Verification Test Plan

Unit Testing

Target Component: Individual functions and methods in the design specification.

* Test Set 1A: User Authentication
  + Test 1A.1: Create a new user account and verify the account is created successfully.
    - Test Case:

Input: Username: JuanMatias808 Password: ILoveCoding808!

Expected: Account Creation Successful!

* + Test 1A.2: Login with valid credentials and verify successful login.
    - Test Case:

Input: Username: JuanMatias808, Password: ILoveCoding808!

Expected: Welcome back Juan!

* + Test 1A.3: Logout and verify successful logout.
    - Test Case:

Input: Click Logout

Expected: User successfully logged out!

* Test Set 2A: Bubble Display and Interaction
  + Test 2A.1: Verify that "bubbles" are displayed correctly to users.
    - Test Case:

Input: Message: I love Bobble!

Expected: I love Bobble!

* + Test 2A.2: Verify that users can click into a "bubble" to see posts and related "bubbles."
    - Test Case:

Input: Click on a bubble named “Workout tips”

Expected: Display posts related to workout tips inside the bubble “Workout Tips” posts can be related to strength training, marathon training, form correction, hypertrophy training tips etc.

Functional Testing

Target Component: Interactions between different units (methods and classes) within the software.

* Test Set 1B: Bubble Functionality
  + Test 1B.1: Create a new bubble and verify it appears in the list of bubbles.
    - Test Case:

Input: Create a bubble named: “Bodybuilding”

Expected: “Bodybuilding” appears in the list of bubbles.

* + Test 1B.2: Edit a bubble and verify the changes are reflected.
    - Test Case:

Input: Edit bubble named “Bodybuilding” to Strength Training”

Expected: Bubble name is changed to “Strength Training”

* + Test 1B.3: Link two bubbles and verify the link is established.
    - Test Case:

Input: Link Strength Training bubble to Bodybuilding bubble

Expected: A link between the two bubbles are created.

* Test Set 2B: Post Functionality
  + Test 2B.1: Create a new post and verify it appears in the bubble.
    - Test Case:

Input: Post: “How to train to failure and achieve muscle hypertrophy” inside the bodybuilding bubble

Expected: the post appears within the bodybuilding bubble.

* + Test 2B.2: Edit a post and verify the changes are reflected.
    - Test Case:

Input: Edit post of “How to train to failure and achieve muscle hypertrophy” and the content within it.

Expected: The post is updated containing the new information.

* + Test 2B.3: Add a response to a post and verify it appears correctly.
    - Test Case:

Input: Respond to the post “How to train to failure and achieve muscle hypertrophy” with a comment like “Wow this was very insightful, I can’t wait to apply this during my next mesocycle”

Expected: The response can be found below the post.

System Testing

Target Component: Overall software system and interaction between various components.

* Test Set 1C: Overall System Functionality
  + Test 1C.1: Verify that a user can create a bubble, post in it, and interact with other users.
    - Test Case:

Input: Create Bodybuilding bubble, create a post on why CBum being the best classic physique Olympian, reply to comments about the post

Expected: All functions work and the system is executable.

* + Test 1C.2: Verify that a user can link their bubble with another bubble and share posts between them.
    - Test Case:

Input: Create Strength Training bubble, link the bubble to bodybuilding, create post supporting that “you can strength train and build muscle at the same time.

Expected: The post is posted in strength training and is related to bodybuilding bubble respectively.

* + Test 1C.3: Verify that users can follow other users' posts.
    - Test Case:

Input: Follow username ChicagoMarathonRunner808

Expected: You are now following, ChicagoMarathonRunner808

* Test Set 2C: User Profile and Security
  + Test 2C.1: Verify that a user can manage their profile and settings within the system.
    - Test Case:

Input: Update your profile picture and notification settings to off

Expected: Your profile picture is updated and your notifications are turned off.

* + Test 2C.2: Verify that password reset functionality works correctly.
    - Test Case:

Input: Click “Forgot Password?” and enter the email associated to the account for the verification link is sent out

Expected: User received verification link to the provided email.