Recipe App

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Introduction

- This is an AWS web app that is implemented using a web server and a database in a properly configured network environment.
- It is implemented using a simple web page to simulate the apps interactions with the database.
- The app collects data about the user and allows them to search the database.

Background

The reason we chose to do a recipe based app was because:

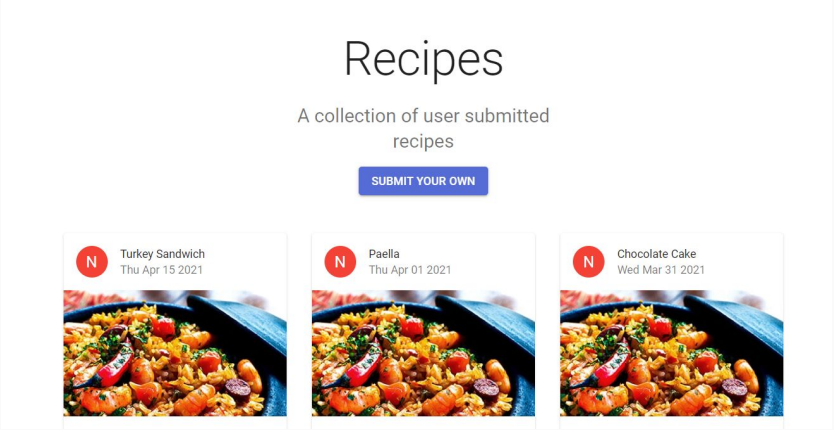
- All group members are from different cultures
- Food blogs are cool
- Simple enough to implement

Objective

The goal of this app is to allow users to interact with the recipe database.

Users can:

- Sign up/Login
- Search for recipes
- Create/Delete recipes
- Add tags
- Filter by tags
- Add/Delete images
- Favorite recipes



Constraints, Assumptions, Risks and Dependencies

Constraints - The tools that will be used are on the Free Tier on AWS.

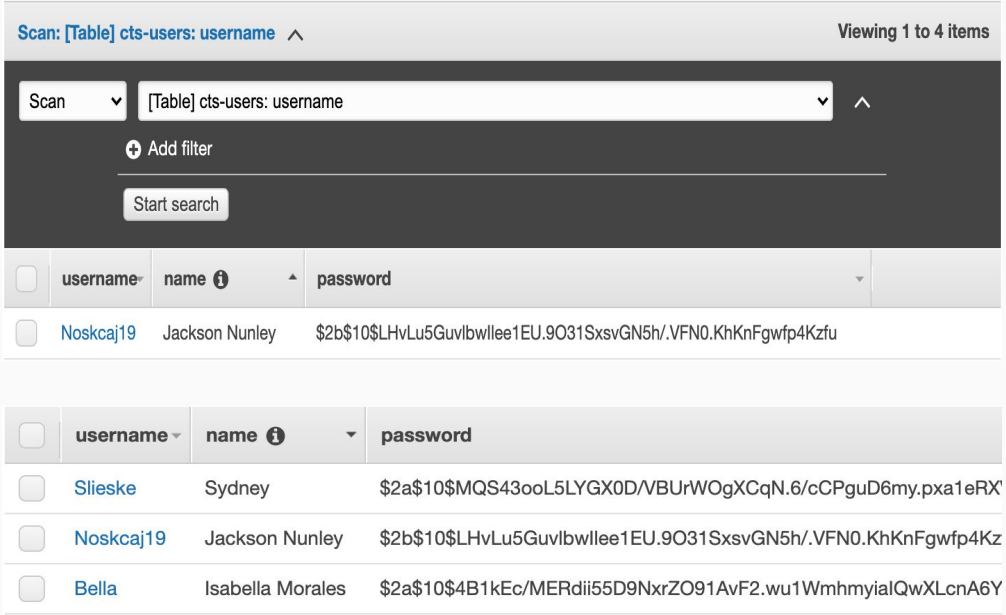
Assumptions - Tools that will be available to deploy the web app, including Database, Storage, and Public Access.

Risks and Dependencies - Selecting a large project scope could result in an incomplete project and communication issues.

User Table

Using the examples from class, we created a DynamoDB table for users.

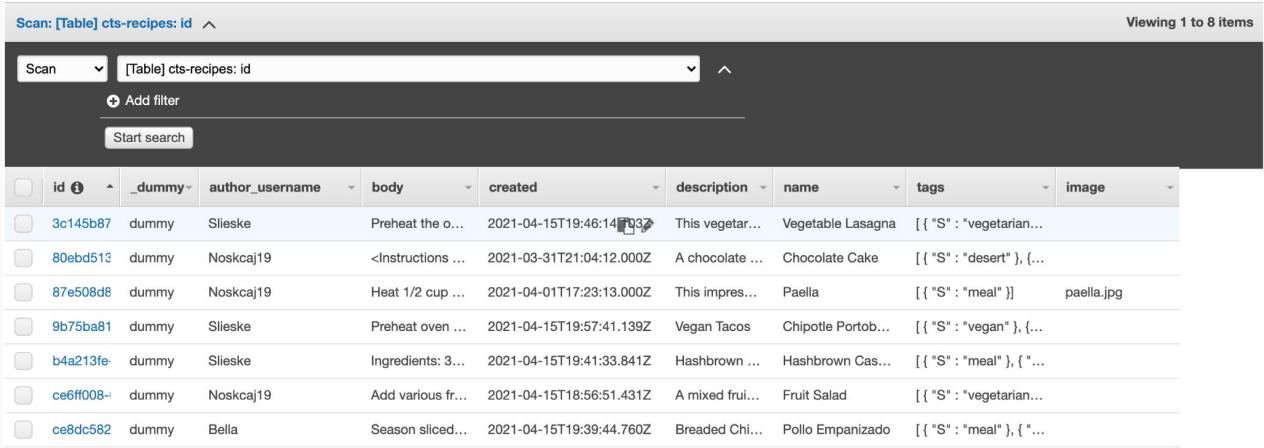
- Username
- Name
- Passwords



Recipe Table

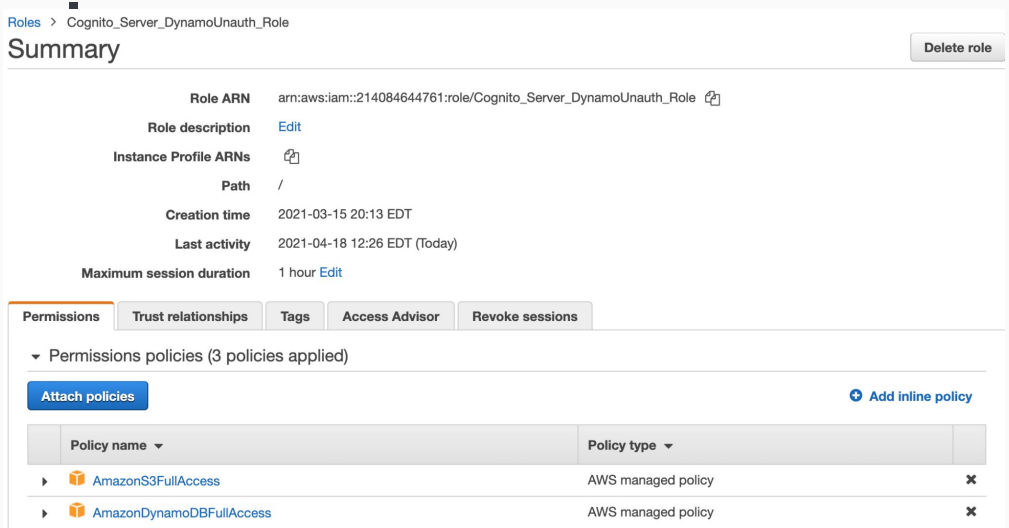
DynamoDB table for recipes.

- Author
- Instructions
- Date created
- Recipe name
- Tags
- Images



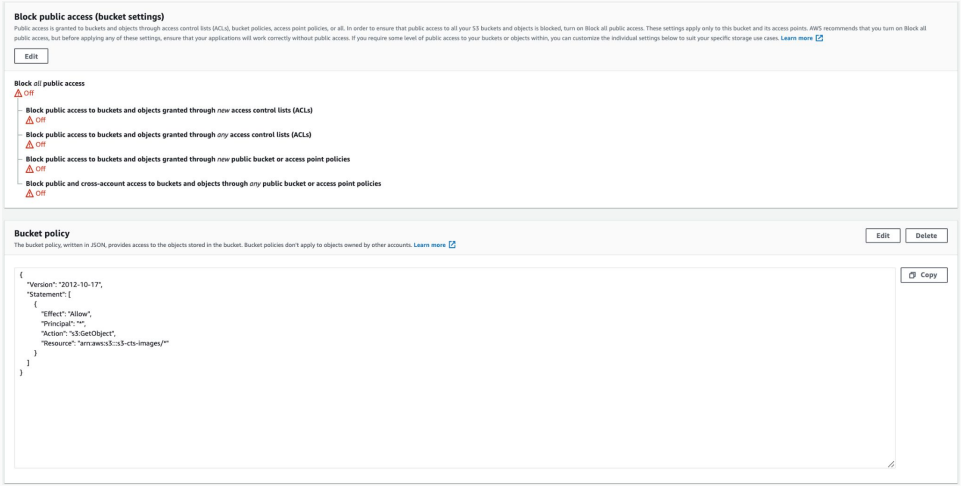
id	_dummy	author_username	body	created	description	name	tags	image
3c145b87	dummy	Slieske	Preheat the o…	2021-04-15T19:46:14.933Z	This vegetar…	Vegetable Lasagna	[{ "S" : "vegetarian…	
80ebd513	dummy	Noskcaj19	<Instructions …	2021-03-31T21:04:12.000Z	A chocolate …	Chocolate Cake	[{ "S" : "desert" }, {…	
87e508d8	dummy	Noskcaj19	Heat 1/2 cup …	2021-04-01T17:23:13.000Z	This impres…	Paella	[{ "S" : "meal" }]	paella.jpg
9b75ba81	dummy	Slieske	Preheat oven …	2021-04-15T19:57:41.139Z	Vegan Tacos	Chipotle Portob…	[{ "S" : "vegan" }, {…	
b4a213fe-	dummy	Slieske	Ingredients: 3…	2021-04-15T19:41:33.841Z	Hashbrown …	Hashbrown Cas…	[{ "S" : "meal" }, { "…	
ce6ff008-l	dummy	Noskcaj19	Add various fr…	2021-04-15T18:56:51.431Z	A mixed frui…	Fruit Salad	[{ "S" : "vegetarian…	
ce8dc582	dummy	Bella	Season sliced…	2021-04-15T19:39:44.760Z	Breaded Chi…	Pollo Empanizado	[{ "S" : "meal" }, { "…	

Cognito Unauthenticated IAM Role



S3 & Image Uploading

Using S3, we created an image uploading feature.




```ts
public async addRecipe(recipe: DBRecipe) {
  let imageKey = undefined;
  if (recipe.image) {
    imageKey = uuidv4();
    try {
      await this.s3.send(
        new PutObjectCommand( input: {
          Bucket: DB.IMAGES_BUCKET,
          Key: imageKey,
          Body: Buffer.from(recipe.image,  encoding: "base64"),
        })
      );
    } catch (err) {
      console.log("Error", err);
    }
  }

  await this.docClient.put( args: {
    Item: {
      id: uuidv4(),
      ...recipe,
      ...(imageKey && { image: imageKey }),
      created: recipe.created.toISOString(),
      _dummy: "dummy",
    },
    TableName: DB.RECIPES_TABLE,
  });
}
```

Conclusion

In our introduction, we had outlined the project of creating an AWS web app that collected data about the user and let them interact with the database. This app we felt accomplished that.

Some difficulties encountered:

- Communication
- Different levels of experience
- Some issues understanding Dynamo

What we would do differently:

- Create a clear plan
- Communicate effectively
- Maybe use an SQL database

Live Demo