

# CODE CONNECT

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New Horizon Institute of Technology and Management

University of Mumbai

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# New Horizon Institute of Technology and Management

## CERTIFICATE

This is to certify that the Mini Project entitled "CODE CONNECT" is a bonafide work of **"Reeti Sharma"** (IEN No. 11912029), **"Harsh Karande"** (IEN No. 11912017), and **"Pushkaraj Kulkarni"** (IEN No. 11912027) submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of "Bachelor of Engineering" in "Computer Engineering".

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Prof. Deepak Khachane  
Guide

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Dr. Sanjay N. Sharma  
Head of Department

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Dr. Prashant D. Deshmukh  
Principal



# New Horizon Institute of Technology and Management

## Project Report Approval for S.E.

This project report entitled "**CODE CONNECT**" by *Reeti Sharma, Harsh Karande and Pushkaraj Kulkarni* is approved for the *Mini Project 1A* in *Computer Engineering 2020-21*.

Examiner Name

Signature

1.

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2.

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Date

Place

## Abstract

Various questions can occur to a student on a day to day basis. These doubts can be solved by someone who has already faced these issues. **Code Connect** provides easy and more accessible opportunities for all the computer department students to interact with each other. It helps students to interact and learn something new amid the crisis.

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# Chapter 1.0

## Introduction

## Chapter 1.0 Introduction

Code Connect is a web application, *made for students by students*. With its easy to use interface, interaction with other students is just a click away. Built on open source software's, Code Connect provides a fast and effortless path for upgradeability.

### 1.1 Objective

Code Connect expects to provide a common platform for students to interact online for institutional needs.

Students who are new to programming can discuss with seniors who have faced issues with the same.

### 1.2 Scope

- The scope of the project is the **computer department**.
- Users can **create** and **customize** their profiles according to their needs.
- Adding a programming **skillset** makes it easier for others to notice and correlate.
- Actions such as **like**, **dislike**, **comment**, and **follow** are open for all.
- Administrator specific actions like **announcements** are also accessible for specific individuals.
- Show your code from the open-source repositories with your **GitHub** username.

# Chapter 2.0

## Present Investigation



## Chapter 2.0 Present Investigation

### 1.1 Problem Definition

Providing easier and more accessible educational opportunities to all the computer department students online.

### 1.2 Feasibility Analysis

Code Connect is completely built on *open source*, which means it is completely free to use and easy to modify.

In terms of technical feasibility, this project would run on a web server when in production. So, users would be able to access it through any browser which has a *JavaScript Engine* and a data plan.

To make the project operational for larger institutions, it would require a more efficient server for faster transfer of data.

# Chapter 3.0

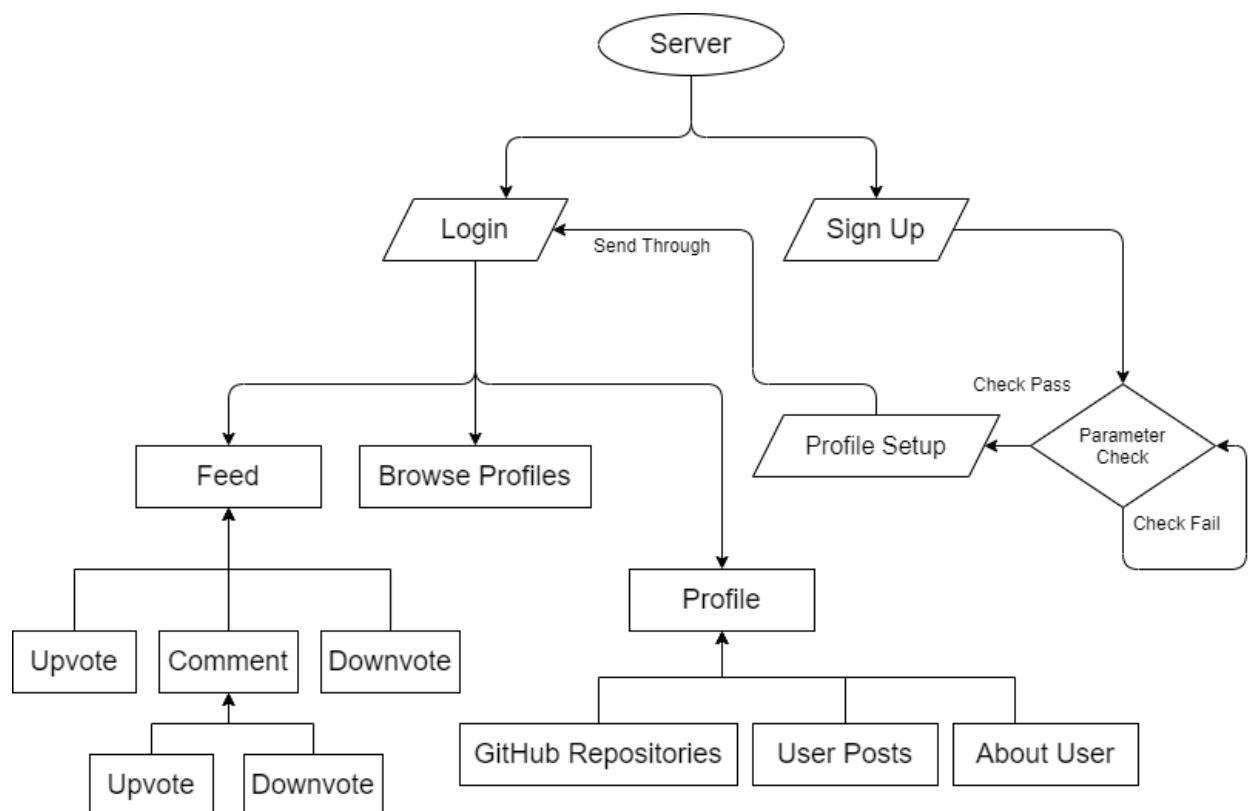
## System Design

## Chapter 3.0 System Design

### 3.1 Proposed Architecture

To create, build, or maintain the project an efficient environment is required. This project requires *Node.js* and its submodules along with external downloadable packages. The frontend is made with *React* by *Facebook* and an extensive backend API with *Express*. It includes authorization and authentication with the help of stateless *JWT*. *Redux* is used for state management and the data is stored in a NoSQL database, *MongoDB*.

### 3.2 Flowchart



# Chapter 4.0

## Implementation Details

## Chapter 4.0 Implementation Details

### 4.1 Algorithm

algorithm starts here

## 4.2 Code

```
{
  "dependencies": {
    "@testing-library/jest-dom": "^4.2.4",
    "@testing-library/react": "^9.5.0",
    "@testing-library/user-event": "^7.2.1",
    "moment": "^2.27.0",
    "react": "^16.13.1",
    "react-dom": "^16.13.1",
    "react-moment": "^0.9.7",
    "react-redux": "^7.2.1",
    "react-router-dom": "^5.2.0",
    "react-scripts": "3.4.2",
    "redux": "^4.0.5",
    "redux-devtools-extension": "^2.13.8",
    "redux-thunk": "^2.3.0",
    "uuid": "^8.3.0"
  }
}
```

*client dependencies in package.json*

```
const express = require('express');
const connectDB = require('./config/db');
const methoseoverride = require('method-override')

const app = express();

connectDB();

app.use(express.json({extended: false}));
app.use(express.urlencoded({extended: true}))
app.use(methoseoverride('_method'))

app.get('/', (req, res) => res.send('API running...') )

app.use('/api/users', require('./routes/api/users'));
app.use('/api/profile', require('./routes/api/profile'));
app.use('/api/posts', require('./routes/api/posts'));
app.use('/api/auth', require('./routes/api/auth'));
app.use('/api/announcements', require('./routes/api/announcements'))

const PORT = process.env.PORT || 5000 ;

app.listen(PORT, () => console.log(`Server started on port ${PORT}`));
```

*express in server.js*

```

const mongoose = require("mongoose");
const config = require("config");

const mongoURI = config.get("mongoURI");

const connectDB = async () => {
  try {
    await mongoose.connect(mongoURI, {
      useUnifiedTopology: true,
      useNewUrlParser: true,
      useCreateIndex: true,
      useFindAndModify: false,
    });
  } catch (err) {
    console.error(err.message);
    process.exit(1);
  }
};

module.exports = connectDB;

```

*connecting to database in db.js*

```

const mongoose = require("mongoose");

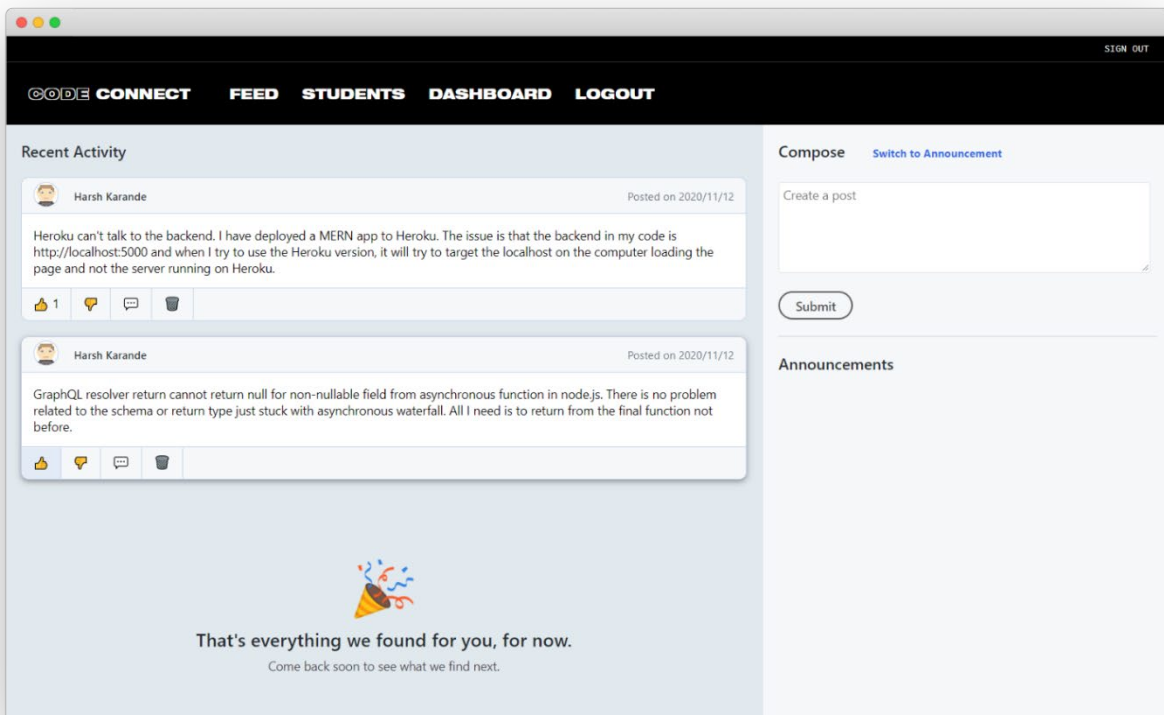
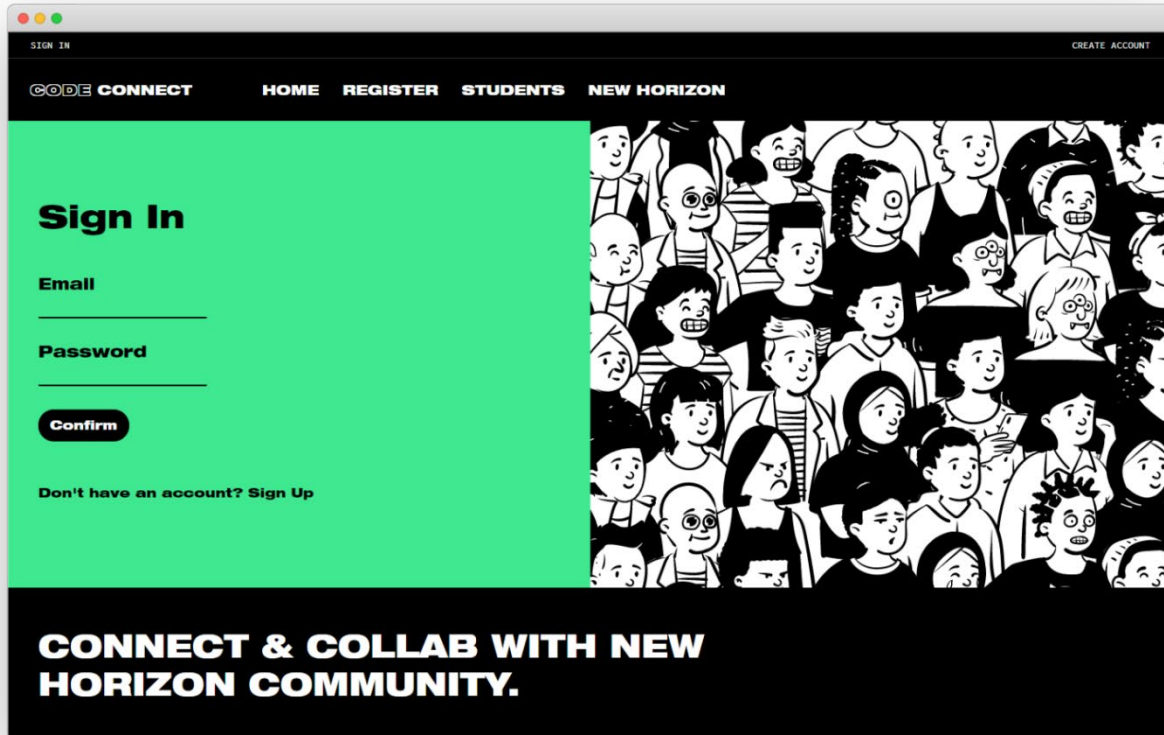
const UserSchema = new mongoose.Schema({
  email: {
    type: String,
    required: true,
    unique: true,
  },
  password: {
    type: String,
    required: true,
  },
  isVerified: {
    type: Boolean,
    default: false,
  },
  admin: {
    type: Boolean,
    default: false,
  },
  passwordResetToken: String,
  passwordResetExpires: Date,
  date: {
    type: Date,
    default: Date.now,
  },
});

module.exports = User = mongoose.model("user", UserSchema);

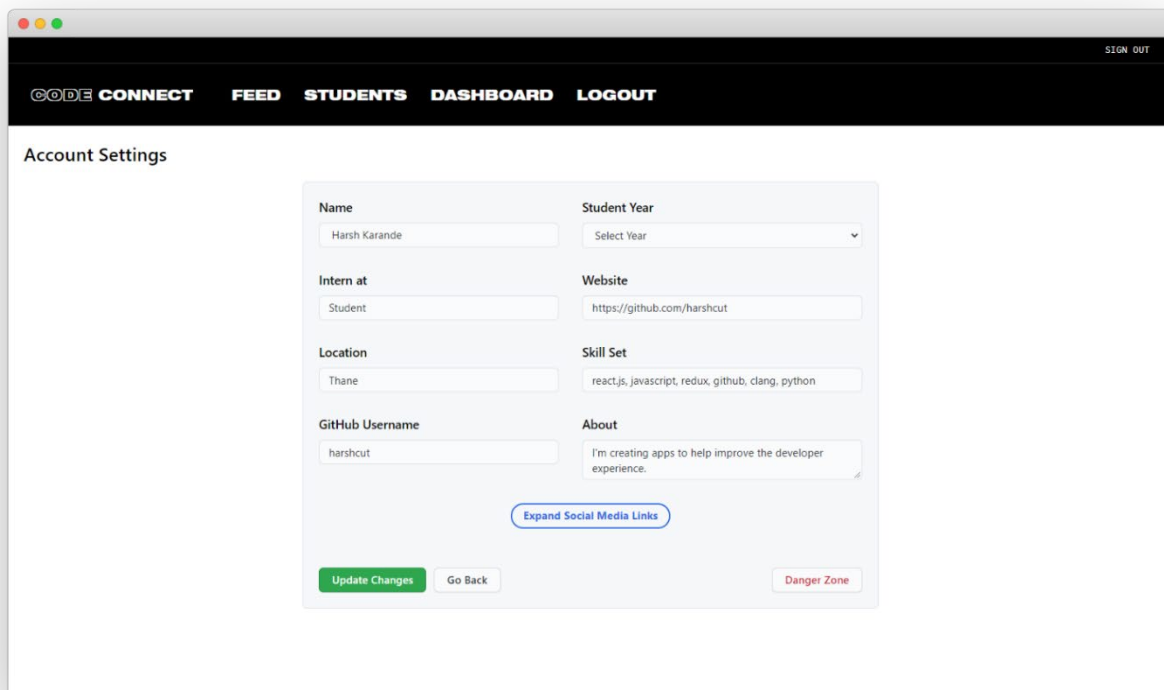
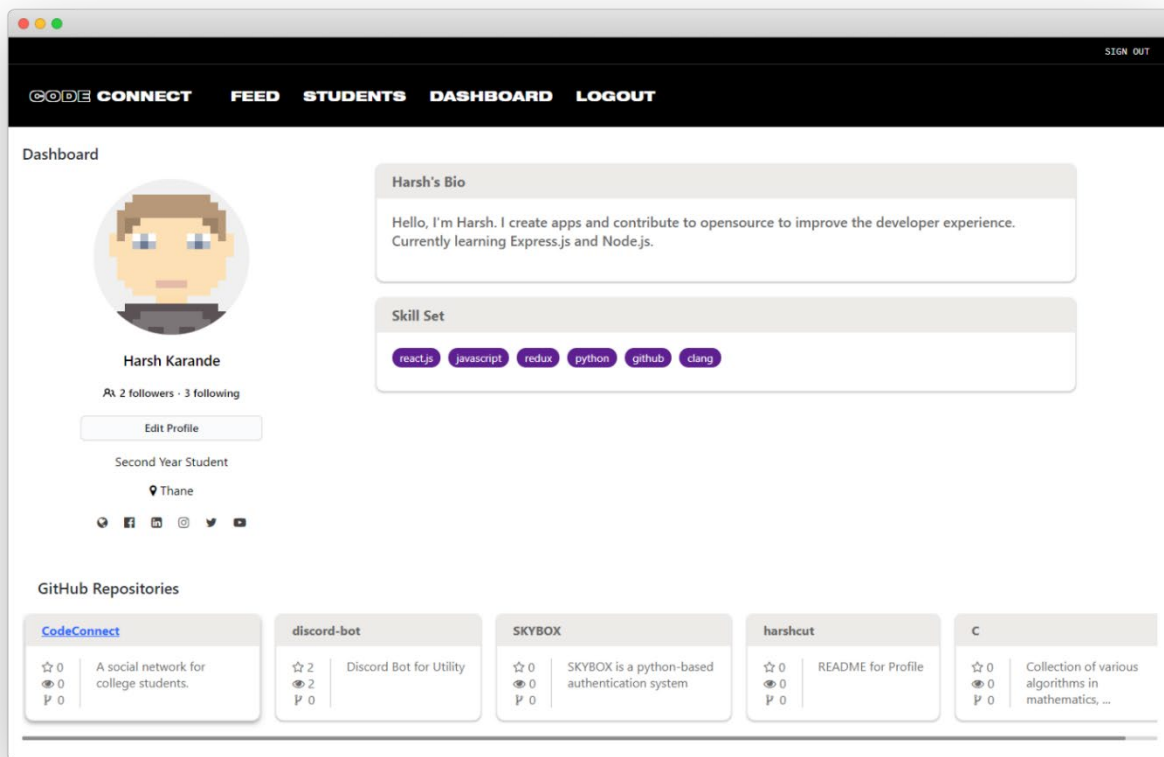
```

*user schema in user.js*

## 4.3 Screenshots







# Chapter 5.0

## Conclusion & Future Scope

## Chapter 5.0 Conclusion & Future Scope

### Conclusion

The goal to provide easier and more accessible opportunities to all the computer department students to interact with each other. Juniors who are new to programming can ask for coding guidance and can showcase their skills.

### Future Scope

The scope for an online application is infinite. Active presence for students, improved post thread, continuous integration and deployment can be added.

## Acknowledgement

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We would like to take this opportunity to thank one and all.

It is our immense pleasure to express our gratitude to our Guide, Prof. Deepak Khachane for providing us with constructive and positive feedback during the preparation of this project.

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