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Phase 3 Backend Framework: Go to file Project Structure.doc

- Use a backend framework like Flask (Python), Express (Node.js), or Ruby on Rails (Ruby) to create API endpoints for your application.
- Javascript (NodeJS)
- NodeJS is an open source server
- environment that will allow the use of

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Below are the main components and considerations for building this platform:

- 1. Project Structure:
- Start by setting up the project folder structure. For a Node.js application, you can use a structure like this:

Markdown code:

- /project-root
- /controllers
- /models
- /routes
- /config
- /middlewares
- /public (for static files)
- /views (if you're using server-side rendering)
- app.js (main application file)
- package.json (for npm packages)
- 2. Backend Framework (Node.js):
- Use Node.js to create the backend of your application. Set up routes and controllers to handle various API endpoints.
- 3. Express.js (Web Framework):
- If you're using Node.js, consider using Express.js, a popular web framework that simplifies routing, middleware handling, and API development.

### Basic CRUD Operations (CREATE, READ, UPDATE and DELETE)

4. Authentication and Authorization:

- Implement user authentication and authorization mechanisms, especially if users can create accounts or interact with sensitive data.

# **Basic CRUD Operations**

### 5. API Endpoints:

- Define API endpoints for various functionalities:
- User registration and login (if required)
- Retrieving food sources and supplier information
- Marking food sources as favorites for registered users
- Managing user sessions
- Implementing policies acceptance functionality

#### 6. Database Interaction:

- Create database models (using an ORM like Sequelize or writing raw SQL queries) to interact with the MySQL database as defined in your schema. **Basic CRUD Operations** 

#### 7. Middleware:

- Use middleware for tasks like handling CORS (Cross-Origin Resource Sharing), parsing request bodies, and adding authentication checks.

### 8. Error Handling:

- Implement error handling middleware to gracefully handle errors and provide meaningful responses to clients.

### 9. Security:

- Ensure that your application follows best practices for security, including input validation, password hashing, and protection against common vulnerabilities like SQL injection and XSS (Cross-Site Scripting).

### 10. Frontend Development (Optional):

- Create a user-friendly frontend using HTML, CSS, and JavaScript. Consider using a frontend framework like React or Vue.js if you want a dynamic and responsive interface.

### 11. Testing:

- Write unit tests and integration tests for your application to ensure its reliability and functionality.

# 12. Deployment:

- Deploy your application to a web server or cloud platform of your choice (e.g., AWS, Heroku, or DigitalOcean).

#### 13. Documentation:

- Provide clear and comprehensive documentation for your API endpoints, database schema, and any other relevant aspects of your project.

# 14. Continuous Development:

- Plan for continuous development and maintenance of your platform, including updates, bug fixes, and feature enhancements.

Remember to follow best practices, modularize your code, and maintain a structured and organized development approach throughout the project. Additionally, make use of npm to manage packages and dependencies effectively.