

# PlaceMentor

Online Placement  
Information  
Gathering System

Software Project by CodeNatives





# Group Members

Group 34

*CodeNatives*

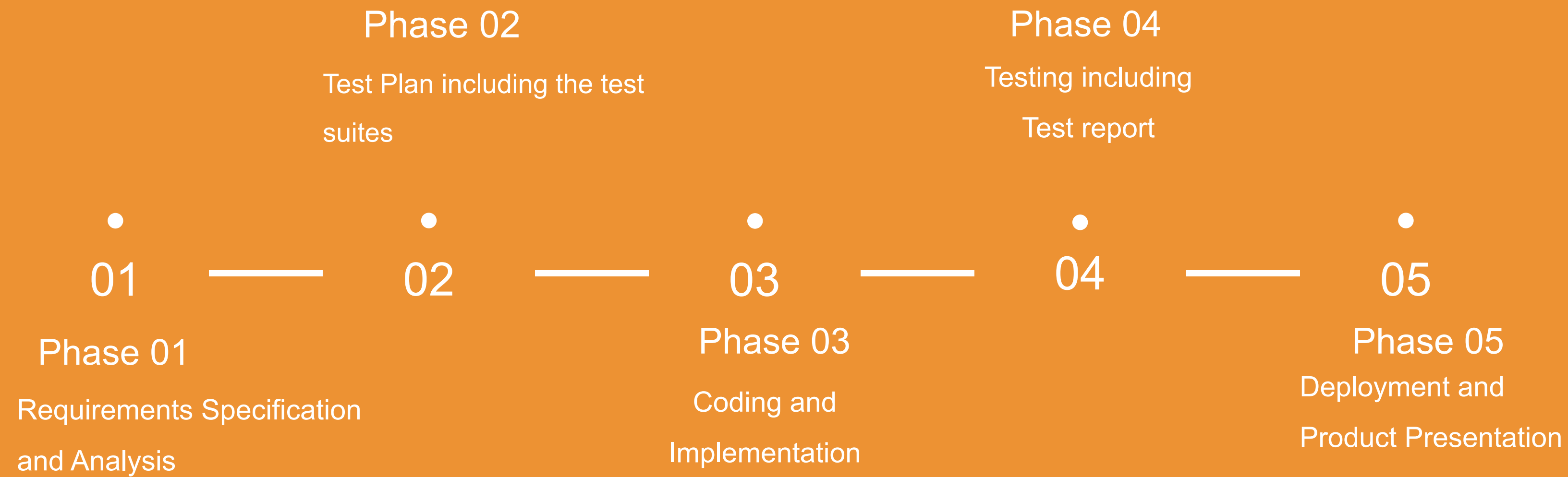
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# Project Timeline



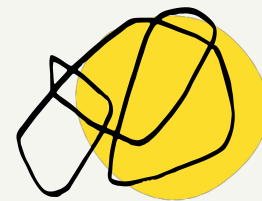


# Introduction





# The Problem



## **What we want to solve**

- To ease the placement process for students and establish better communication by integrating various stakeholders involved.
- To bridge the gap between the students and the recruiters in an effective manner avoiding the innumerable hassles in an offline setup.



# Objectives

## What we want to achieve

To notify the students whenever a new job position has been released or a notice is made by the Institute Placement Board.

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To help the Institute placement cell to get the information of the recruiters trying to contact the company.

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To make the process of getting the applications and accepting them easier for the companies.

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To establish a better communication between alumni and students regarding the placement process and get their feedback.





# Significance of the Project

## In terms of scope

- Students can provide their job preferences along with their resume' for a job position.
- The College Administration ensures that students do not miss out on any updates.
- Recruiters can view student profiles along with their resume' for short listing.
- In addition to these features, students also can contact registered alumni or ask for advice.
- This efficiently encourages hiring companies to participate in a smooth process.

## In terms of resources

- Students can get updates quite effectively as compared to that in an offline process.
- It saves a lot of manpower required for handling the placement procedures and updates.
- It reduces a lot of paperwork involved in registering new companies and releasing their associated job profiles.
- It automates some of the time-taking processes such as verifying recruiters manually.





# Implementation





# System Features

What the software  
provides

## Notifying Users

Users are notified regarding the various updates which include job positions, messages, feedback given by alumni, application status and notices by the Institute.

## Releasing Job Positions

New Job Positions can be created by the Companies and once created, the Institute will be releasing them to the students.

## Job Applications

Students can apply to their desired job profiles and once applied, the companies can accept/reject these applications.

## Communications

Messages can be shared between suitable users, notices released by the Institute will be shared to all the students and alumni.





# Product Demonstration

<https://placementor-code-natives.herokuapp.com>





# Reasons for choosing React JS

for the Front End

## Reusable Components

- React encourages component-based web development is here to stay.
- Creation of components can be helpful at any time, to combine, and nest with other components.
- This saves a lot of time for the developer.
- It also speeds up the process of making changes or updates to a component.

## JSX Syntax

- JSX allows you to mix your HTML directly into the Javascript, without the need for separate template files.
- Doing so allows you to organize your code based on logical concerns

## Redux and Other Libraries

- React gets especially powerful when you combine it with other libraries.
- One of the most popular is Redux which provides a single state container.
- It becomes a single source of application's state.
- React then re-renders with any change in the data container.





# Reasons for choosing Flask

for the BackEnd

## Fast and Lightweight

- A micro-framework written in Python with minimal dependencies.
- Provides extensive support for integration with databases and frontend frameworks.

## Support for REST APIs

- REST APIs can be easily designed for accessing data across web applications.
- It encourages the best practices with minimal setup by integrating with the existing ORMs.

## Support for Testing

- It provides an extension, Flask-Testing- for unit testing APIs.
- Configurations required for testing can be easily setup.

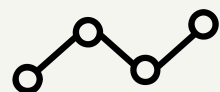




## Efficiency in Handling Data

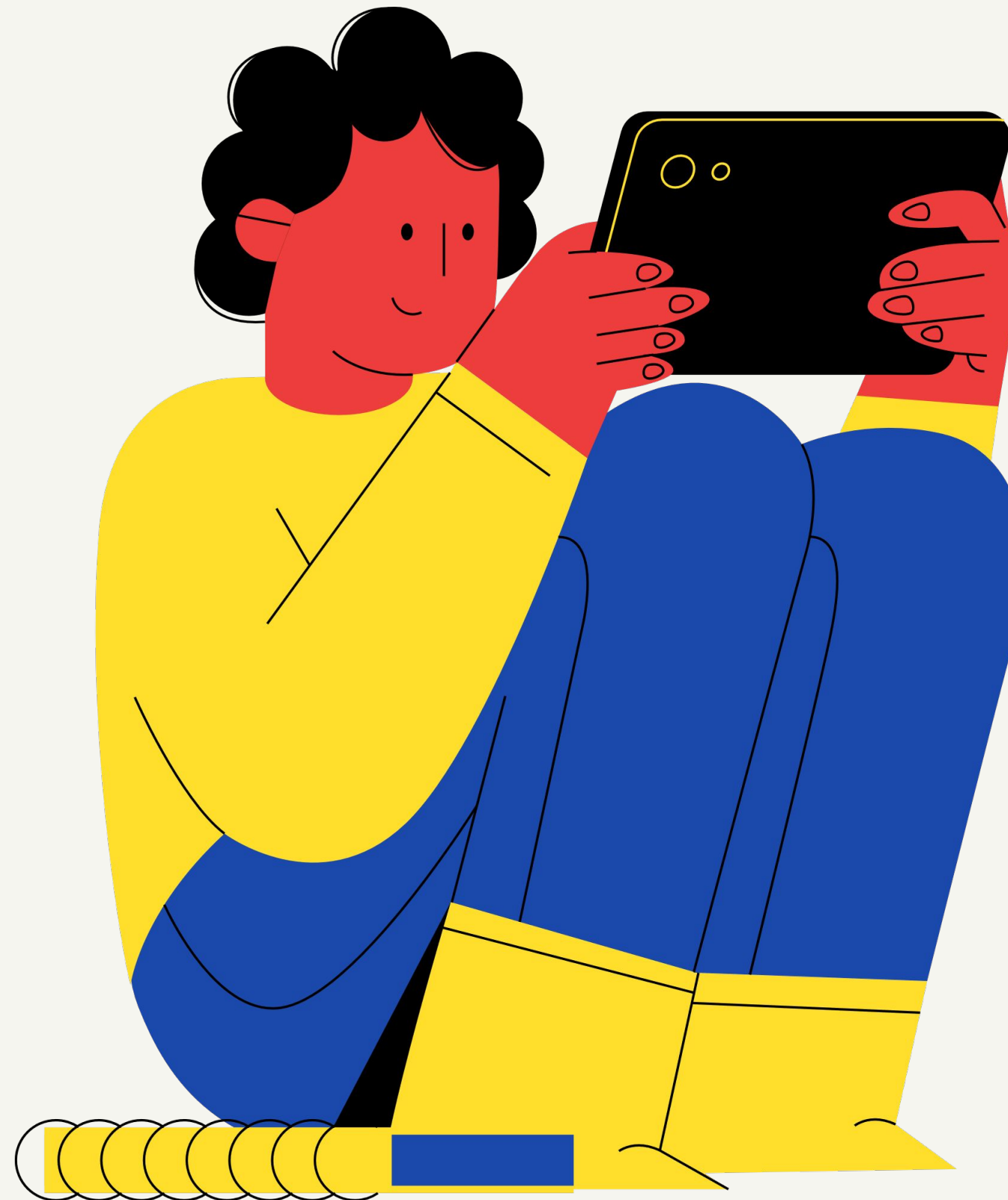
MySQL Server is used which uses SQL and a proper normalization of data is done for the efficiency of reading and inserting.

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## Guarding App Routes

The routes have been guarded in the frontend and in case someone tries to send a fake request the backend detects it using the token passed.



# Challenges Faced during Implementation

Sending notifications about recent updates requires fetching of unread messages which needs marking of messages as read and unread

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NOTIFICATIONS

Linking Front End and Back End requires matching of the response-request data names and configuring the request headers for authentication tokens.

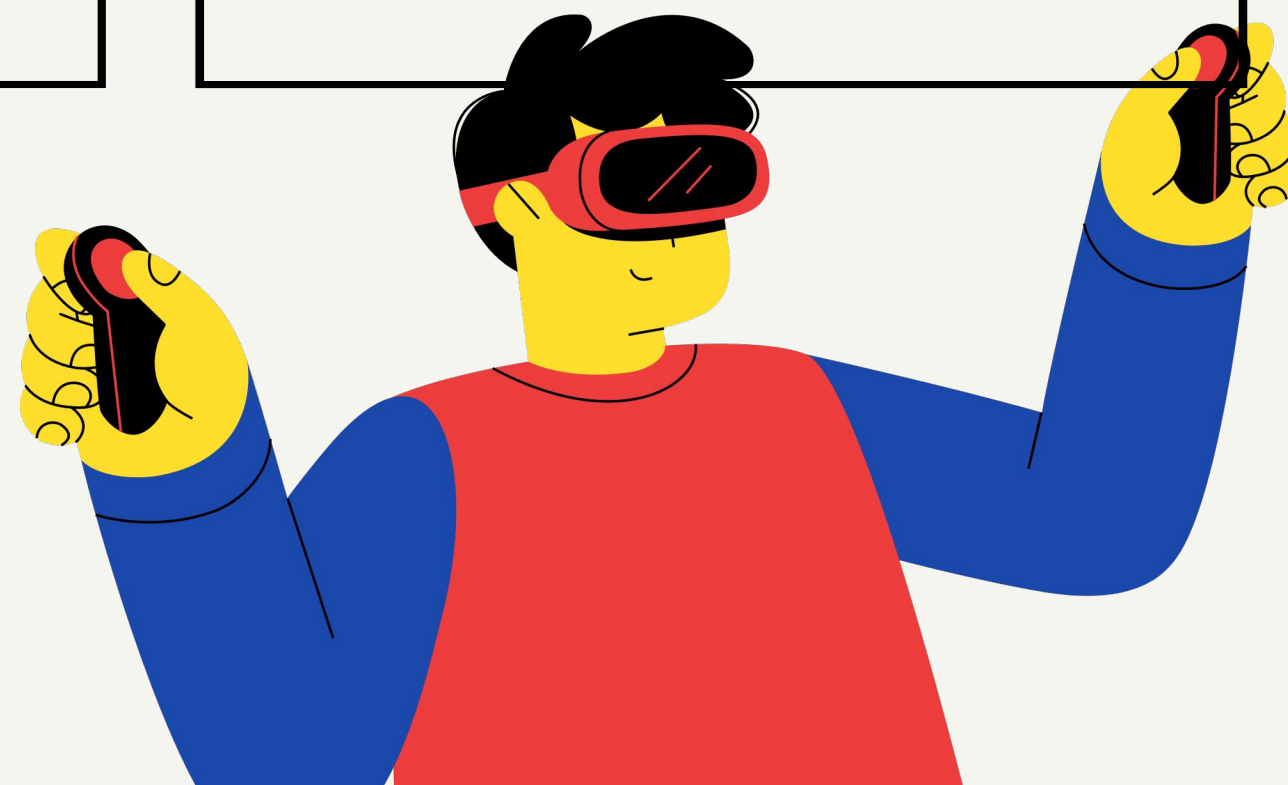
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LINKING FRONTEND & BACKEND

Managing the State of the Application is quite challenging and hence Redux is used for the State Management.

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STATE MANAGEMENT  
FRONT END





# Possible Improvements to the Software

## Multiple Institutions

- At present, this works for single Institution, which can be made to work for multiple institutions by which the recruiters will get the opportunity to get all things at a place.

## Verification through Email

- At present, email is just displayed in the profile which can be later used to verify the registration of stakeholders.

## Notifications through Emails

- Even though the software dynamically shows the notification in the run time but it is nevertheless matching the feature of getting personalised emails regarding the updates. This could be implemented in the later versions.

## Uploading Resume in place of Links

- The software allows submission of resume links for now as we are not having the datastore to store the files.
- Implementing this could be useful as the resume could be shown in the application itself instead of redirecting the user





THANK  
YOU

