

# Fitness Management Application

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March 8, 2024

## 1 Overview

A web application that allows users to manage their fitness routines, track workouts, and set goals. The application is called HyperSense for now.

## 2 User Stories

### 2.1 Role 1: User

As a user, I am able to log in to the application so that I can access my personal fitness data. I am able to view my workout history so that I can track my progress over time. I can see a list of completed workouts when I log in and I can select a workout to view more details. A workout includes a list of exercises, the number of sets, and the number of reps for each exercise. I am able to name and save workout routines to my profile so that I can easily start a new workout with the same details. I can create a workout routine by selecting exercises from a list. I am able to see a picture or video for each exercise to make sure I am doing it correctly.

### 2.2 Role 2: Administrator

As an administrator, I am able to add new exercises to the application so that users can include them in their workout routines. I am able to view a list of all users. I am able to view a list of all exercises.

## 3 Prototype Screenshots

### 3.1 Login Page

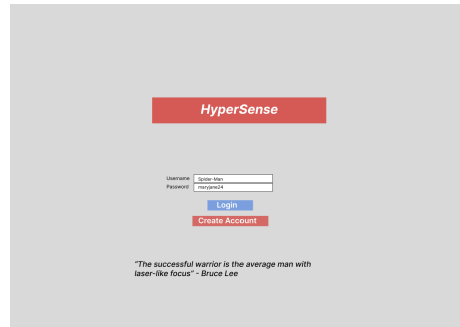


Figure 1: A login page for the application with a motivational quote.

### 3.2 Login Page : Create Account

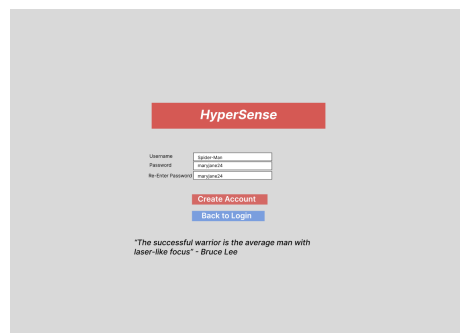


Figure 2: When create account button is clicked. The user is prompted to enter their email and password with a re-enter password prompt. Clicking create account button again will create the account.

### 3.3 Current Workout Page

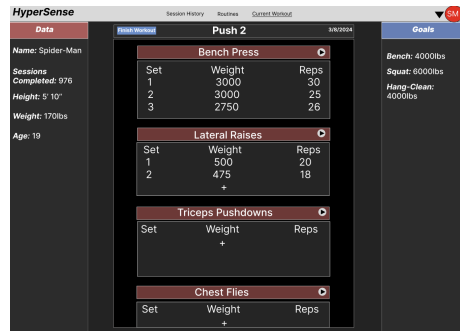


Figure 3: A detailed view of the current workout routine. User data and goals are displayed. Goals and Notes can be changed by going to profile settings. Play symbol can be pressed to show a video for the workout. The + symbols are clicked to enter more data.

### 3.4 User Routines Page : Routine Selected

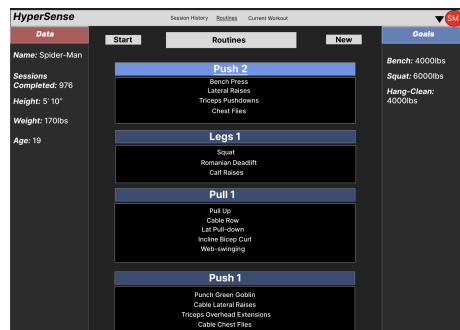


Figure 4: A list of user routines. The user can select a routine, in this case Push 2, and press start to begin the workout.

### 3.5 User Routines Page : New Routine

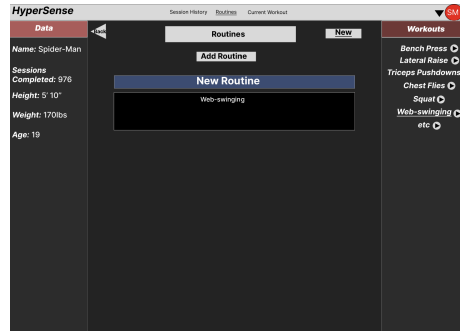


Figure 5: When new button is clicked, a new routine page appears. The user can add exercises from list of workouts that appears on the right. Clicking the back button cancels the routine creation and pressing Add Routine button adds it to the list of routines. Workouts have a button to display a video on how to perform the exercise.

### 3.6 User Session History Page

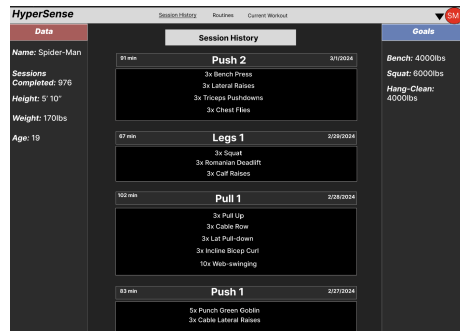


Figure 6: A list of user session history. The user can select a session to view more details.

### 3.7 User Session History Page : Detailed View

The screenshot shows the 'HyperSense' app interface. On the left, a sidebar contains user information: Name: Spider-Man, Sessions Completed: 976, Height: 5' 10", Weight: 170lbs, and Age: 19. The main area displays a 'Session History' for 'Push 2' on 3/1/2024, lasting 91 minutes. The session details are as follows:

Set	Weight	Reps
1	3000	50
2	3000	25
3	2750	26

Set	Weight	Reps
1	500	20
2	475	18
3	475	15

Set	Weight	Reps
1	500	20
2	475	18
3	475	15

Set	Weight	Reps
1	500	20

On the right, the 'Goals' section lists: Bench: 4000lbs, Squat: 6000lbs, and Hang-Clean: 4000lbs.

Figure 7: Detailed view of selected past workout session.

### 3.8 User Session History Page : Profile View

The screenshot shows the 'HyperSense' app interface with the 'Session History' dropdown menu open. The sidebar on the left is identical to Figure 7. The main area displays a summary of the user's session history:

- Push 2** (3/1/2024, 91 min): 3x Bench Press, 3x Lateral Raises, 3x Triceps Pushdowns, 3x Chest Flies.
- Legs 1** (2/28/2024, 87 min): 3x Squat, 3x Romanian Deadlift, 3x Calf Raises.
- Pull 1** (3/28/2024, 102 min): 3x Pull Up, 3x Cable Row, 3x Lat Pull-down, 3x Incline Bicep Curl, 10x Web-swinging.
- Push 1** (3/27/2024, 83 min): 5x Pumph Green Goblet, 3x Cable Lateral Raises.

On the right, the 'Goals' section is identical to Figure 7. A dropdown menu is visible at the top right, showing 'Profile Settings' and 'Logout'.

Figure 8: Shows the dropdown menu for the user profile.

### 3.9 User Profile Settings

The screenshot shows the 'HyperSense' application interface. The top navigation bar includes 'Session History', 'Routines', and 'Current Workout'. The main content area is titled 'Profile Settings'. On the left, under the 'Data' tab, user information for 'Peter Parker' is listed: Sessions Completed: 976, Height: 5' 10", Weight: 175, and Age: 20. In the center, there are input fields for 'Username' and 'Password', with a 'Save Changes' button below them. On the right, under the 'Goals' tab, target weights are listed: Bench: 4000lbs, Squat: 7000lbs, and Hang-Clean: 5000lbs. A user profile icon and 'Logout' link are in the top right corner.

Figure 9: Shows changed user Data and Goals(text boxes) as well as text input to change username and password.

### 3.10 Admin Page : Users View

The screenshot shows the 'HyperSense' application interface from an admin perspective. The top navigation bar includes 'Session History', 'Routines', 'Current Workout', and 'Admin Controls'. The main content area is titled 'Admin Controls' and has tabs for 'Users' and 'Workouts'. The 'Users' tab is active, displaying a table with the following data:

Name	Email	User Id
Spider-Man	friendynneighbor@gmail.com	1

On the left, under the 'Data' tab, user information for 'Silver Surfer' is listed: Sessions Completed: 1000000000000000, Height: 6' 4", Weight: 225lbs, and Age: 140000000000. On the right, under the 'Goals' tab, target weights are listed: Bench: 5000000lbs, Squat: 6800000lbs, and Hang-Clean: 4700000lbs. An 'Admin Controls' dropdown menu is in the top right corner.

Figure 10: Admin view of the users list.

### 3.11 Admin Page : Workouts View

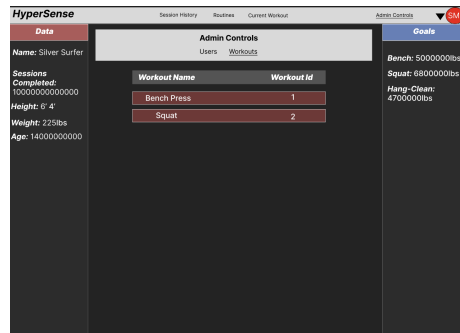


Figure 11: Admin view of the workouts list.

### 3.12 Admin Page : New Workout View

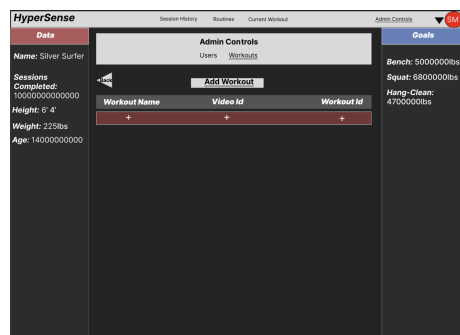


Figure 12: Admin view while creating a new workout.

## 4 Third Party API

The third-party API that will be used is Youtube API.

I will include the Youtube API JavaScript library using

```
<script src="https://www.youtube.com/iframe_api"></script>
```

I can then create a Youtube video player object using something like the following code.

```

var player;

player = new YT.Player('player', {
  height: '390',
  width: '640',
  videoId: 'VIDEO_ID', // VIDEO_ID would be stored on the server
  playerVars: {          // and associated with the workout object.
    'autoplay': 1,
    'controls': 1,
    'showinfo': 0,
    'rel': 0,
    'fs': 1,
    'modestbranding': 1
  },
  events: {
    'onReady': onPlayerReady,
    'onStateChange': onPlayerStateChange
  }
});

```