



SlackPost is a Blog application developed using Express, NodeJs, MongoDB and Bootstrap 4.

NodeJs is used for backend of the application with express used for simplifying the development of the application. EJS is used as Express's view engine used to render pages. Further MongoDB is used as the database. Node package Mongoose is used to interact with the MongoDB database. The below diagram shows the overall flow of the project.



- MongoDB Database: Used to store data related to users and blog posts. The communication between mongoDB database and express application is using Mongoose Node Package.
- Express Application: Express application is used to read/write the data from the database and handle HTTP requests (GET and POST requests). The views are accordingly render based on the requests. The views are present in EJS format.
- Front End: The front end views are present as EJS views. Frontend UI was design using Bootstrap 4. The posts requests from form submissions are handled in express application using body-parser node package.

Database

MongoDB database named BLOG has two collections:

• Users: Stores information related to users. The schema of the users is the following

```
({
    UserName:String,
    password:String,
    title:String
});
```

• Posts: Stores information related to posted articles. The schema of posts is the following

```
({
    User:String,
    UserTitle:String,
    title:String,
    content:String,
    date:{type:Date,default:Date.now}
});
```

Express Application

Express application is used to read/write data to database and handle GET/POST requests. Accordingly it renders the EJS views.

Get Requests

• GET('/')

The homepage of the application

GET('/Register')

Renders the registration view

GET('/CreatePost')

Renders view that allows user to create posts

· GET('/Logout')

Logs out user from the account being used and returns to login page.

GET('/UserPost')

Give author and title of a given blogpost it sends the blogpost information of respective blogpost and renders it using Blogpost.ejs view.

GET('/Posts')

Renders view which has all the blogposts

Post Requests

· POST('/Login')

Handles post request from login form by checking if the give username/password login pair exists or not.

POST("/AddUser")

Handles post request from registration form by checking if the details entered by user is valid and Saving it to database.

POST('/CreatePost')

Handles post request of the form used to create posts and saves it to the database.

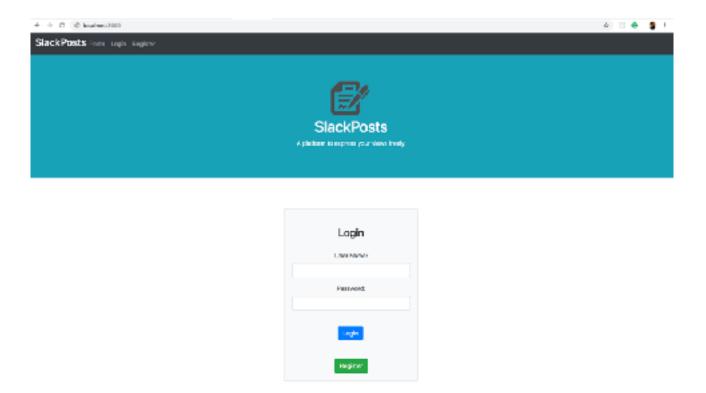
Frontend

The frontend uses Bootstrap 4 templates and EJS views. The EJS views are rendered according to the data passed by express framework. The following are the views used for application.

- Index
- Register
- Dash
- CreatePost
- BlogPost
- · Nav (Partial)

Index

Index view consists of the form which allows the user to login using desired credentials. The form sends a POST request POST('/Login').



Register

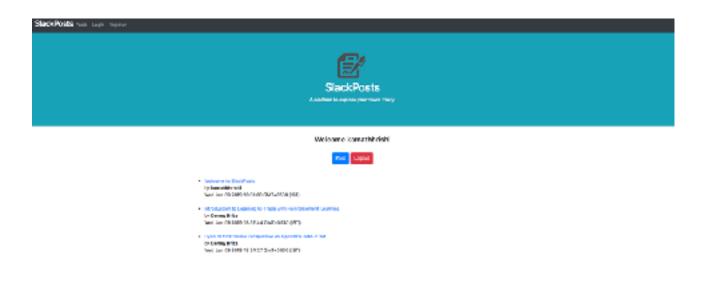
Register view has a form allowing user to register. Form submission sends the request ${\sf POST}(\text{'}/{\sf AddUser'}).$





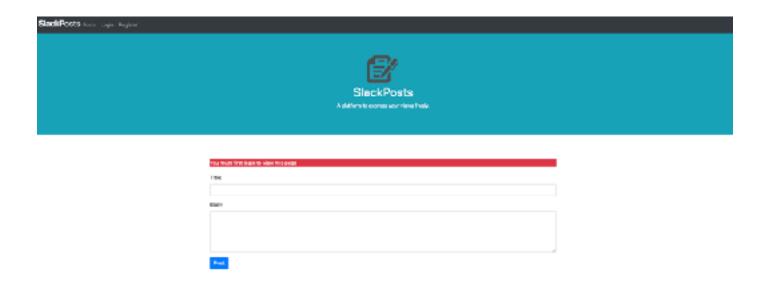
Dash

Dash is the view rendered when the user logs in with appropriate registered credentials. It consists of the posts posted on the blog.



CreatePost

Create post is the view rendered using which the user can create blogposts



BlogPost

The default view which renders blogposts in a given format. The blog post content is passed as JSON data to the view which is rendered as follows. The view is rendered when a specific blogpost is clicked on in Dash view.



Nav (Partial View)

Nav partial view is included in every view. It includes the navbar and header with Slackposts Logo and title in every view. Since it remains constant for every view, it is a separate view included in every view.

