







FLAVOUR FUSION



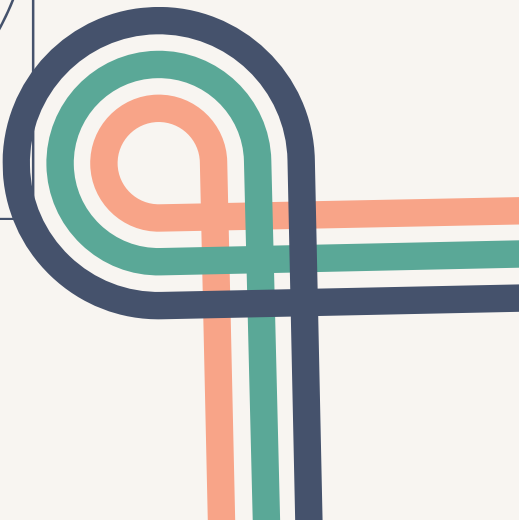
PROJECT OVERVIEW



Flavour Fusion eliminates time and hassle when looking for your next meal. Fuse ingredients together to be presented with what you are already craving.



You will be able to create an account, add to your own personal cart, and add to your own personal fuse list.



PROCESS: FIREBASE

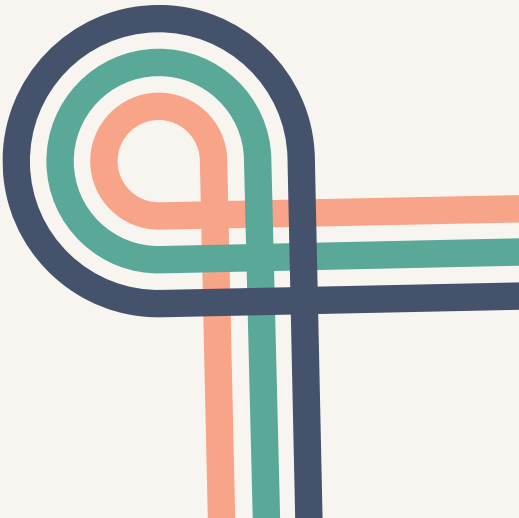



- Firebase is a backend as a service platform that allows users to more easily create high security user authentication and account creation.
- Firebase also allows for easy database implementation to store data



INITIALIZE FIREBASE

```
};  
  
// Initialize Firebase  
const app = initializeApp(firebaseConfig);  
const analytics = getAnalytics(app);  
const auth = getAuth(app);  
const db = getFirestore(app);
```





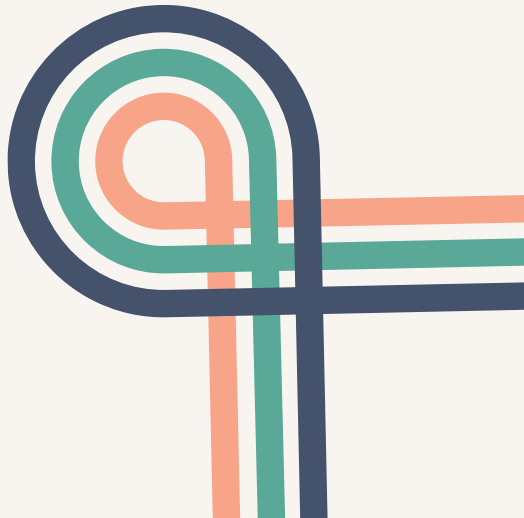
PROCESS



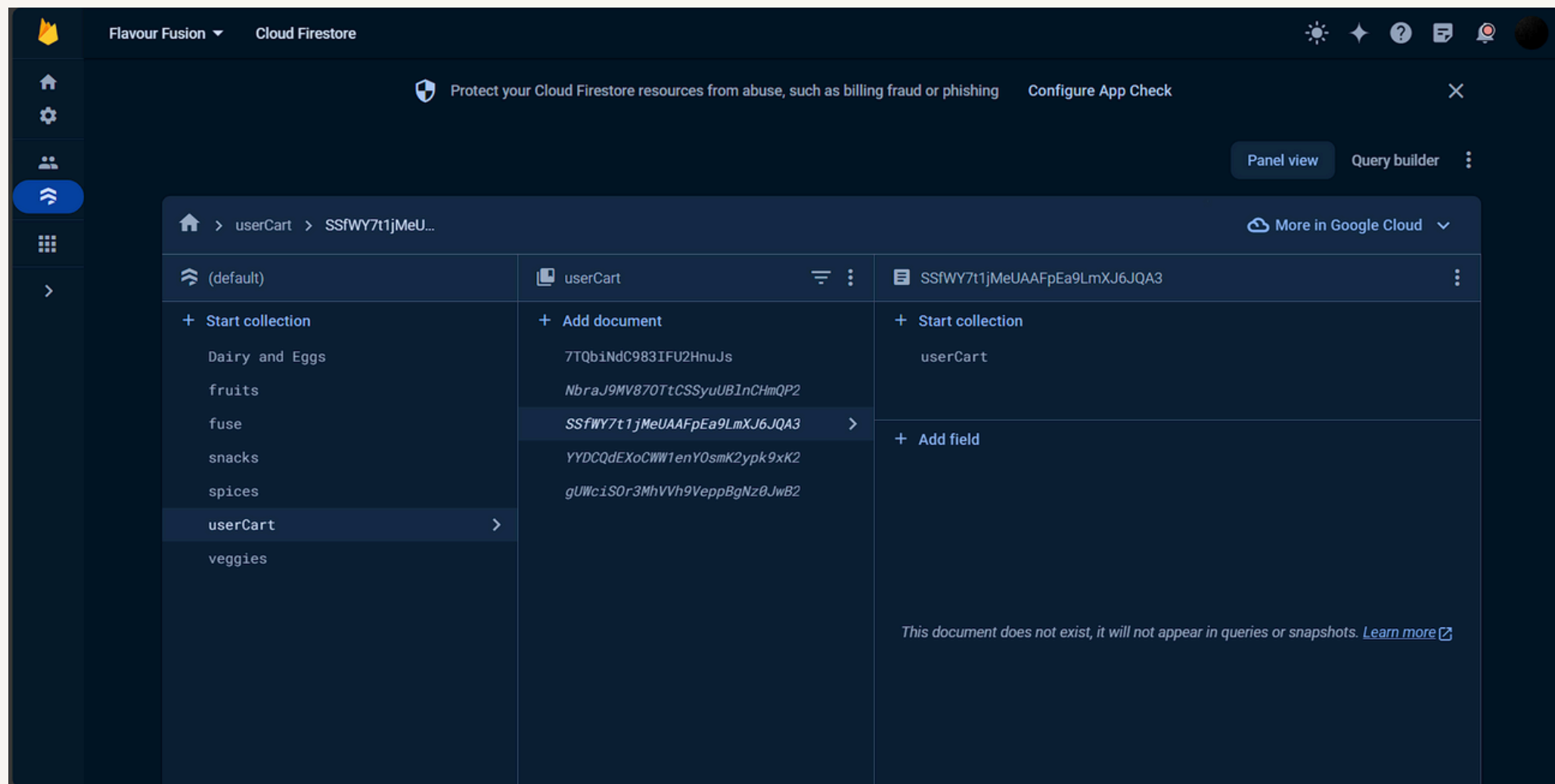
```
// Function to add a product to the cart
const addToCart = async (productName, category, price, userId) => {
  try {
    // Construct the Firestore document path for the user's cart
    const cartDocRef = doc(db, 'userCart', userId, 'userCart', productName);

    // Set the document with the product details
    await setDoc(cartDocRef, {
      name: productName,
      price: price,
      userId: userId
    });

    console.log(`Product "${productName}" added to cart`);
  } catch (error) {
    console.error("Error adding product to cart:", error);
  }
};
```

- Adding to the database is very simple.
- 

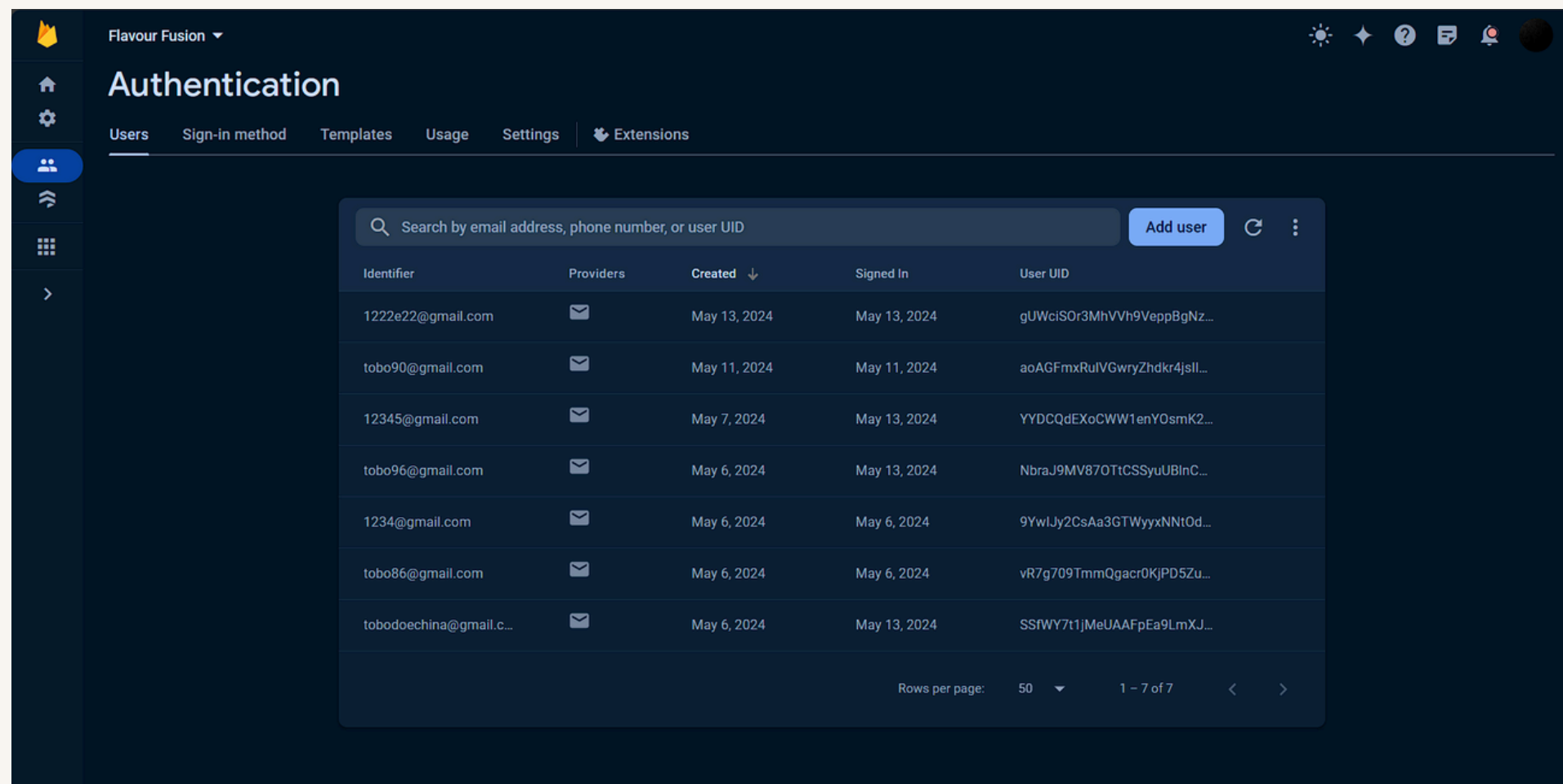
FIRESTORE



- Firestore is a real time database that allows us to quickly make updates to data and organize it

AUTHENTICATION

```
// Sign up user  
createUserWithEmailAndPassword(auth, email, password)
```



The screenshot shows the Firebase Authentication console. The 'Users' tab is selected, displaying a table of users. The table has columns for Identifier, Providers, Created, Signed In, and User UID. There are 7 users listed. At the bottom, it shows 'Rows per page: 50' and '1 - 7 of 7'.

Identifier	Providers	Created	Signed In	User UID
1222e22@gmail.com	📧	May 13, 2024	May 13, 2024	gUWciS0r3MhVVh9VeppBgNz...
tobo90@gmail.com	📧	May 11, 2024	May 11, 2024	aoAGFmxRulVGwryZhdKr4jsll...
12345@gmail.com	📧	May 7, 2024	May 13, 2024	YYDCQdEXoCWW1enY0smK2...
tobo96@gmail.com	📧	May 6, 2024	May 13, 2024	NbraJ9MV870TtCSSyuUBlnC...
1234@gmail.com	📧	May 6, 2024	May 6, 2024	9YwlJy2CsAa3GTWyyxNNtOd...
tobo86@gmail.com	📧	May 6, 2024	May 6, 2024	vR7g709TmmQgacr0KjPD5Zu...
tobodoechina@gmail.c...	📧	May 6, 2024	May 13, 2024	SSfWY7t1jMeUAAFPeA9LmXJ...

- Firebase stores all created users for easy and secure authentication.

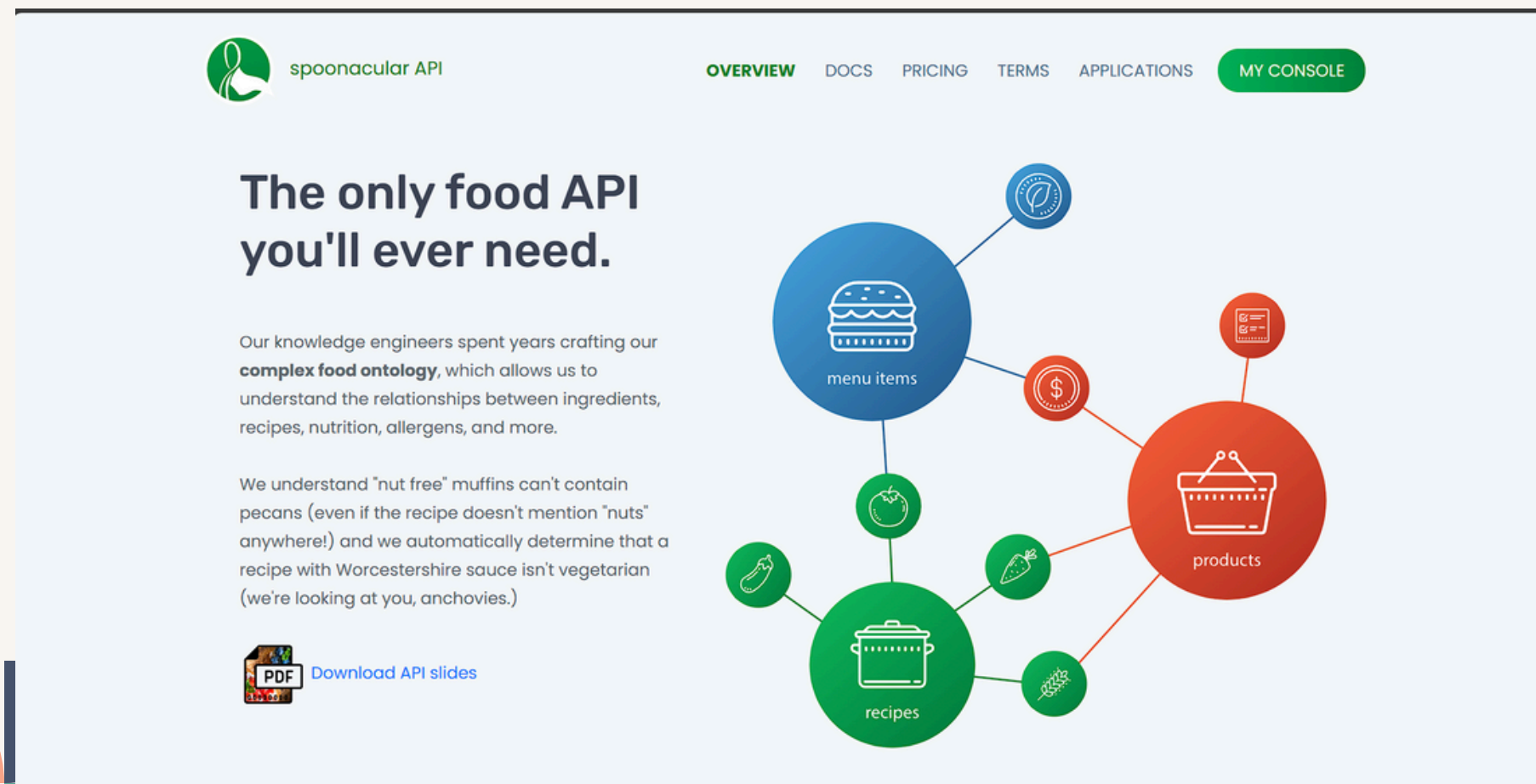
XML DATA

```
<food category="fruits">
  <name>Apples</name>
  <price>$2.50</price>
</food>
<food category="fruits">
  <name>Pineapple</name>
  <price>$3.99</price>
</food>
<food category="fruits">
  <name>Grapes</name>
  <price>$3.99</price>
</food>
<food category="fruits">
  <name>Strawberry</name>
  <price>$4.99</price>
</food>
<food category="veggies">
  <name>Romaine Lettuce Hearts</name>
  <price>5.99</price>
</food>
<food category="veggies">
  <name>Iceberg Lettuce</name>
  <price>2.99</price>
</food>
<food category="veggies">
  <name>English Cucumber</name>
  <price>3.99</price>
</food>
<food category="veggies">
  <name>Baby-Cut Carrots</name>
  <price>1.99</price>
</food>
<food category="spice">
  <name>Chinese Five Spice</name>
  <price>$1.99</price>
</food>
```

- XML file that keeps track of all products

RECIPE API

- I used an API that can generate recipes and implemented it into my website
- <https://spoonacular.com/food-api>
- With the fuse button and this API you can generate recipes easily



The screenshot shows the Spoonacular API website. At the top, there's a navigation bar with links: OVERVIEW, DOCS, PRICING, TERMS, APPLICATIONS, and MY CONSOLE. The main heading is "The only food API you'll ever need." Below this, there's a paragraph about the "complex food ontology" and another paragraph explaining how the API understands food relationships. A diagram in the center shows a network of food-related concepts: menu items, products, recipes, ingredients, and nutrition. At the bottom left, there's a "Download API slides" button with a PDF icon.


spoonacular API

OVERVIEW DOCS PRICING TERMS APPLICATIONS MY CONSOLE

The only food API you'll ever need.

Our knowledge engineers spent years crafting our **complex food ontology**, which allows us to understand the relationships between ingredients, recipes, nutrition, allergens, and more.

We understand "nut free" muffins can't contain pecans (even if the recipe doesn't mention "nuts" anywhere!) and we automatically determine that a recipe with Worcestershire sauce isn't vegetarian (we're looking at you, anchovies.)

 Download API slides

menu items

products

recipes

```
// Perform the API call
try {
  console.log(apiUrl);

  console.log(collect);
  const response = await fetch(apiUrl);
  if (response.ok) {
    const recipes = await response.json();
    // Handle the retrieved recipes
    console.log(recipes);
    if (recipes.length > 0) {
      displayRecipes(recipes); // Display the first recipe in the random_recipe div
    } else {
      displayRecipe(null); // Display a message if no recipes are found
    }
  } else {
    console.error('Failed to fetch recipes:', response.statusText);
  }
} catch (error) {
  console.error('Error fetching recipes:', error);
}
```

CHECKOUT

```
try {
  const userCartRef = collection(db, 'userCart', userId, 'userCart');
  const snapshot = await getDocs(userCartRef);
  const cartData = [];
  snapshot.forEach(doc => {
    const item = doc.data();
    item.itemId = doc.id;
    console.log(item.itemId); // Add the document ID as itemId
    cartData.push(item);
  });
  return cartData;
} catch (error) {
  console.error("Error fetching user's cart data:", error);
  return [];
}
```

- I collect cart data from Firestore using this method

- The price is updated once the data loads to prevent it from staying at \$0

Your Cart

Item	Price
Apples	2.5
Chinese Five Spice	1.99
Eggs	3.99
Garlic Powder	6.99
Grapes	3.99
Pineapple	3.99

Total: \$23.45

Purchase