

CSE 341 Project 2 Proposal

This project will look quite a bit different from your e-commerce project. This project will be a REST API. This means that your Node.js project will not do any server-side rendering, and will not use views or ejs. Instead, all of your routes will simply return JSON. You will not develop a frontend for this project. Instead, you will develop a RESTful Node.js API that performs CRUD operations on a NoSQL database in a secure way. You will document all of your API routes using Swagger, and in the end you will submit a video demonstration of your API documentation, your API requests being handled properly, and your MongoDB database being modified accordingly.

General Info

Ashley Zufelt, Chris Blount, Ellie Lofgreen, Gary Wilkins, Jeremy Knudsen, Josh Knudsen, Josh Wassum, Robert Bridge

My grandma's recipes

Contents:

Contents

General Info	1
Application Info	2
What will the API be?	2
What will the API do?	2
What database will you use?	2
How will your API utilize a login system?	2
How would a frontend be able to manage authentication state based on the data you provide?	2
What pieces of data in your app will need to be secured? How will you demonstrate web security principles in the development of this app?	2
What file structure and program architecture will you use for this project (how will you organize your node project)? Why?	2
How will the data be stored in your database?	2

What are potential stretch challenges that you could implement to go above and beyond?	3
How will you divide up work in your team to ensure the following tasks all get completed?	3
Potential Risks and Risk Mitigation Techniques	3
What are the risks involved with you being able to finish this project in a timely manner?	3
How will you mitigate or overcome these risks?	3
Project Scheduling Timeline	3

Application Info

What will the API be?

...This will be a method to interact with a recipe management system

What will the API do?

...Create, retrieve, update recipes and delete

Second API for user management creation

What database will you use?

...Mongo DB

How will your API utilize a login system?

...Read only for unauthorized users, once authenticated users can update and create

How would a frontend be able to manage authentication state based on the data you provide?

...Front end would create a session with an access token when user logs in. Post request API to allow users to register for an account

What pieces of data in your app will need to be secured? How will you demonstrate web security principles in the development of this app?

...Database, User password. Passwords will be encrypted Server side authentication to avoid sql injection.

What file structure and program architecture will you use for this project (how will you organize your node project)? Why?

...MVC model with API's replacing views this is a commonly accepted industry standard

How will the data be stored in your database?

...Models will be used to validate and store data.

What are potential stretch challenges that you could implement to go above and beyond?

...Skeletal front end

MFA

How will you divide up work in your team to ensure the following tasks all get completed?

- HTTP GET, GET (all, single) ...Chris, Gary
- HTTP POST ...Ashley, Jeremy, Ellie
- HTTP PUT ...Josh, Gary
- HTTP DELETE ...Robert, Chris
- Node.js project creation ...Robert
- MongoDB setup ...Jeremy, Robert
- API Swagger documentation for all API routes ...Josh, Ashley, Ellie
- Video presentation of node project, all routes functioning, mongoDB data being modified, and API documentation. ...Jeremy, Ashley

Potential Risks and Risk Mitigation Techniques

What are the risks involved with you being able to finish this project in a timely manner?

...Covid, Work emergencies, Family Emergencies, GIT Hub stepping on issues, Understanding full scope of project

How will you mitigate or overcome these risks?

...Working 1 week ahead, Redundancies of personnel, Devops lead will create GitHub plan, Adding wireframes and flow charts to fully scope project at the beginning

Project Scheduling Timeline

Plan out when you will complete each phase of development listed in the [Project 2 High-level Tasks webpage](#) within the allotted time to complete the project.

Lesson 9 Tasks	... <i>API DOCUMENTATION</i> ...DB setup, Index.js Initialized
Lesson 10 Tasks	... Routes Defined, models
Lesson 11 Tasks	...Controllers, integration, authentication
Lesson 12 Tasks	...QA testing, presentation
Lesson 13 Tasks	... <i>Video Presentation</i> ...

Project Roles

- PM Robert Bridge
- Devops lead - Chris Blount
- Frontlead - Ashley Ellie
- Engineering Lead - Josh
- QA integration- Gary
- Testing Lead - Jeremy