# CSCI 331 Final Project

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### The Plan

A web application that allows you to enter ingredients that you have on hand.

The application will then give you some recipes that you make with those ingredients.

PBJ = {"peanut butter", "jelly", "bread"}, {1, 1, 2}, {tbsp, tbsp, slices}

We may also provide the ability for users to add their own recipes (this has some issues we will discuss later).

A site does exist that does this (SuperCook), but it sends you to other sites to get recipes and we want it all on one page. We also want to make it targeted towards simpler recipes without a ton of ingredients.

### Github

https://github.com/Jordath/CSCI-331-Final-Project

Used for version control.

Using projects tab for assigning tasks and keeping track of progress.



### **MERN Stack**

MongoDB, Express, React JS, Node JS

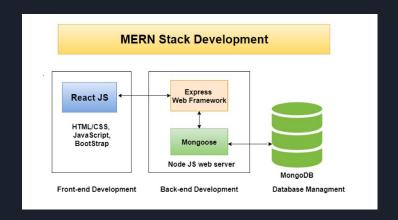
But why use it?

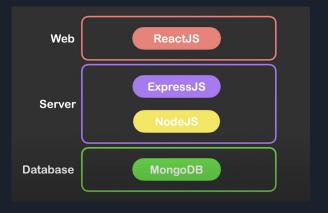
Good documentation and community support

Widely used in industry

Lower Learning curve than other full stack tools

Open source (we love FREE!)





### Back End

#### **Express**

A web application framework for Node.js.

Lets us create a web server.

#### Node JS

JavaScript run-time environment that allows execution of JavaScript code in a server.

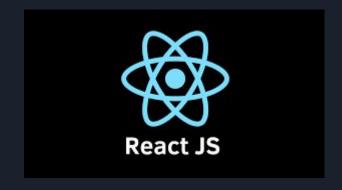


### Front End Tools - React JS

A JavaScript library that is used for building interactive user interfaces.

Uses HTMI and CSS inside JS file

Chosen because of it's widespread usage



### Present vs Future

Currently taking in user input

Plans to add design and and more features

Here is a mockup of what it might look like:

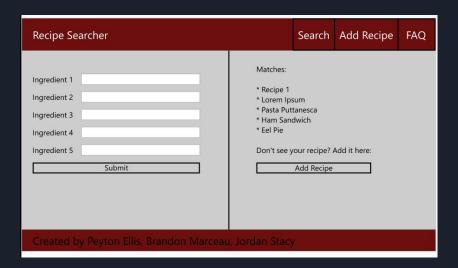
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### User Interface

Users input up to five ingredients

Returns recipes that match

If no match a user can add one



## Database Management - MongoDB

NoSQL Document Database that uses a binary version of JSON called BSON behind the scenes.

Documents - Single object in the database with field/value pairs (single recipe).

Collection - A group of documents (recipes).

Why would we use it?

- Most popular NoSQL database among Node.js developers, and Node.js has exploded in popularity recently.
- Ease of storing data.
- Seems simple to setup and use..
- Mature platform with lots of support and documentation.
- Built to be fast and efficient.

MongoDB Atlas:



https://account.mongodb.com/account/login

### Risks and Issues

Can we get it all connected?

Scalability

Number of Recipes

Number of Ingredients

Usability

Ingredient Spelling with Text Boxes

What Ingredients should we assume a user has?

User Addition of Recipes

