on OS X, Microsoft Windows, and Linux.

Node.js also provides a rich library of various JavaScript modules which simplifies the development of web applications using Node.js to a great extent.

Chapter-5

Implementation and User Interface





Chapter-6

References

- ❖ www.javatpoint.com
- ❖ www.w3school.com
- ❖ www.tutorialspoint.com
- ❖ www.youtube.com
- ❖ www.beta-labs.in
- ❖ <https://developer.mozilla.org/en-US/>

Books:

- Beginning Node.js
- Express in Action: Writing, Building, and Test
- Amazon Web Services in Action
- Learning AWS
- Get Programming with Node.js

Chapter-7

Data Collection & Links

Websites:

- www.simplilearn.com
- www.google.com
- aws.amazon.com
- www.tutorialspoint.com
- <https://expressjs.com>

Faculty Guidelines:

Md. Farmanual Haque (Technical Trainer in GLA University)

GitHub Repository link:

<https://github.com/shashank026/Talk-Lime>