

Title: Vacation Planner using Cloud Tech

Team Members:

Nikhitha Sadanala(Student Id: 16335566)

Samarasimha Reddy Kota(Student Id: 16336264)

Susmitha Kolla(Student Id: 16330355)

Hema Nagini Matta(Student Id: 16347557)

Roles & Responsibilities:

Nikhitha is responsible to develop login & registration pages with validations using Angular. After validating the user, application will be redirected to the home page which includes tabs like About, Contact Us, Logout.

Samar is responsible for creating a Mongo database for application which will be used to store all the collections. And he also created backEnd API to store new user details in MongoDB.

Susmitha is responsible for backend API's using Node JS to validate input request. She is also responsible for deploying the application in Heroku.

Hema is responsible for integrating the external API(Travel API), so that the results will be displayed in the home page using CSS.

Motivation/Purpose:

The motivation for creating a Vacation Planner is to develop a web application which will make life easier for a traveler planning to explore new destinations within the time available. A complete, user-friendly platform that assists tourists in trip planning with locations and discovering unusual activities would be necessary. Vacation Planner project or application also be developed with the aim of promoting sustainable travel practices and encouraging travelers to save time for planning.

Technologies Used:

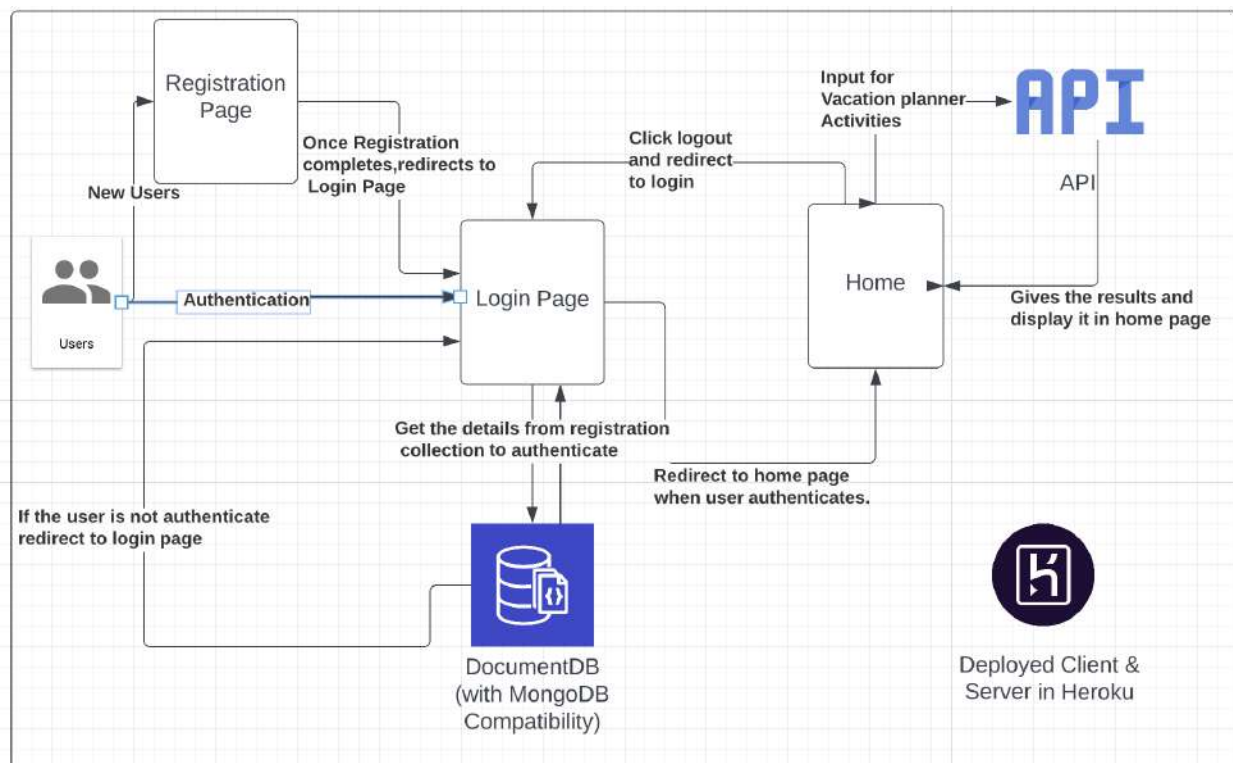
Cloud Platform: Heroku for its broad variety of cloud services and scalability.

Frontend Development: Angular, Typescript is used for front-end development to create a responsive and dynamic user experience.

Backend Development: Node.js for server-side development.

Database: Mongo Database

System Architecture:



Features:(Screenshots added)

Mongo Atlas: Created the Mongo Cloud database and integrated it with the Vacation Planner application to store the required collections.

The screenshot shows the MongoDB Atlas Project 0 dashboard. The left sidebar contains navigation links for DEPLOYMENT, Database, SERVICES, and SECURITY. The main content area displays a banner to 'Load sample datasets to Cluster0'. Below this, the 'Cluster0' details are shown, including a table of specifications:

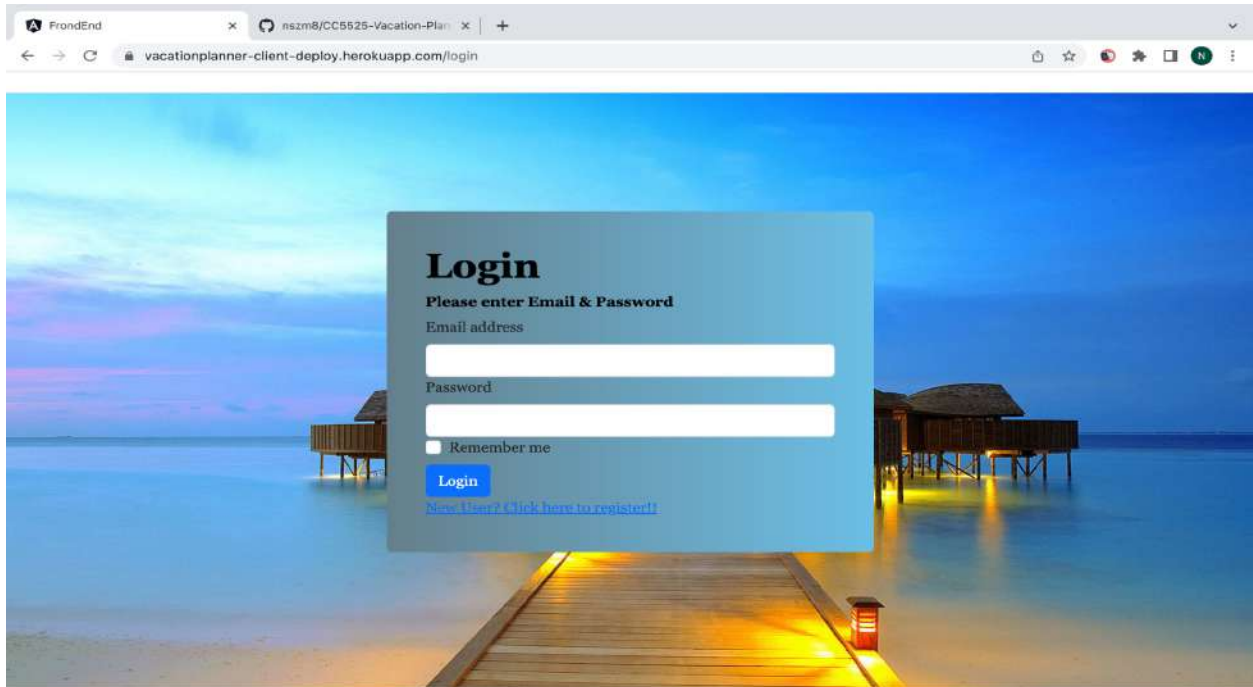
VERSION	REGION	CLUSTER TIER	TYPE	BACKUPS	LINKED APP SERVICES	ATLAS SQL	ATLAS SEARCH
6.0.5	AWS / N. Virginia (us-east-1)	M0 Sandbox (General)	Replica Set - 3 nodes	Inactive	None Linked	Connect	Create Index

Performance metrics for the last 6 hours are also displayed: R: 0, W: 0, Connections: 3.0, In: 15.7 B/s, Out: 213.9 B/s, and Data Size: 20.2 KB.

The screenshot shows the MongoDB Atlas CloudProject.registrations collection view. The left sidebar is the same as the previous screenshot. The main content area displays the collection details, including a search bar and a table of document details:

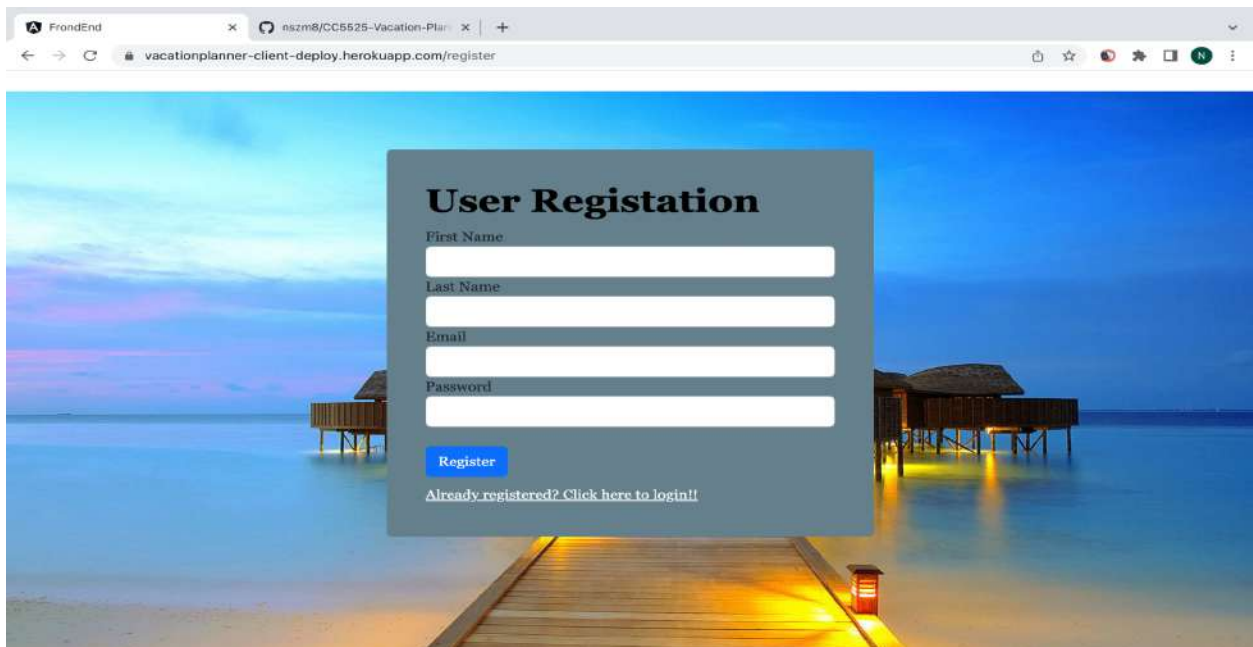
Find	Indexes	Schema Anti-Patterns	Aggregation	Search Indexes
<p>Filter: Type a query: { field: 'value' } [Reset] [Apply] [More Options]</p> <p>QUERY RESULTS: 1-8 OF 8</p> <pre>{ "_id": ObjectId("64548261201f70b92cd5aec7"), "firstname": "Nikhitha", "lastname": "Sadanalala", "email": "ns@gmail.com", "password": "9d06212c5c6afe59398124cff52235d9b2aaf88068609c96a997e140fd576326fec366...", "__v": 0 }</pre> <pre>{ "_id": ObjectId("64572c7d98ec8cb53cd358b5"), "firstname": "Nikhitha", "lastname": "Sadanalala", "email": "ns@gmail.com", "password": "e9a31a3bd3034b3331295331e9901466352b3adbd73dd3f917c317bdd440e22395cd28...", "__v": 0 }</pre>				

Login page:User can login with his email address and password.We have added the validations like if we give invalid email or password application will not give access.



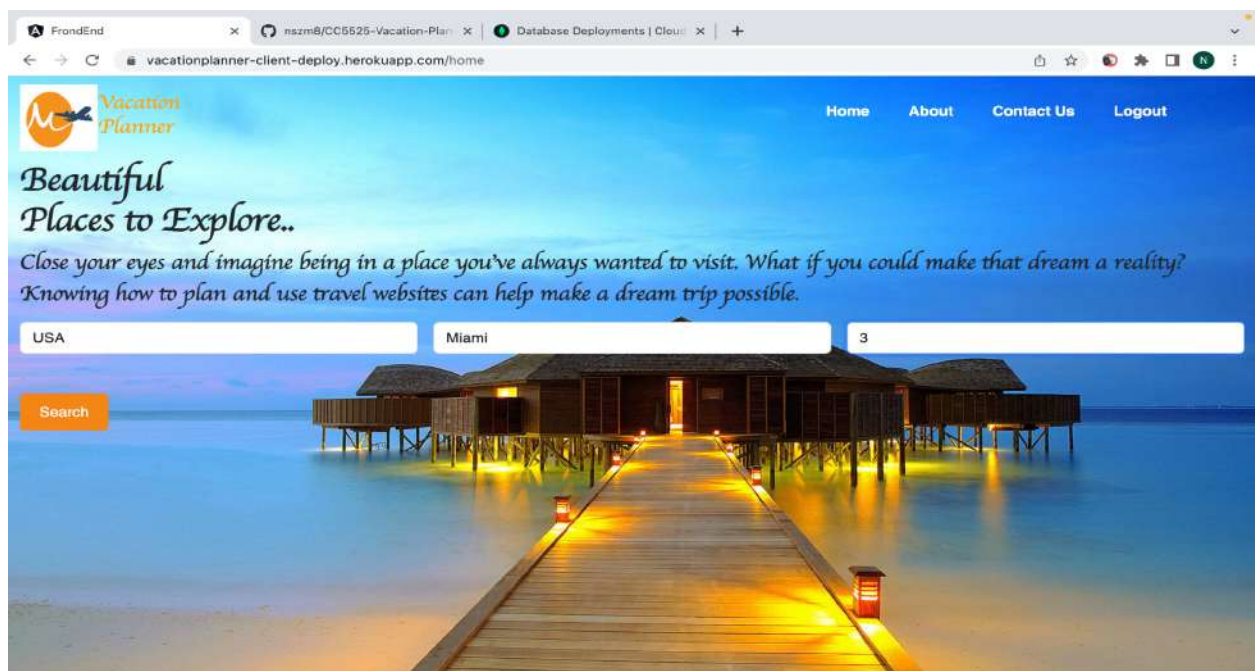
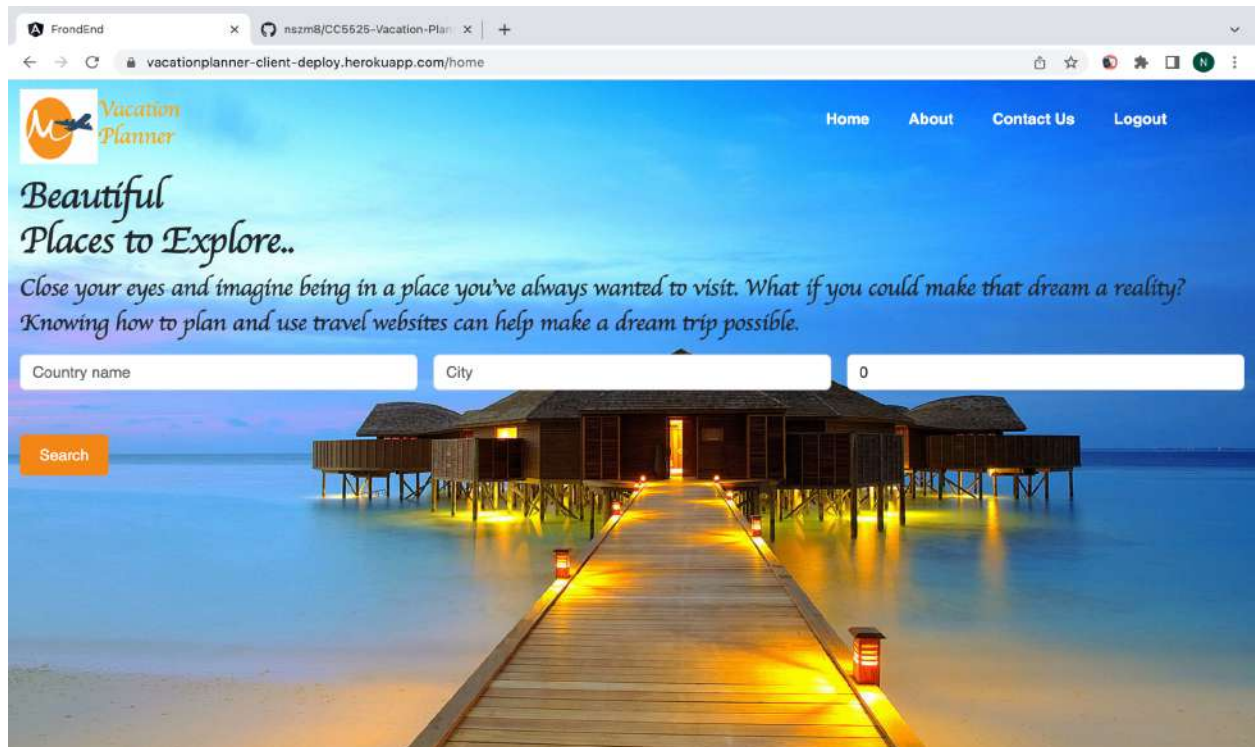
The screenshot shows a web browser window with the URL `vacationplanner-client-deploy.herokuapp.com/login`. The page features a background image of a wooden pier extending into the ocean at dusk. Overlaid on this is a light blue login form with the title "Login" and the instruction "Please enter Email & Password". The form contains two input fields for "Email address" and "Password", a "Remember me" checkbox, a blue "Login" button, and a link that says "New User? Click here to register!!".

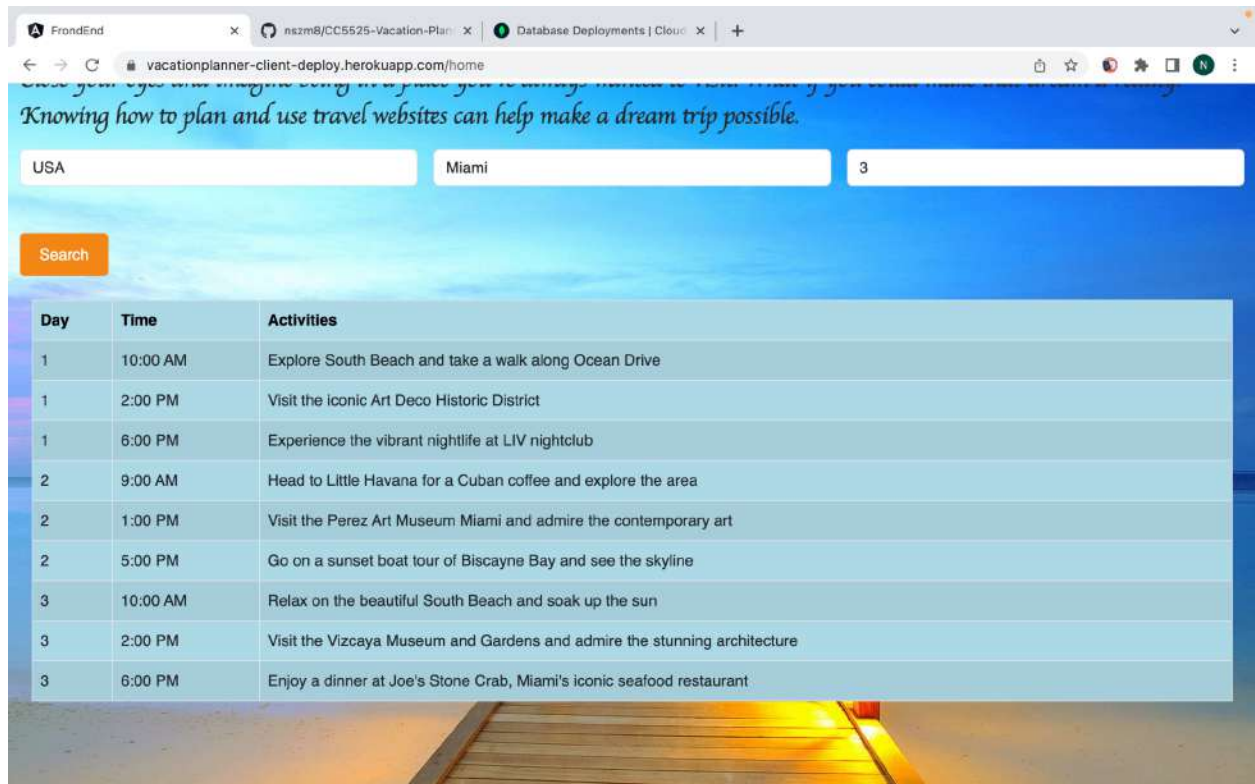
Registration page:Here,the user can register themselves by giving below details. After clicking the register button, the details provided by the user will be stored in the Register collection in Mongo cloud DB.For security purposes we are encrypting and storing the password.



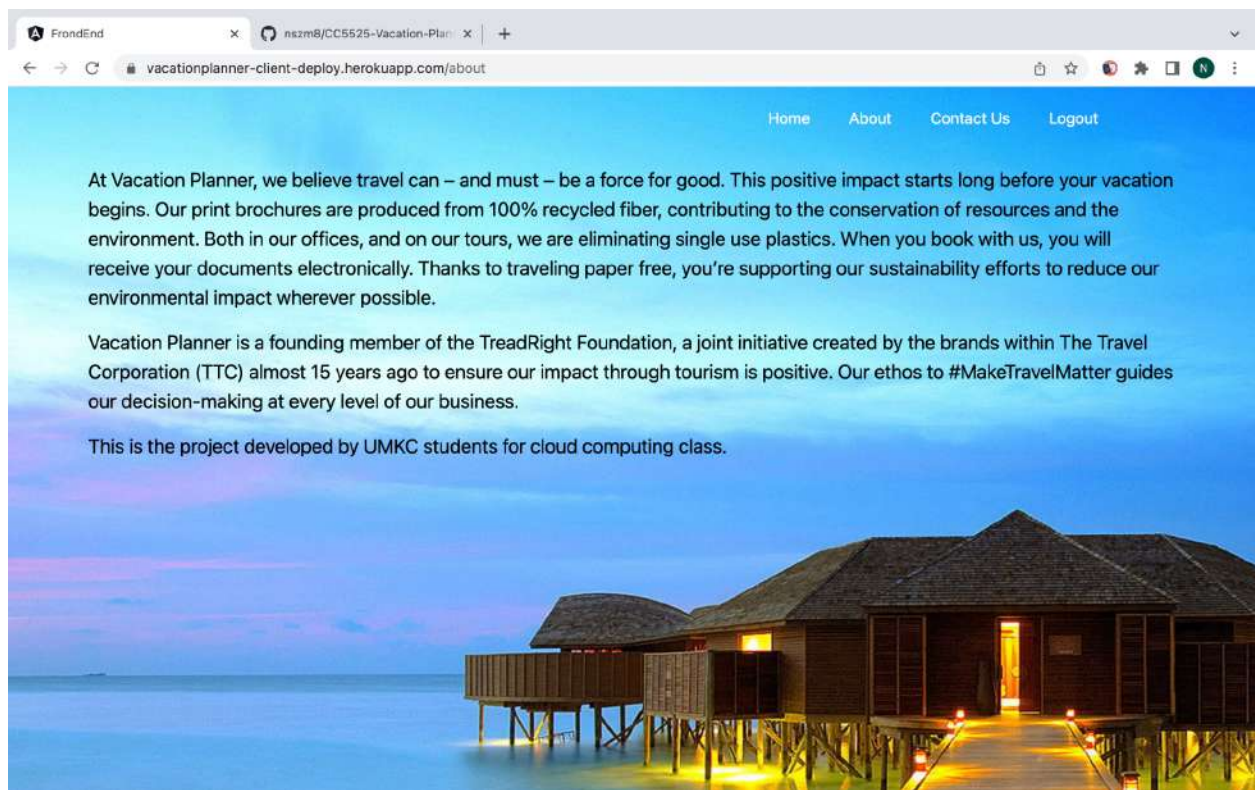
The screenshot shows a web browser window with the URL `vacationplanner-client-deploy.herokuapp.com/register`. The page features the same background image of a wooden pier at dusk. Overlaid on this is a light blue registration form with the title "User Registration". The form contains four input fields for "First Name", "Last Name", "Email", and "Password", a blue "Register" button, and a link that says "Already registered? Click here to login!!".

Home Page: This page contains tabs for About, Contact and Logout pages. Here the user enters the Country name, City & Number of days details and clicks the 'Search' button. Based on the input provided, the vacation planner will display the planned activities with time prepared for them. We are using external API (rapid API) to get the planned activities for the given input request.

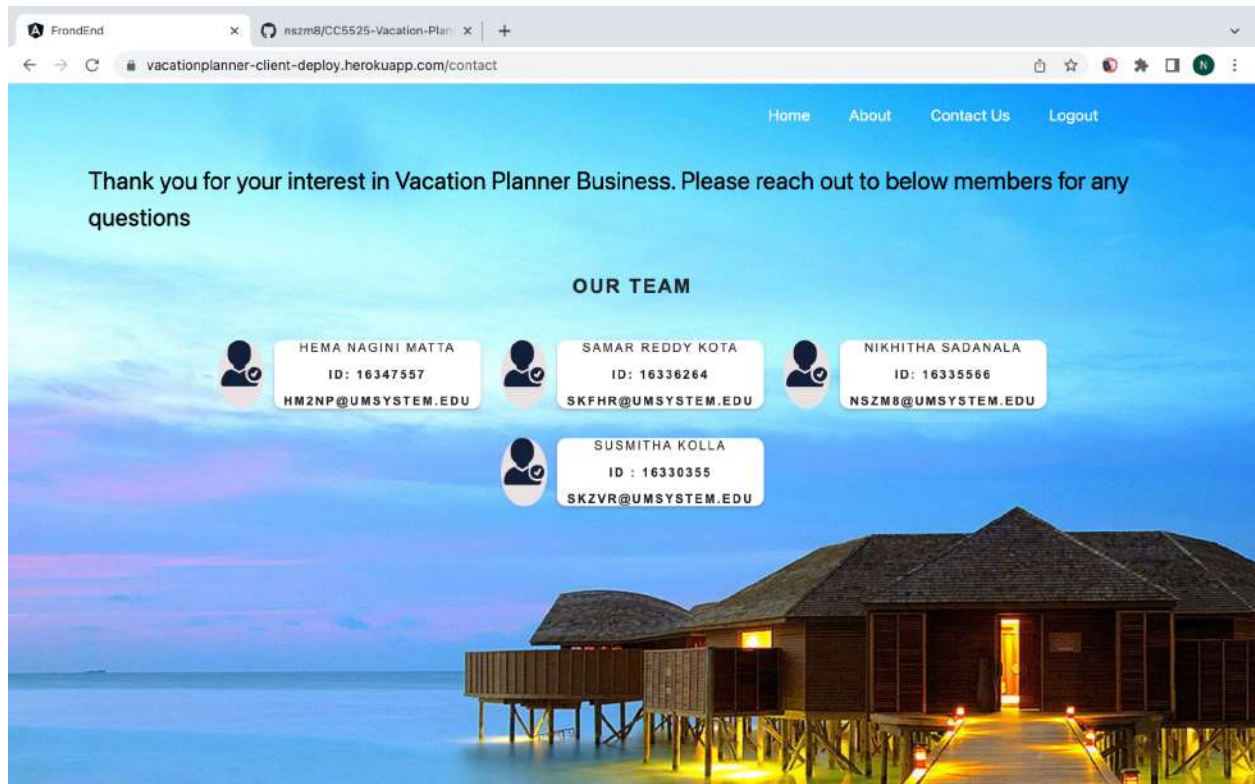




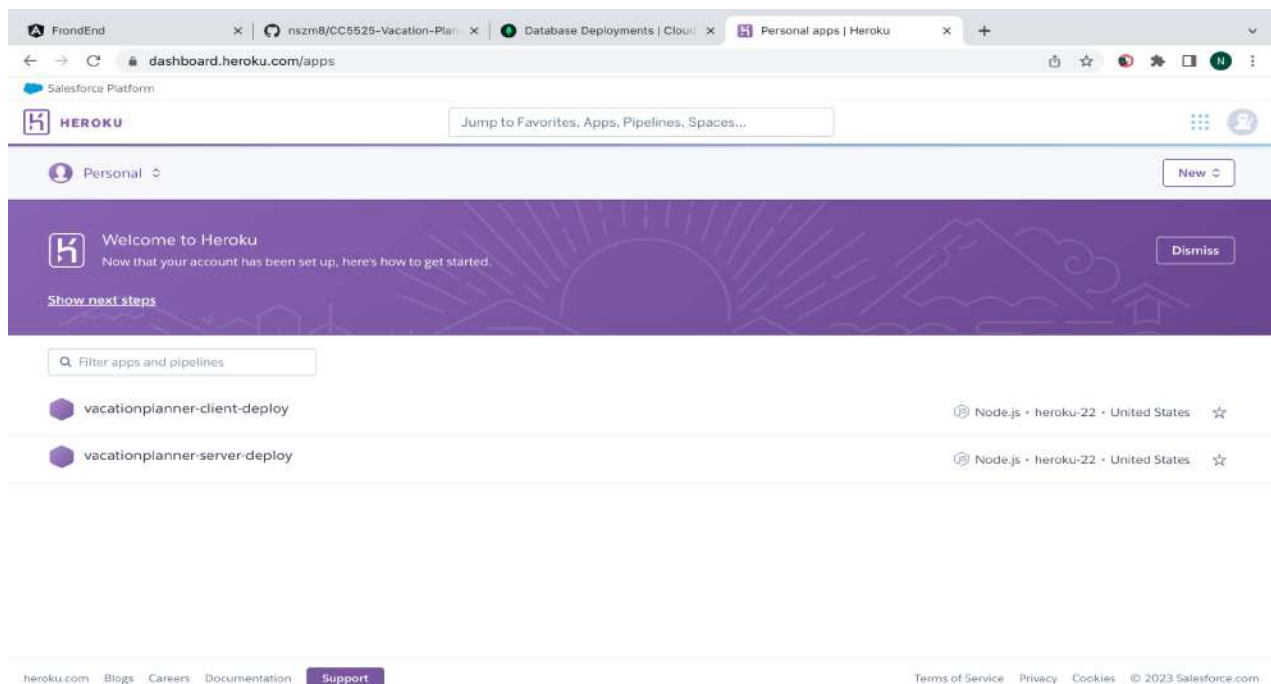
About Page: The about page contains the information about Vacation Planner.

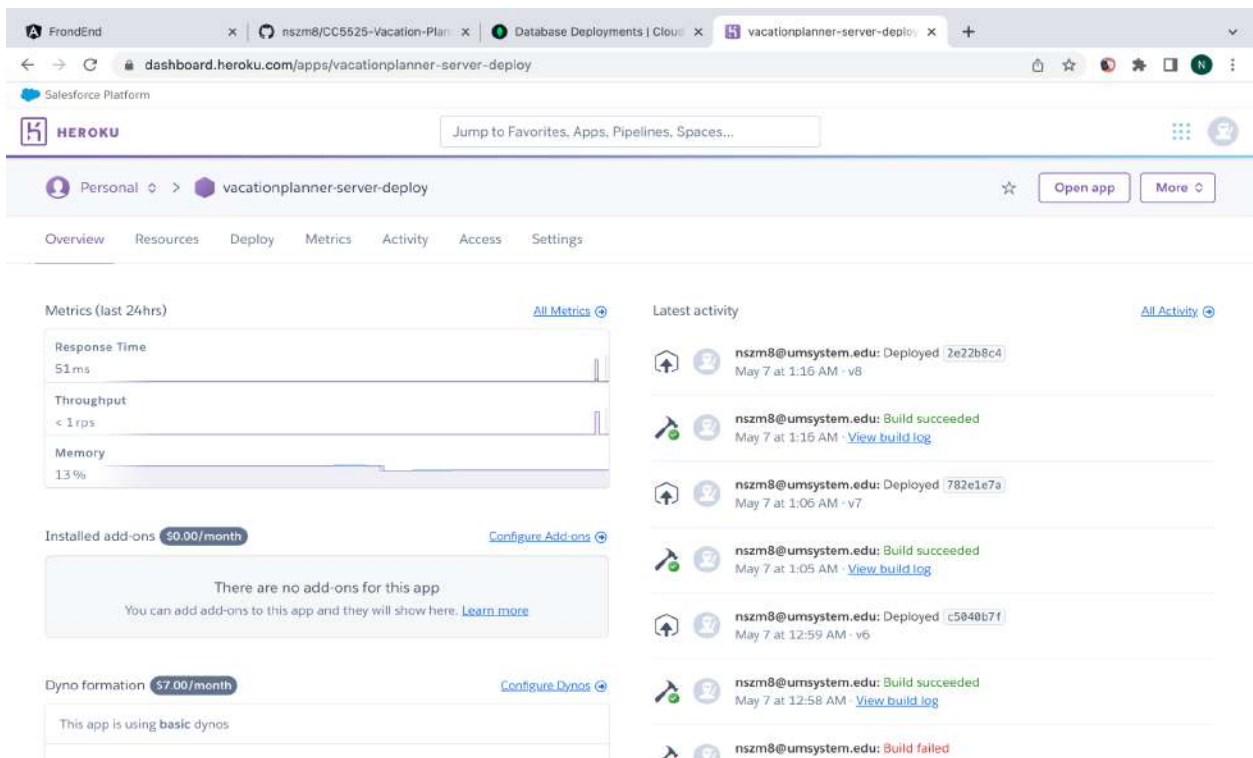
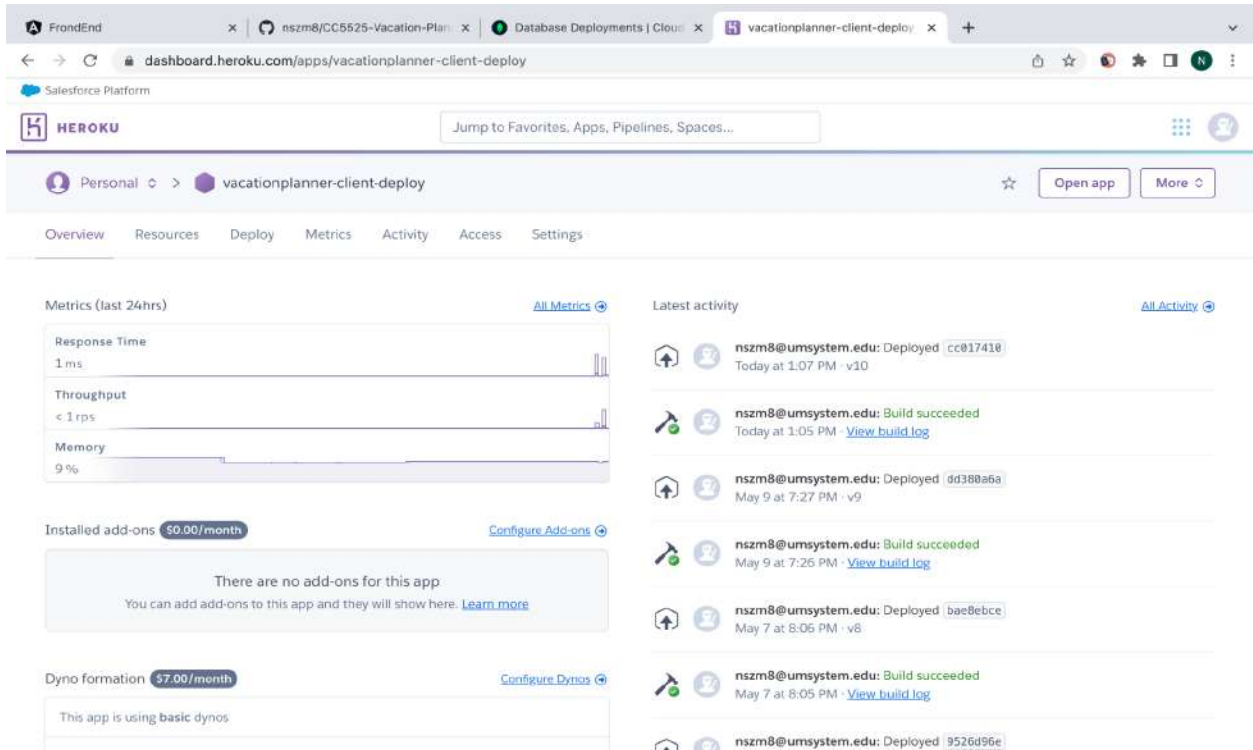


Contact Page: The Contact Us page contains the details of team members and email ids.



Heroku : We have used Heroku to deploy the website.Both client and server code are deployed.





Steps to start the application:

- 1.Redirect to the backEnd folder and give **node serve.js** command to start the server.
- 2.Redirect to the frontEnd folder and give **ng serve** to start the client application.
- 3.Once the application starts,the user needs to create an account to login to the app.
- 4.After completing the registration, user can login with credentials.Here we have done the validations to check whether the user credentials are valid or not
- 5.Once a user clicks the login button, the application will check in the backEnd given username and password is valid or not.
- 6.If the user is valid, then login will be successful.Then user can proceed to give the input details Country, City, No of the days and clicks the Search button.
- 7.The application will display vacation plan activities corresponding to the Country, City, No of days. Here we are using an external api (Travel API) to get the details.

Heroku URL:

<https://vacationplanner-client-deploy.herokuapp.com/login>

Github URL:

Url: <https://github.com/nszm8/CC5525-Vacation-Planner/tree/main>

Demo Video URL:

[video1980814866.mp4](#)