



AXIS SARAL

Learning Management Portal

GROUP-B

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Introduction

Axis Saral Learning Management Portal is a project on web-based portal dedicated to its employees to retrieve work related information related to all the units within the organisation

Objective

The objective of an employee management portal is to provide a centralized platform for managing various aspects of employee information and performance within an organization.

Key Features

Access to important documents

Details about services offered

Employee Information

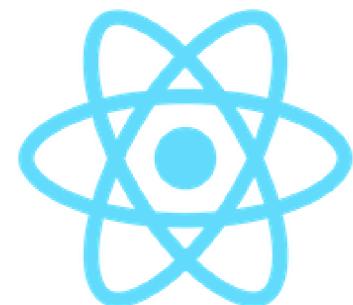
Newsfeed about recent activities

Project Details

Technologies Used



Spring boot



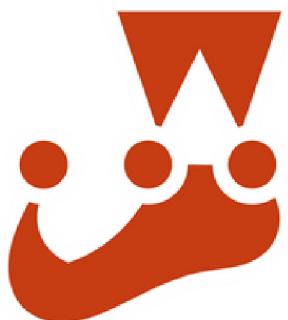
React



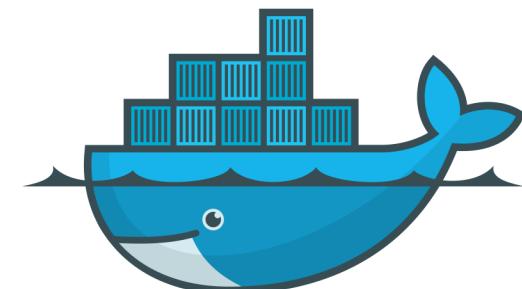
Postman



Swagger



Jest



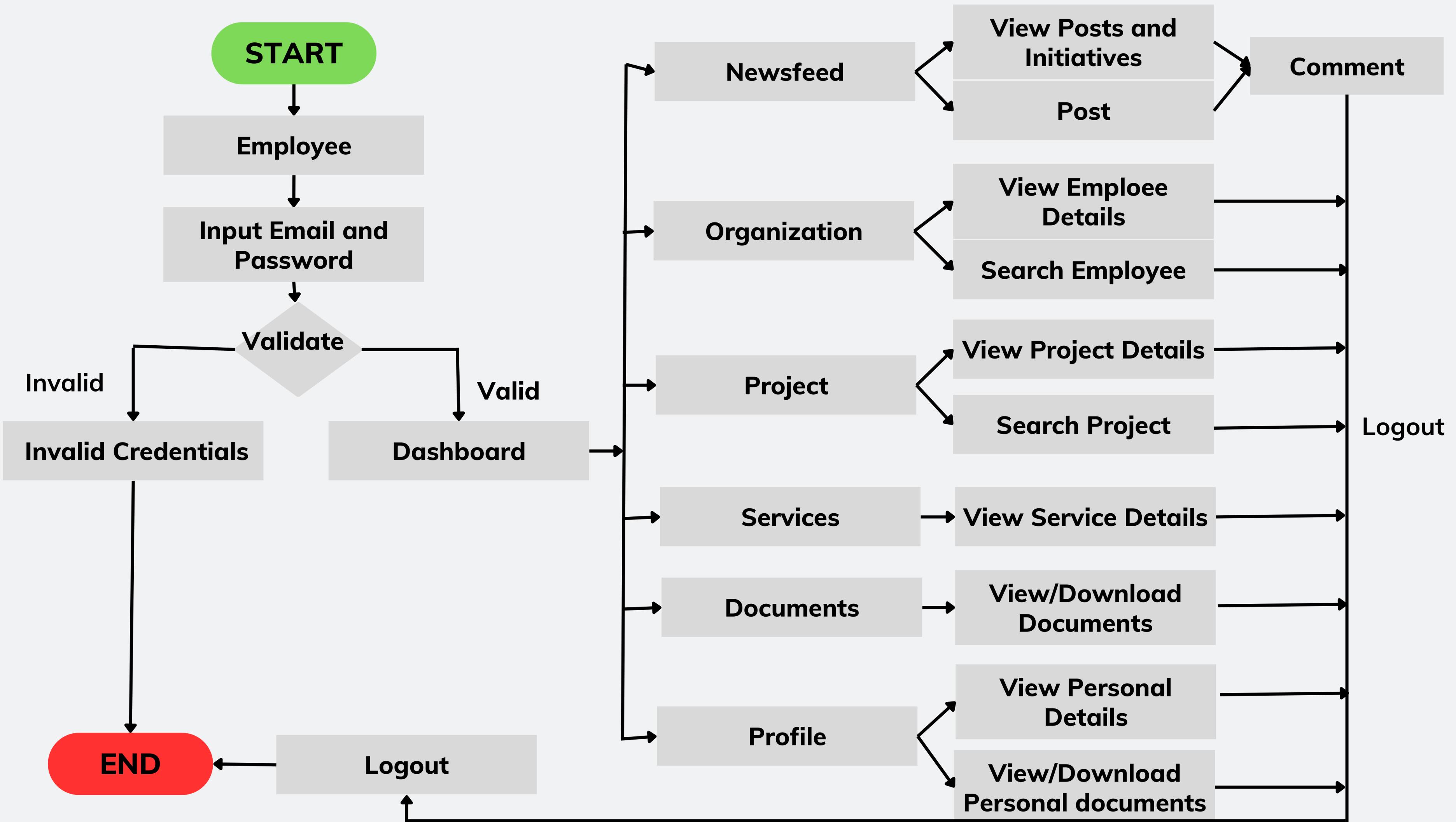
Docker



Kubernetes



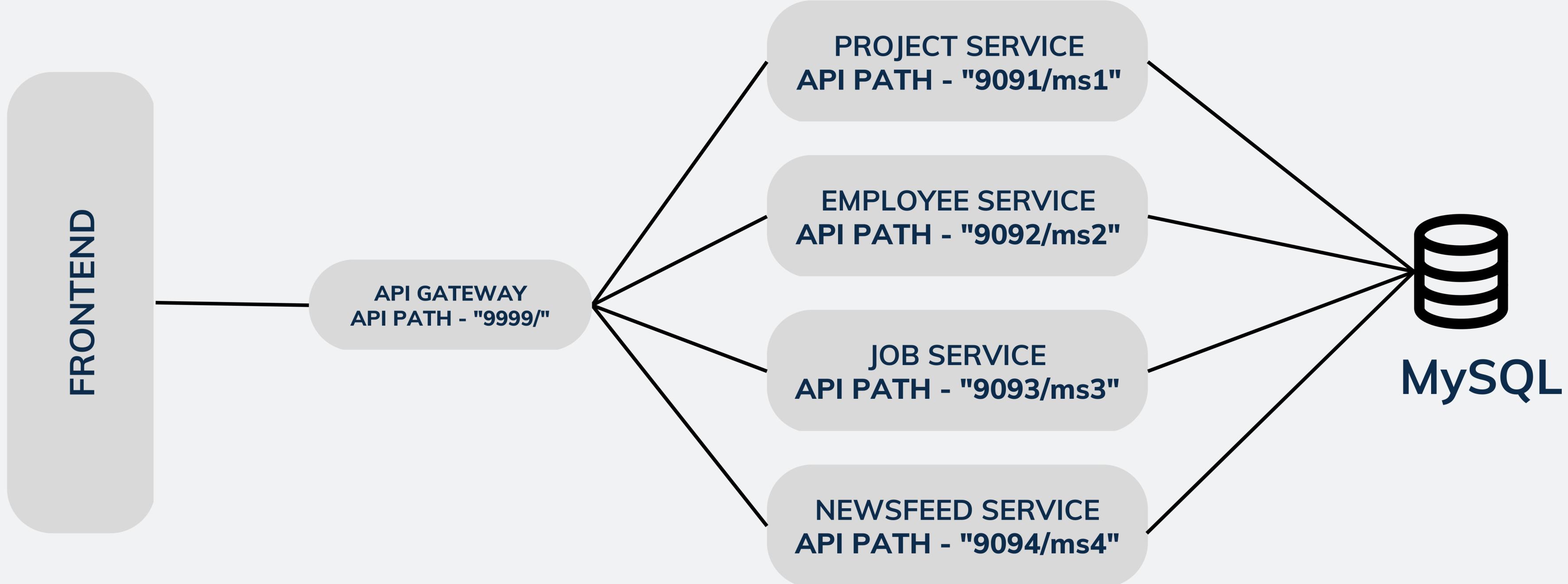
Jenkins



Backend Microservices

- 1 Eureka Server
- 2 Project Service
- 3 Employee Service
- 4 Apigateway
- 5 Newsfeed Service

Microservices

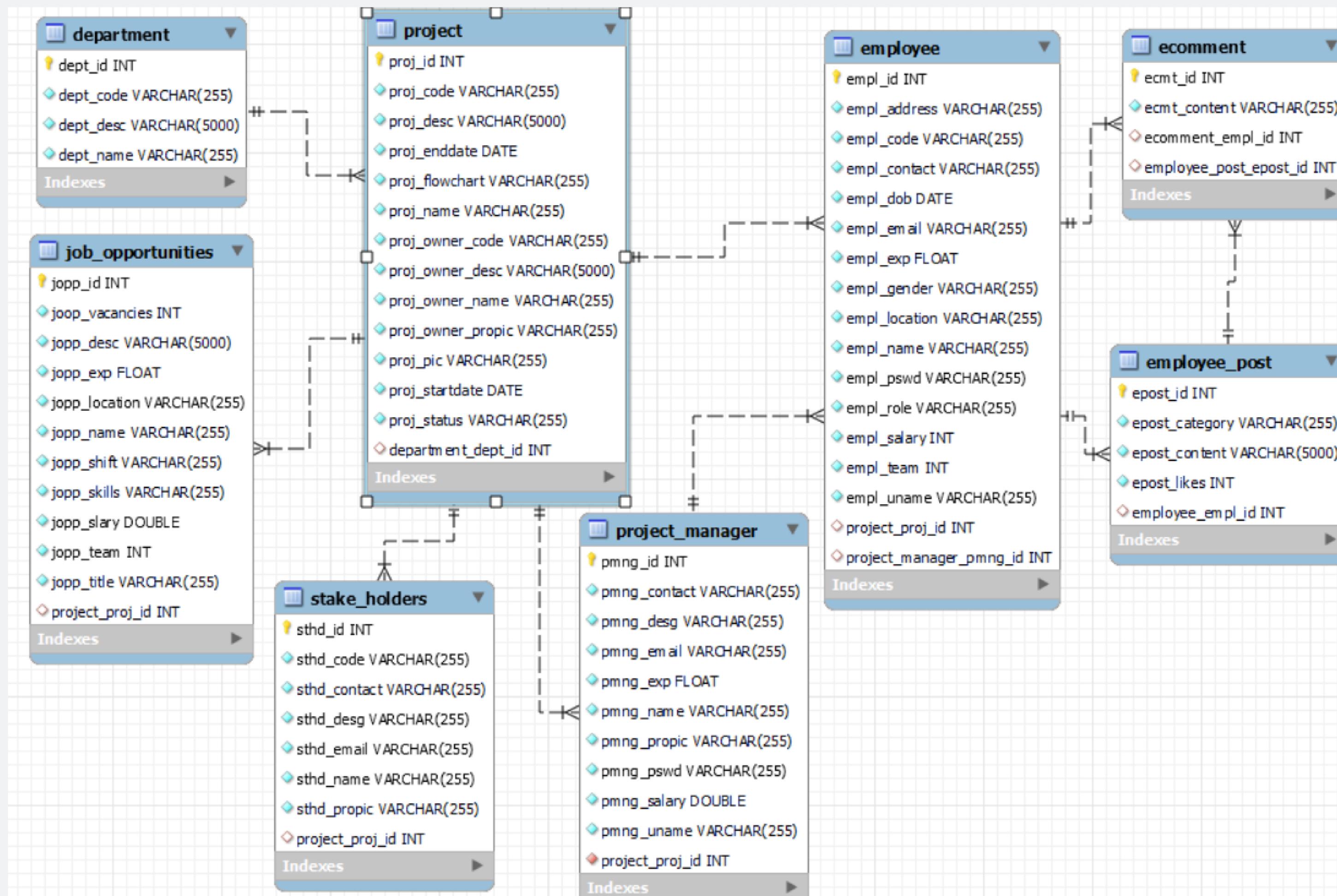


Swagger

We used Swagger for testing the apis and posting the data to database

The screenshot shows the Swagger UI interface. At the top, there is a navigation bar with the Swagger logo, the URL '/v3/api-docs', and a 'Explore' button. Below the navigation bar, the title 'OpenAPI definition' is displayed, followed by 'v0 OAS3'. A 'Servers' section contains a dropdown menu with the URL 'http://localhost:9091 - Generated server url'. The main content area is divided into sections for different controllers. The first section, 'stake-holder-controller', contains four API endpoints: a POST method for '/ms1/sthd/post/{proj_id}', and three GET methods for '/ms1/sthd/g3/{project_proj_id}', '/ms1/sthd/g2/{sthd_id}', and '/ms1/sthd/g1'. The second section, 'project-controller', contains one POST method for '/ms1/proj/post/{dept_id}'. Each endpoint is represented by a button indicating the HTTP method and the full API path.

ER DIAGRAM



Frontend

- 1 React JS
- 2 Axios
- 3 Chakra UI
- 4 Jest and Enzyme

Jest and Enzyme Testing

```
C:\WINDOWS\system32\cmd. x + ~
(c) Microsoft Corporation. All rights reserved.

C:\Users\SHREYA VANAMPALLY\Downloads\jestlogintest>npm test

> axis-saral@0.1.0 test
> react-scripts test
  console.log
    email

      at validate (src/Components/Login/LoginPage.js:37:17)

    console.log
      password:

      at validate (src/Components/Login/LoginPage.js:38:17)

PASS  src/LoginPage.test.js
  ✓ Login component (185 ms)
  Test cases for login page->
    ✓ should render title (9 ms)
    ✓ render userName input (3 ms)
    ✓ render password input (3 ms)
    ✓ render button render (89 ms)

Test Suites: 1 passed, 1 total
Tests:       5 passed, 5 total
Snapshots:  0 total
Time:        5.417 s
Ran all test suites.

Watch Usage
> Press f to run only failed tests.
> Press o to only run tests related to changed files.
> Press q to quit watch mode.
> Press p to filter by a filename regex pattern.
> Press t to filter by a test name regex pattern.
> Press Enter to trigger a test run.
|
```

Docker

Dockerized Project Service, Employee Service, Job Service, Newsfeed Service, Eurekaserver and Apigateway springboot applications.

The screenshot shows the Docker Desktop interface. On the left, there's a sidebar with icons for Containers, Images, Volumes, Dev Environments (beta), Extensions (beta), Okteto, and Add Extensions. The main area is titled "Containers" with a "Give feedback" link. It includes a note about what containers are: "A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another." There's a checkbox for "Only show running containers" which is unchecked. A search bar is at the top right. Below is a table listing five containers:

	NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
<input type="checkbox"/>	unruffled_herschel c0fe538460c2	ankitapanpatil/news-feed-service:latest	Exited (1)	9095:9096	8 minutes ago	▶ ⋮ ☰
<input type="checkbox"/>	minikube bd08c3e37ece	gcr.io/k8s-minikube/kicbase:v0.0.36	Running			▶ ⋮ ☰
<input type="checkbox"/>	confident_archimedes 7c0d6f31fafd	employeeservice.jar:latest	Exited (1)	9094:9093		▶ ⋮ ☰
<input type="checkbox"/>	focused_buck c5c30feb88ca	apigateway.jar:latest	Exited (143)	9092:9999		▶ ⋮ ☰
<input type="checkbox"/>	cool_nightingale 67f3c79b89e9	eurekaserver.jar:latest	Exited (137)	9091:8761		▶ ⋮ ☰

At the bottom, it says "Showing 5 items". The footer shows system stats: RAM 3.41 GB, CPU 49.65%, Connected to Hub, v4.16.0, and a Q icon.

Kubernetes

Deployed docker container to kubernetes cluster using minikube

The screenshot shows the Kubernetes Dashboard interface. The left sidebar contains navigation links for Workloads, Services, Config and Storage, and Secrets. The main area displays the 'Workload Status' section with three large green circles representing the status of Deployments, Pods, and Replica Sets. Below this, the 'Deployments' section is shown with a table listing three entries: 'project-service', 'job-service', and 'news-feed-service-app'. Each entry includes columns for Name, Images, Labels, Pods, and Created.

Name	Images	Labels	Pods	Created
project-service	ankitapanpatil/project-service	app: project-service	1 / 1	2 hours ago
job-service	ankitapanpatil/job-service	app: job-service	1 / 1	22 hours ago
news-feed-service-app	ankitapanpatil/news-feed-service/latest	-	2 / 2	a day ago

The screenshot shows the Kubernetes Dashboard interface. The top navigation bar includes tabs for 'Kubernetes' and 'default' namespace, along with a search bar and a '+' button for creating new resources. The main content area is titled 'Workloads' and displays a table of running pods. The table has columns for Name, Images, Labels, Node, Status, Restarts, CPU Usage (cores), Memory Usage (bytes), and Created. The data in the table is as follows:

	Name	Images	Labels	Node	Status	Restarts	CPU Usage (cores)	Memory Usage (bytes)	Created
Cron Jobs									
Daemon Sets	project-service-6fd4bcb784-p7dvt	ankitapanpatil/proj ect-service	app: project-service pod-template-has h: 6fd4bcb784	minikube	Running	1	-	-	7 hours ago
Deployments									
Jobs	job-service-5577bccf7f-zheq7	ankitapanpatil/job- service	app: job-service pod-template-has h: 5577bccf7f	minikube	Running	2	-	-	7 hours ago
Pods									
Replica Sets									
Replication Controllers	news-feed-service-app-5476c58b9d-ssmko	ankitapanpatil/news -feed-service@latest	app: news-feed-ser vice-app pod-template-has h: 5476c58b9d	minikube	Running	2	-	-	7 hours ago
Stateful Sets									
Service									
Ingresses	news-feed-service-app-5476c58b9d-5lgrz	ankitapanpatil/news -feed-service@latest	app: news-feed-ser vice-app pod-template-has h: 5476c58b9d	minikube	Running	2	-	-	7 hours ago
Ingress Classes									
Services									
Config and Storage	bank-management-service-app-64674f8db7-7kjxj	ankitapanpatil/ban k-management-ser vice@latest	app: bank-manage ment-service-app pod-template-has h: 64674f8db7	minikube	Running	7	-	-	a month ago
Config Maps									
Persistent Volume Claims									
Secrets	bank-management-service-app-64674f8db7-r9g95	ankitapanpatil/ban k-management-ser vice@latest	app: bank-manage ment-service-app pod-template-has h: 64674f8db7	minikube	Running	7	-	-	a month ago

Slack integration using jenkins

The screenshot shows a Slack interface with the following details:

- Channel:** # axissaralnotifications
- Message 1:** jenkins APP 9:37 PM - Slack/Jenkins plugin: you're all set on <http://localhost:8080/>
- Message 2:** jenkins APP 9:43 PM - axissaral1 - #1 Failure after 1 min 14 sec ([Open](#))
- Message 3:** jenkins APP 9:43 PM - axissaral1 - #2 Still Failing after 1.5 sec ([Open](#))
- Message 4:** jenkins APP 9:43 PM - axissaral1 - #3 Started by user Maddireddy Venkata Sri Likhitha ([Open](#))
- Message 5:** jenkins APP 9:43 PM - axissaral1 - #3 Success after 44 sec ([Open](#))
- Message 6:** jenkins APP 9:43 PM - axissaral1 - #4 Started by user Maddireddy Venkata Sri Likhitha ([Open](#))
- Message 7:** jenkins APP 9:43 PM - axissaral1 - #4 Failure after 55 sec ([Open](#))
- Message 8:** jenkins APP 9:43 PM - axissaral1 - #5 Started by user Maddireddy Venkata Sri Likhitha ([Open](#))
- Message 9:** jenkins APP 9:43 PM - axissaral1 - #5 Still Failing after 37 sec ([Open](#))
- Message 10:** jenkins APP 9:43 PM - axissaral1 - #6 Started by user Maddireddy Venkata Sri Likhitha ([Open](#))
- Message 11:** jenkins APP 9:43 PM - axissaral1 - #6 Back to normal after 5 min 46 sec ([Open](#))
- Message 12:** jenkins APP 9:43 PM - axissaral1 - #7 Started by user Maddireddy Venkata Sri Likhitha ([Open](#))
- Message 13:** jenkins APP 10:04 PM - axissaral1 - #7 Aborted after 10 min ([Open](#))

The message input field at the bottom contains: Message #axissaralnotifications.

At the bottom of the screen, the taskbar shows the following icons: Weather (24°C Clear), Search, File Explorer, Google Chrome, Microsoft Edge, Microsoft Teams, Word, Google Sheets, and Power BI. On the right side of the taskbar, there are system status icons for battery, signal, volume, and date/time (26-02-2023 22:09). A language setting (ENG IN) is also visible.

Slack integration using jenkins

The image shows two side-by-side screenshots of Jenkins console output windows. Both windows have a title bar with multiple tabs: 'Meet - ymr-sfbp-rpi', 'localhost:8080/job/axisaral1/3/console' (selected), and several other tabs for Pipeline Syntax Snippet Generator, Jenkins, and React App.

Left Window (Console Output):

- Header:** Jenkins, Search (CTRL+K), Maddireddy Venkata Sri Likhitha, log out
- Left Sidebar:** Status, Changes, **Console Output** (selected), View as plain text, Edit Build Information, Delete build '#3', Git Build Data, Previous Build, Next Build.
- Content:** Console Output section titled 'Console Output' with a green checkmark icon. It shows the build process starting with 'Started by user Maddireddy Venkata Sri Likhitha' and running as SYSTEM. It details the cloning of the repository from GitHub and the execution of an npm install command.
- Bottom:** Jenkins status bar showing 24°C Clear, system icons, ENG IN, 26-02-2023, 22:08, and a battery icon.

Right Window (Console Output):

- Header:** Jenkins, Search (CTRL+K), Maddireddy Venkata Sri Likhitha, log out
- Left Sidebar:** Dashboard > axisaral1 > #3
- Content:** Shows the same Jenkins build log as the left window, followed by a summary of npm audit results:
 - added 1690 packages, and audited 1691 packages in 40s
 - 243 packages are looking for funding
run 'npm fund' for details
 - 6 high severity vulnerabilities
 - To address all issues (including breaking changes), run:
npm audit fix --force
 - Run 'npm audit' for details.
- Bottom:** Jenkins status bar showing 24°C Clear, system icons, ENG IN, 26-02-2023, 22:09, and a battery icon.

Thank you