Service Layer

My application will be built using Node.js with the Express library. Using the Express library with Node.js will allow the application to build using RESTful APIs. The backend service will be broken down into three layers.

1. The Route Layer: This layer will handle incoming HTTP request, manage routing, and interacts with the client.
2. The Service Layer: This layer will implement the application’s rules, process data, and perform actions based on the incoming requests and data.
3. The Data Access Layer: This layer will manage interactions with the database and perform CRUD operations.

**User Management Endpoint:**

1. Create User: Endpoint for creating a new user profile.

URL: https://madefitness.com/api/users/create

Method: POST

Purpose: When users first go the web app, they will be able to create user profiles.

Success

A screenshot of a computer program

Description automatically generated

Error

A screen shot of a computer

Description automatically generated

A blue rectangle with black text

Description automatically generated

1. Retrieve User Profile: Endpoint to fetch user profile data.

URL: https://madefitness.com/api/users/{user\_id}

Method: GET

Purpose: Users will be able to view their profile after they create one.

Success

A screen shot of a computer program

Description automatically generated

Error

A screen shot of a computer program

Description automatically generated

A diagram of a user login

Description automatically generated

1. Update User Profile: Endpoint to update user profile information.

URL: https://madefitness.com/api/users/{user\_id}

Method: PUT

Purpose: Users will be able to update or modify their user profiles.

Success

A screenshot of a computer

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Error

A screen shot of a computer

Description automatically generated

A diagram of a user login

Description automatically generated

**Workouts Endpoints:**

1. Create Workout: Endpoint to log a workout.

URL: https:madefitness.com/api/workouts/create

Method: POST

Purpose: Users will be able to log their exercise activities, such as exercise type, time, and date.

Success

A screen shot of a computer program

Description automatically generated

Error

A screenshot of a computer program

Description automatically generated

A diagram of a workout

Description automatically generated

1. Retrieve User's Workouts: Endpoint to fetch a user's workout history.

URL: https:madefitness.com/api/workouts/{user\_id}

Method: GET

Purpose: Users will be able to access their workout histories to track their progress and plan future workouts.

Success

A screenshot of a computer program

Description automatically generated

Error

A screen shot of a computer program

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A diagram of a diagram

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**Meals Endpoints:**

1. Log Meal: Endpoint to log a meal.

URL: https://madefitness.com/api/meals/create

Method: POST

Purpose: Users can log their meals, including food items, and nutritional information.

Success

A screen shot of a computer

Description automatically generated

Error

A screen shot of a computer program

Description automatically generated

A diagram of a diagram

Description automatically generated

1. Retrieve User's Meals: Endpoint to retrieve a user's meal logs.

URL: https://madefitness.com/api/meals/{user\_id}

Method: GET

Purpose: Users can access their meal logs to view their history and monitor nutrition.

Success

A screen shot of a computer

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Error

A screen shot of a computer program

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A diagram of a diagram

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**Workout Routines Endpoints:**

1. Retrieve Workout Routines: Endpoint to fetch a list of available workout routines.

URL: https://madefitness.com/api/workoutroutines

Method: GET

Purpose: Users can access a list of different workout routines to choose from that aligns with their fitness goals.

A screenshot of a computer program

Description automatically generated

A diagram of a workout routine

Description automatically generated

1. Retrieve Workout Routine Details: Endpoint to fetch details of a specific workout routine.

URL: https://madefitness.com/api/workoutroutines/{routine\_id}

Method: GET

Purpose: Users will get a detailed description of the selected workout routine.

A screen shot of a computer program

Description automatically generated

A diagram of a workflow

Description automatically generated

**Exercises Endpoints:**

1. Retrieve Exercises for Routine: Endpoint to fetch exercises associated with a workout routine.

URL: https://madefitness.com/api/exercises/{routine\_id}

Method: GET

Purpose: Users can access details for specific workout routine to understand how to perform each exercise.

A computer screen shot of a program

Description automatically generated

A diagram of exercise and exercise

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