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Project Report

ICT ACADEMY OF KERALA
Monsoon Internship Report
Full Stack Application
Development with ReactJS

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SUMMARY

Cusiny is a dynamic website designed for food enthusiasts to discover, share, and manage their recipes. Users can easily add, remove, and edit their own recipes, detailing ingredients, instructions, and the food category. All users have access to a wide range of recipes shared by others, with the ability to rate and comment on these recipes to foster community engagement. The home page features a carousel showcasing top-rated and featured recipes, while users can conveniently sort recipes by category. Admins play a crucial role in maintaining the platform, managing recipes and user profiles without access to passwords and removing users if necessary.

INTRODUCTION

Cusiny is an innovative online platform dedicated to food enthusiasts who love to explore, share, and manage recipes. It provides users with the ability to create, modify, and categorize their own recipes, ensuring a personalized culinary experience. Users can also engage with the broader community by browsing, rating, and commenting on recipes shared by others. The homepage features a curated carousel of top-rated and featured recipes, while the platform's sorting options allow for easy navigation based on food categories.

OBJECTIVES

- Empower User Creativity: Provide users with the tools to easily create, edit, and manage their own recipes, allowing them to showcase their culinary creativity.
- Foster Community Engagement: Build a vibrant community where users can interact by browsing, rating, and commenting on each other's recipes, encouraging knowledge sharing and collaboration.
- Enhance User Experience: Feature top-rated and popular recipes on the homepage through a dynamic carousel and offer intuitive sorting options, making it easy for users to discover new dishes based on their preferences.

- Maintain Platform Integrity: Ensure the platform remains safe and user-friendly by allowing admins to manage user profiles effectively while respecting user privacy by restricting access to passwords. These passwords are also encrypted.
- Promote Culinary Exploration: Encourage users to explore diverse recipes and food categories, broadening their culinary horizons and discovering new tastes and techniques using a search bar.

Proficiency

- HTML Proficiency: We mastered HTML, enabling us to structure web content effectively.
- CSS Mastery: We enhanced the website's visual appeal and responsiveness through advanced CSS techniques.
- ReactJS Development: We developed dynamic, interactive user interfaces using ReactJS, improving our front-end development capabilities.
- MongoDB, Express, and Node.js: We learned to manage databases with MongoDB, handle server-side logic with Express, and build efficient server applications using Node.js, rounding out our back-end development skills.

SCOPE & DELIVERABLES

During the internship, the scope of our project encompassed a wide range of tasks, activities, and deliverables, all aimed at the successful development of the Cusiny website. Our responsibilities included:

1. Front-End Development:

- **ReactJS Development:** We built dynamic and interactive user interfaces using ReactJS. This involved creating reusable components, managing state, app context and ensuring a smooth user experience. Data is also stored locally.

2. Back-End Development:

- **Database Management with MongoDB:** We handled the setup and management of the database using MongoDB, ensuring that user data, recipes, and other essential information were stored securely and efficiently.
- **Server-Side Logic with Express and Node.js:** We developed and managed the server-side logic using Express and Node.js, allowing for seamless communication between the front-end and the database, and enabling key functionalities such as user authentication, recipe management, password eand admin controls.

3. User Interaction and Engagement:

- **Login and Registration:**
 - **Login Page:** Users and admins can enter their credentials on the login page. If the credentials match those in the database, they are granted access to the site; otherwise, an appropriate message is displayed, indicating that the credentials entered are incorrect.
 - **Registration:** New users can create an account by signing up, which allows them to access and use the site. The admin has pre-defined login credentials.

4. Recipe Management Features:

- **Initial User Experience:** For new users with no recipes, the "My Recipes" page displays a message indicating that no recipes are available and offers the option to create a new recipe.
- **Recipe Creation:** Clicking "Create New" on the "My Recipes" page allows users to submit new recipes by entering details such as name, ingredients, instructions, categories and image.
- **Recipe Editing:** Developed functionality to enable users to modify their existing recipes, including updating name, ingredients, instructions, categories and image.
- **Recipe Deletion:** Provided users with the option to remove their recipes from the platform, ensuring a straightforward process for managing their content.
- **Recipe Browsing:** Created an intuitive interface for users to view recipes added by others. All recipes were displayed in a grid format on the "ALL RECIPES" page, allowing for easy browsing and exploration. A search bar is provided for help in searching for recipes in the home page.
- **Recipe Details:** Users can view detailed instructions of recipes by clicking into individual recipes.
- **Recipe Rating and Commenting:** Enables users to rate and comment on recipes, facilitating community feedback and interaction.

5. Admin Management Tools:

- **User Profile Management:** Implemented features for admins to view and manage user profiles, including the ability to remove users while protecting their privacy. Admin also has the ability to manage and delete recipes.

6. Testing and Optimization:

- **Functionality Testing:** Conducted thorough testing to ensure that all features worked as intended, identifying and fixing bugs and optimizing the performance of the website.
- **User Experience Enhancement:** Refined the user interface and experience based on feedback, making the website more intuitive and user-friendly.

7. Deliverables:

- A fully functional Cusiny website with front-end and back-end integration.
- A responsive and visually appealing user interface.
- Secure user authentication and data management systems.
- A grid-format display of recipes for easy browsing.
- Initial user prompts and recipe management features.
- A set of admin tools for effective platform management.

METHODOLOGY

Requirement Analysis	Route Mapping	Visual Studio Code	Inspiration from MUI
We began by gathering and documenting project requirements, including user roles, recipe management features, and design specifications.	Created route mapping to visualize the application's navigation structure and ensure smooth user flow.	Used Visual Studio Code (VSCode) as the primary development environment, leveraging its features to streamline the coding process.	Referred to the MUI (Material-UI), Apple and various recipe websites for design ideas, which helped in creating a modern and user-friendly interface.

PROJECT ACTIVITIES

During my internship, I undertook a variety of activities focused on the development of the Cusiny website:

1. Front-End Development:

- Tasks: Designed and implemented the user interface using HTML, CSS, and ReactJS.
- Tools: VSCode for coding, MUI for design inspiration.
- Challenges: Ensuring a responsive design that worked across devices.

2. Back-End Development:

- Tasks: Built the server-side logic with Node.js and Express.js, and managed the database using MongoDB.
- Tools: Postman for API testing.
- Challenges: Efficiently handling data flow between the front-end and back-end.

3. Database Design:

- Tasks: Created an ER diagram to structure the database.
- Tools: MongoDB.
- Challenges: Designing relationships between entities to support all user interactions.

4. Testing and Deployment:

- Tasks: Conducted unit and integration testing, and deployed the website.
- Tools: Postman, VSCode.
- Challenges: Identifying and fixing bugs to ensure a smooth user experience.

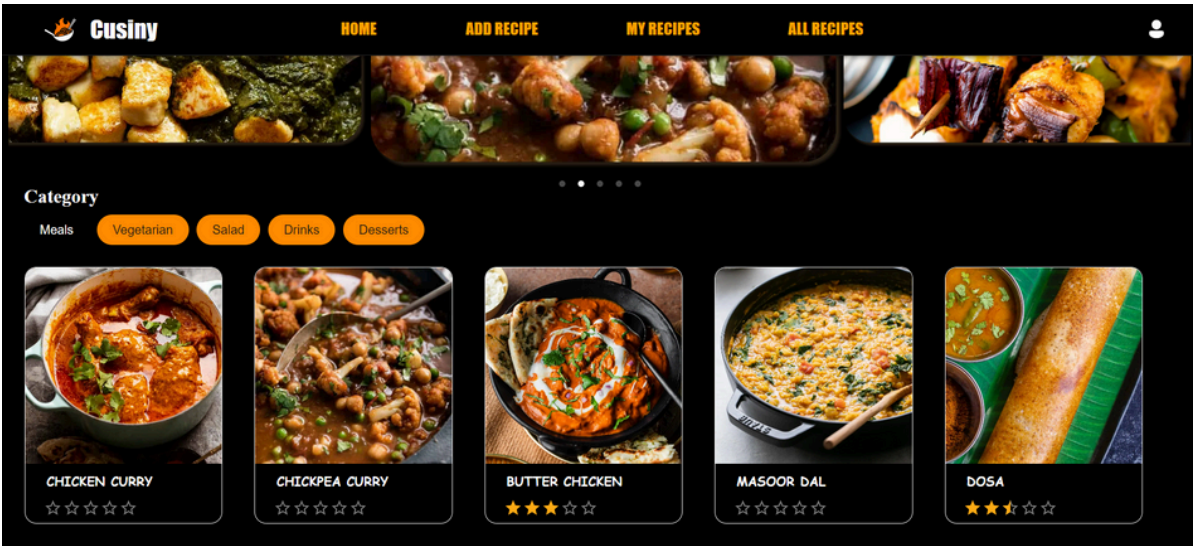
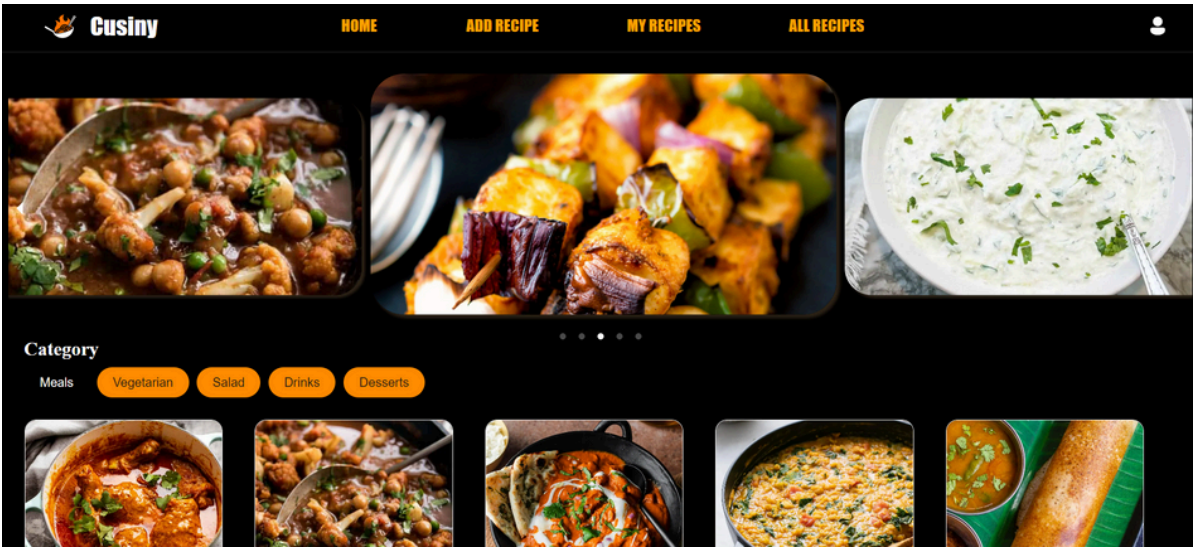
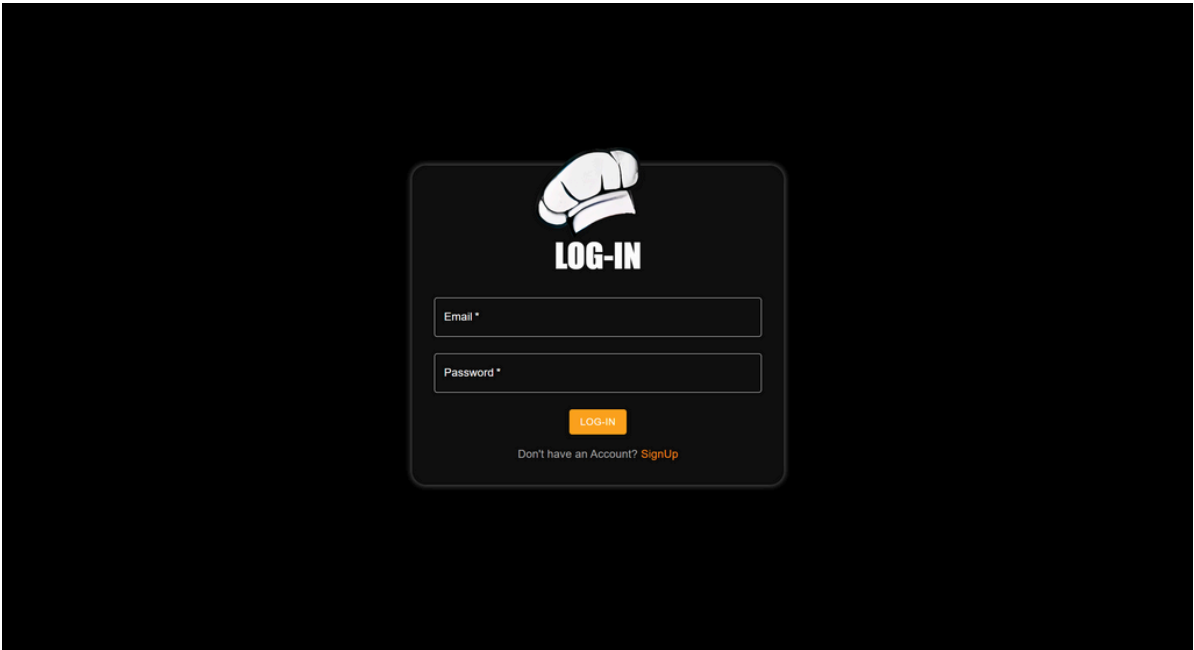
RESULTS & FINDINGS

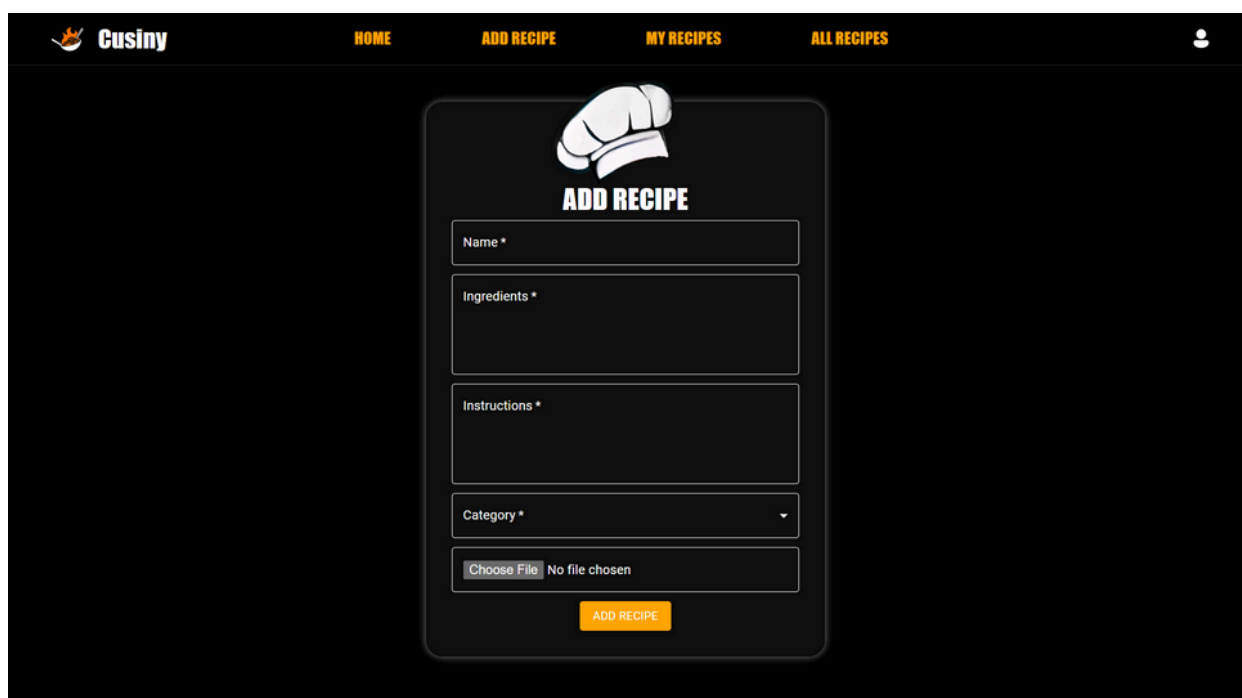
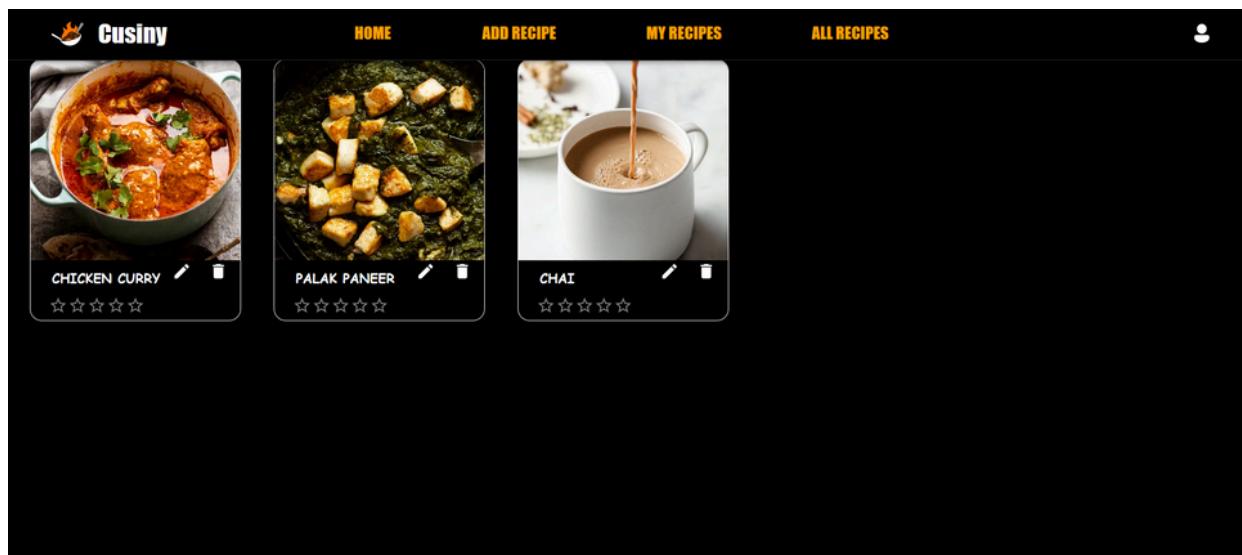
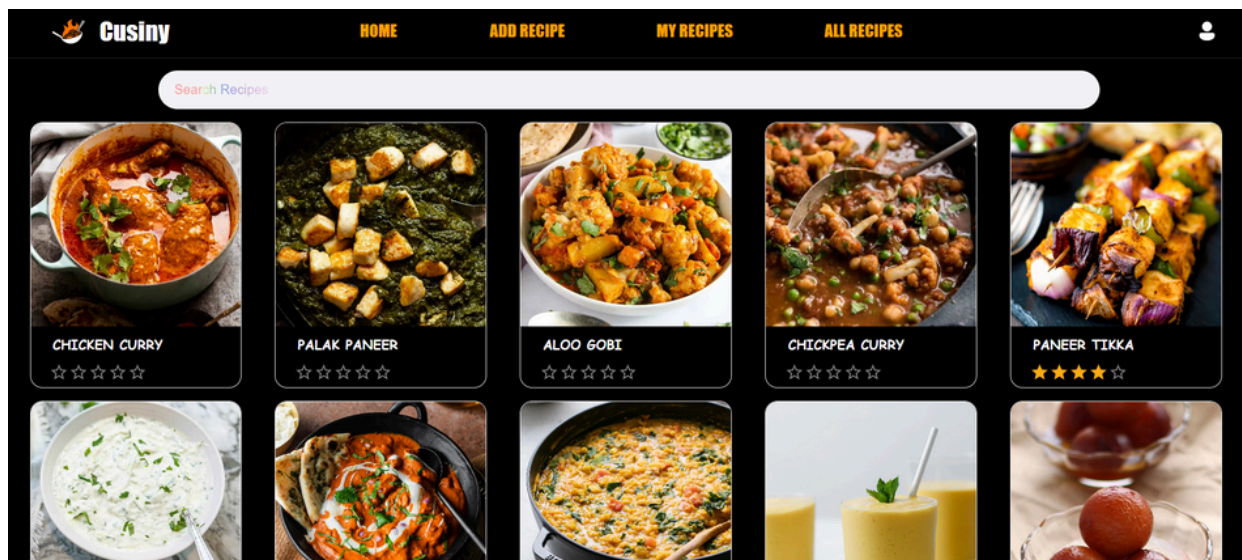
- **Successful Launch:** Cusiny was developed and launched with full functionality, including user authentication, recipe management, and community features.
- **User Engagement:** Enabled users to interact by adding, editing, and rating recipes, fostering community engagement.
- **Efficient Design:** Created a responsive, user-friendly interface inspired by MUI, ensuring a smooth user experience.


CONCLUSION

The internship successfully met the project's objectives, resulting in the launch of a fully functional Cusiny website. Key learnings include mastering full-stack development with MongoDB, Express, ReactJS and Node.js, along with hands-on experience in user authentication, API development, and responsive design. The project also enhanced problem-solving skills through challenges like data management and ensuring a smooth user experience. Overall, the experience was instrumental in strengthening both technical skills and practical application.


APPENDIX







Cusiny

[HOME](#)
[ADD RECIPE](#)
[MY RECIPES](#)
[ALL RECIPES](#)





PROFILE BIO

Username *

Jon Snow

Place *


Winterfell

Age *


28

[SAVE CHANGES](#)

[DELETE MY ACCOUNT](#)


Cusiny


[HOME](#)
[ADD RECIPE](#)
[MY RECIPES](#)
[ALL RECIPES](#)



Chicken Curry

☆☆☆☆☆

Meals



Ingredients

500g chicken, cut into pieces
2 tablespoons vegetable oil
1 large onion, finely chopped
2 cloves garlic, minced
1 tablespoon ginger, minced
2 tomatoes, chopped
1/2 cup yogurt
2 tablespoons curry powder
1 teaspoon turmeric
1 teaspoon cumin
1 teaspoon coriander
1 teaspoon garam masala
1 cup water
Salt to taste
Fresh cilantro for garnish

Instructions

1. Add chicken pieces and cook until they are browned on all sides.
2. Stir in yogurt and cook for a few minutes.
3. Pour in water and bring to a boil. Reduce heat and simmer for 20-25 minutes until chicken is cooked through.
4. Season with salt to taste.
5. Garnish with fresh cilantro before serving.



Write a Review?












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Leave a Comment

[POST](#)

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<div>  <div> HOME USERS RECIPES </div> <div>  </div> </div>				
Name	EMAIL-ID	Place	Ago	
User	user@gmail.com	Westeros	9999	DELETE
Jon Snow	jon.snow@winterfell.com	Winter-fell	28	DELETE
Daenerys Targaryen	daenerys.targaryen@dragons.com	Meereen	26	DELETE
Arya Stark	arya.stark@winterfell.com	Winter-fell	22	DELETE
Tyrian Lannister	tyrian.lannister@easterlyrock.com	Easterly Rock	39	DELETE
Cersei Lannister	cersei.lannister@kingslanding.com	King's Landing	44	DELETE
Sansa Stark	sansa.stark@winterfell.com	Winter-fell	27	DELETE
Jaime Lannister	jaime.lannister@kingslanding.com	King's Landing	41	DELETE
Bran Stark	bran.stark@north.com	Beyond the Wall	24	DELETE

<div>  <div> HOME USERS RECIPES </div> <div>  </div> </div>				
IMG	NAME	OWNER	CATEGORY	
	Chicken Curry	Jon Snow	Meals	DELETE
	Palak Paneer	Jon Snow	Vegetarian	DELETE
	Aloo Gobi	Daenerys Targaryen	Vegetarian	DELETE
	Chickpea Curry	Daenerys Targaryen	Meals	DELETE
	Paneer Tikka	Arya Stark	Vegetarian	DELETE
	Raita	Arya Stark	Salad	DELETE
	Butter Chicken	Tyrian Lannister	Meals	DELETE
	Masoor Dal	Tyrian Lannister	Meals	DELETE
	Mango Lassi	Sansa Stark	Drinks	DELETE