A Mini Project Report on

Simple Social Media Platform to connect with college peers (Connecture)

Submitted in partial fulfillment of the requirements for the award of the degree of

Bachelor of Engineering

in

Computer Engineering

by

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Under the Guidance of

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Academic Year 2020-2021

Approval Sheet

This Mini Project Report entitled "Simple Social Media platform to connect with college peers (Connecture)" Submitted by "Riddhi Narkar" (19102003), "Aditya Yadav" (19102006), "Devansh Katheria" (19102027), "Shauryan Singh"(19102004) is approved for the partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Computer Engineering from University of Mumbai.

Dr. Pravin Adivarekar Guide

Prof. Sachin H Malave Head Department of Computer Engineering

Place: A.P. Shah Institute of Technology, Thane

Date: 16/12/2020

CERTIFICATE

This is to certify that the mini project entitled "Simple Social Media platform to connect with college peers (Connecture)" submitted by "Riddhi Narkar" (19102003), "Aditya Yadav" (19102006), "Devansh Katheria" (19102027), "Shauryan Singh" (19102004) for the partial fulfillment of the requirement for award of a degree Bachelor of Engineering in Computer Engineering to the University of Mumbai, is a bonafide work carried out during academic year 2020-2021.

Dr. Pravin Adivarekar Guide

Prof. Sachin H Malave Head Department of Computer Engineering Dr. Uttam D.Kolekar Principal

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Place: A.P. Shah Institute of Technology, Thane

Date: 16/12/2020

Declaration

We declare that this written submission represents our ideas in our own words and where others' ideas or words have been included, we have adequately cited and referenced the original sources. We also declare that We have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.



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Date: 16/12/2020

Abstract

This project is based on the concept of making new and meaningful connections. By providing access to all college peers on a single platform, getting to know peers with a similar interest can help to guide and inspire students. We already have many sophisticated social platforms to connect with people, but, a setup at an institute-level would significantly help to bind everyone by leveraging the ability to connect digitally.

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List of Abbreviations

SMP: Social Media Platform

Introduction

Exploring new technology, knowledge, and skills is an important step to try to find a new passion or to polish an existing one. But, finding and connecting with new people who share a common interest can be a bit overwhelming at times.

We would be addressing this very issue by designing a centralized platform wherein students and teachers can build new connections, post information and stuff that can help to create an inspiring and encouraging environment to learn, develop and venture for all.

1.1 Problem Definition

For this mini-project, we aim to develop a SMP (Connecture) at an institute level wherein students can connect with and share tech-related ideas, knowledge and help foster a rich tech culture in our college.

1.2 Objectives

- 1) To develop a rich tech culture in college.
- 2) To help college students connect and interact in a way that would lead to their skill development.
- 3) To keep everyone updated about the current technical scenario and to present them with opportunities which would strengthen their vital skills in their college years.

1.3 Scope

This project is will be implemented in an institute level. This way, all college students will have a dedicated and organized and centralized platform wherein they can find other students with similar interest and hence, can venture in the fields of their interest by helping, learning, and guiding each other. This will significantly boost their development curve, both when it comes to technical skills and soft skills alike. The underlying idea behind this project is to increase the quality and quantity of interactions students have about technology in an institute, which in turn is guaranteed to make students more open to opportunities to improve their skills, areas to do and learn from mistakes. The overall effect would be seen in the improving tech culture of the institute which is almost non-existent in 3 tier colleges.

1.4 Existing system/project

When it comes to SMPs which are committed to provide people opportunities to connect, we really have many well-established sites which commit to provide powerful tools for connections. SMPs like Facebook really aims towards meeting new people and connecting with them to make a broader community. LinkedIn is focused on making meaningful connections with people who could help them in professional needs. But both these systems are implemented on a global level and their reach is huge. Bringing a well-planned mix of some of the features of these SMPs and changing the reach level makes this project different. We are leveraging the same – the concept of SMP to enhance connections, but on an institute level and in a way that benefits all.

Technology Stack

A) FRONT END

1)HTML

HTML is responsible for the structuring and placement of the content. It covers the way content is organized and where it is positioned on the page in whatever case. It is the backbone.

2)CSS

CSS is responsible for the representation of the content. It includes colors, fonts, background stuff, peculiarities of a layout, etc.

3)REACT

React.js is the declarative JavaScript framework for creating dynamic client-side applications in HTML. Through React we can build up complex interfaces through simple Components, connect them to data our backend server, and render them as HTML. React's strong suit is handling stateful, data-driven interfaces with minimal code and minimal pain, and it has all the bells and whistles expected from a modern web framework: great support for forms, error handling, events, lists, etc.

B) BACK END

1) Node.js and Express.js

Express.js server-side framework, running inside a Node.js server. Express.js bills itself as a "fast, unopinionated, minimalist web framework for Node.js," and that is indeed exactly what it is. Express.js has powerful models for URL routing (matching an incoming URL with a server function), and handling HTTP requests and responses. By making XML HTTP Requests (XHRs) or GETs or POSTs from React.js front-end, you can connect to Express.js functions that power the application. Those functions in turn use MongoDB's Node.js drivers, either via call backs for using Promises, to access and update data in your MongoDB database.

2) MongoDB

MongoDB is a document database, which means it stores data in JSON-like documents. We believe this is the most natural way to think about data, and is much more expressive and powerful than the traditional row/column model. The Application stores any data (user profiles, content, comments, uploads, events, etc.), JSON documents created React.js front end can be sent to the Express.js server, where they can be processed and (assuming they're valid) stored directly in MongoDB for later retrieval.

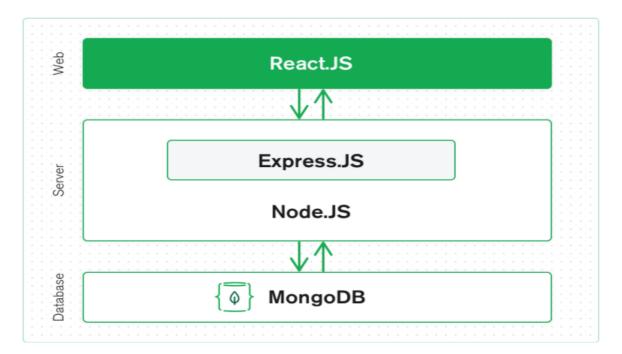


Figure 2.1: Technology Stack

Benefits and Applications

3.1 Benefits for society

This initiative can help students to be able to form strong communities which in turn can help students of any institute to progress. It provides a fair opportunity and a seamless service for all students to excel in their career and to find people with similar interests and goals. Being able to find such a supportive company keeps a healthy competition alive between students and a collaborative and supportive environment is created. By doing this, college students can not only make new friends, but also meet new mentors, guides, or juniors with similar mindset and help them carve their way. This can build a tech intensive ecosystem.

3.2 Benefits for environment

This project will have a dark theme UI which would use less power. Also due to its simple nature, it's working is also not as complicated as other alternatives in the market, which again uses less memory and power.

3.3 Applications

- 1) Will create a very supportive and collaborative environment for students to create communities.
- 2) Will help them to meet new people with similar interests so that they can work together to achieve a similar goal.
- 3) Can act as a medium to keep students updated with the current technical scenario.

Project Design

4.1 Proposed System

At first, user will be prompted to create an account with some basic personal information like name, photo, year, areas of interest and contact details. After creation of an account, the user could sign in with the username and password. The profile of every user will be set as public for better and faster connections. There will be an option of posting pictures or just a text or even a question to interact with others and setup a connection. As the account would be public, so the posts made by anyone could be visible in everyone's feed and they can interact with it and posts could be liked and commented also. To sort the posts out, there will be tags regarding the content, if he/she wanted to use a tag they can easily do so. User will receive notifications when the feed is uploaded or if there are interactions with their posts.

4.2 Flow of modules

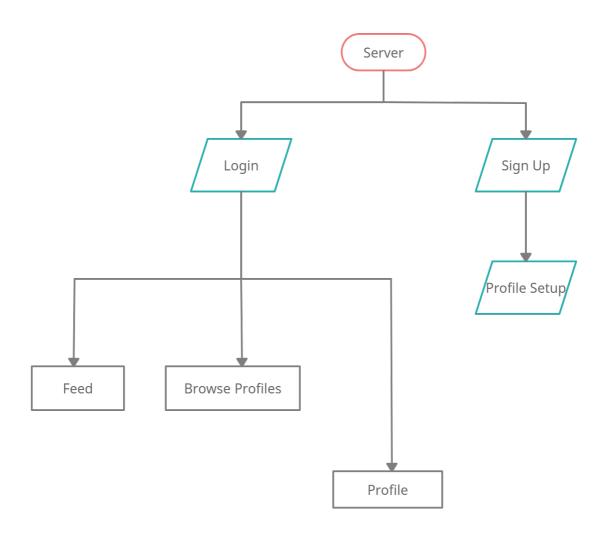


Diagram 4.1: Flow of modules

4.3 Data Flow Diagram

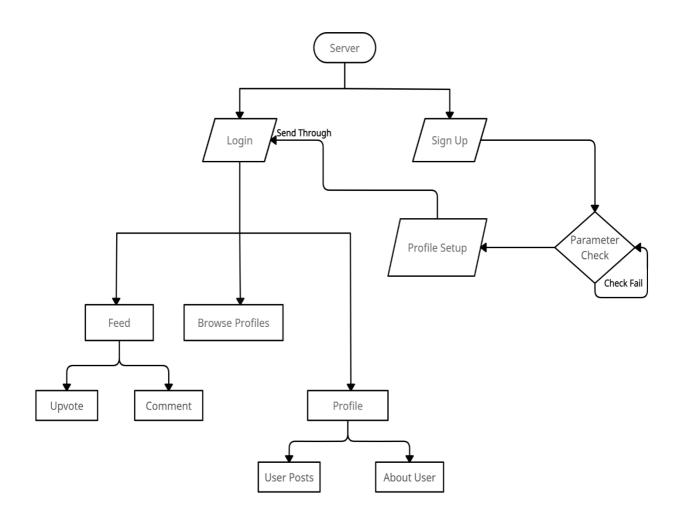


Diagram 4.2: Data flow diagram

Annexure A

5.1 Gantt Chart

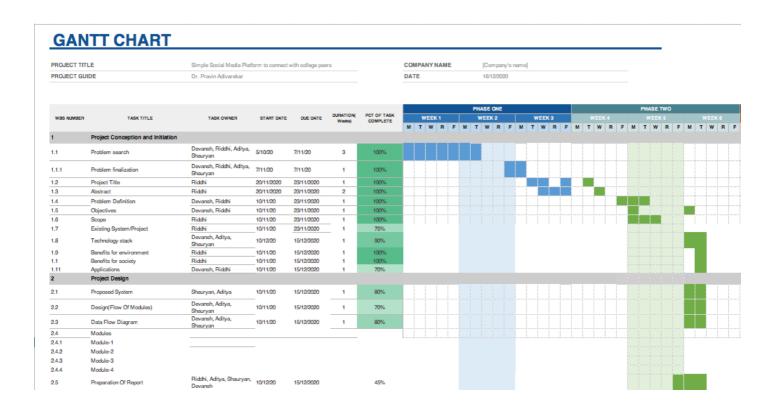


Table 5.1: Gantt Chart

Acknowledgement

We have great pleasure in presenting the miniproject report on **Simple Social platform to connect with college peers(Connecture).** We take this opportunity to express our sincere thanks towards our guide **Dr. Pravin Adivarekar**, Department of Computer Engineering, APSIT thane for providing the technical guidelines and suggestions regarding line of work. We would like to express our gratitude towards his constant encouragement, support and guidance through the development of project.

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