# Test Plan and Report - MuscleMinder

FitTech Innovators - 4 June 2024

### User Stories:

1. As a fitness enthusiast, I want to see a basic virtual body map so that I can get familiar with navigating my workout visually.
2. As a user, I want to hover over muscles on the body map to see their names for educational purposes.
3. As a user, I want to input my workout plan so I can validate if it hits all muscle groups efficiently.
4. As a user, I want the app to suggest exercises when I select a muscle group so that I can effectively target that area.
5. As a user, I want the ability to adjust my workout plan based on the app's recommendations for balanced muscle development.
6. As a user, I want to know if I am over/under-exerting myself on certain days of the week based on my workout.
7. As a user, I want to have my information be stored so I can come back to my chosen plan at a later date.

### System Tests:

#### Scenario 1: Workout Stress Map (pass/fail)

Verifies user stories 1,3

* Start App
  + Select from workout dropdown menu: {preacher curls, lat pulldowns, pull-ups}
  + User should see the following muscles highlighted on body map: {biceps, upper-back, back-deltoids}

#### Scenario 2: Workout Explorer (pass/fail)

Verifies user stories 2,3,4

* Start App
  + Hover over shoulder muscles
    - Check: user should see muscle name (i.e. back-deltoids, front-deltoids)
  + Click on front-deltoids
* Users should see a list of workouts pertaining to front deltoids, and details about each one.

#### Scenario 3: Equipment Filter (pass/fail)

Verifies user story 4

* Start App
  + Select from equipment dropdown menu: (dumbbells, barbells)
  + Open workouts dropdown menu:
* User should only be able to see/select workouts containing dumbbells and barbells:
  + {Barbell Bench Press, Incline Bench Press, Dumbbell Flyes, Push-ups, Chest Dips, Deadlift, Pull-ups/Chin-ups, Bent-over Rows (Barbell or Dumbbell), T-Bar Rows, Squats, Lunges, Romanian Deadlifts, Calf Raises, Overhead Press (Barbell or Dumbbell), Lateral Raises, Front Raises, Upright Rows, Arnold Press, Barbell or Dumbbell Bicep Curl, Hammer Curls, Preacher Curls, Concentration Curls, Tricep Dips, Skullcrushers (lying tricep extension), Tricep Kickbacks, Overhead Tricep Extension, Plank, Russian Twists, Bicycle Crunches, Leg Raises, Mountain Climbers, Woodchoppers}

#### Scenario 4: Workout Validation (pass/fail)

Verifies user stories 3,6

* Start App
  + Select from equipment dropdown menu: {barbells, dumbbells}
  + Selection from workout dropdown menu: {Bench Press, Bicep Curls, Preacher Curls, Lateral Raises}
  + Click “Improve Workout” button
* Expected Results:
  + The selected muscles (chest, bicep, shoulders) should be highlighted on the body map
  + Chart should should reflect the following:
    - Insufficiently targeted: Chest, front-deltoid, back-deltoid
    - Adequately targeted: biceps
    - Not targeted at all: calves, hamstrings, quadriceps, abs, forearms, upper-back, triceps, lower-back, gluteal, trapezius, and obliques

#### Scenario 5: Storing Information (pass/fail)

Verifies user story 7

* Start App
  + Select from equipment dropdown menu: {barbells, dumbbells}
  + Selection from workout dropdown menu: {Bench Press, Bicep Curls, Preacher Curls, Lateral Raises}
  + Refresh the page (CTRL + R)
* Expected Results:
  + The selections in both the equipment dropdown and the workout dropdown menus should still be selected
  + The selected muscles (chest, bicep, shoulders) should still be highlighted on the body map