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Team 02

CSC 431 – Introduction to Software Engineering

March 01, 2022

# Table of Contents

**01** Backgrounds

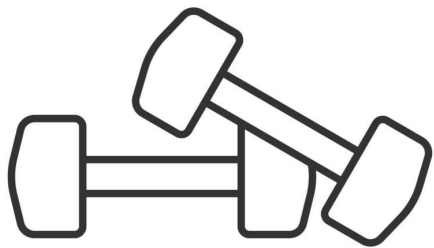
**02** Functional  
Requirements

**03** Non-Functional  
Requirements

**04** Evolutionary  
Requirements

**05** System  
Constraints

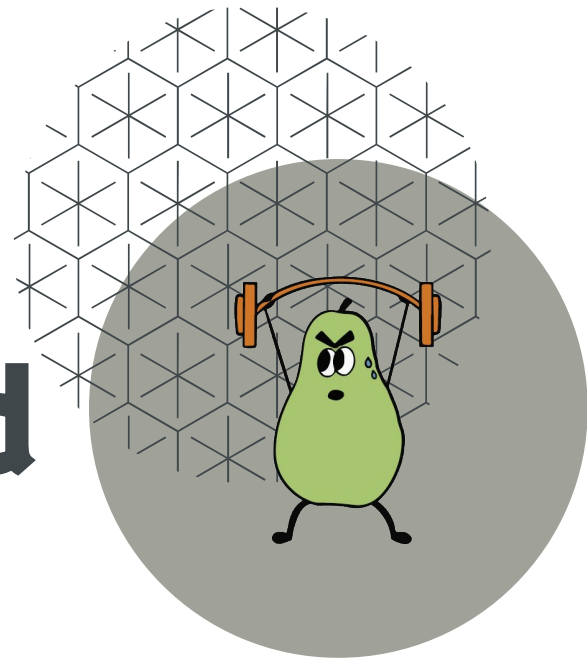
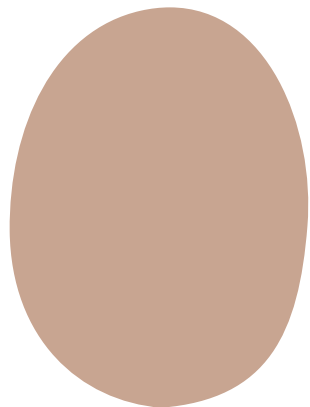
**06** System  
Design



01

# Background

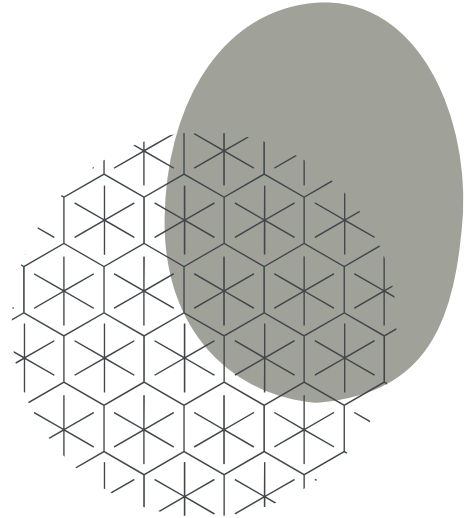
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# Problem:

- No idea where to start the workout journey
- Lack of exercise knowledge
- Lack of motivation
- Gym intimidation

**Solution: UFIT**



# Summary: Mobile Workout App

- Help achieve personal fitness goals by **customizing workout plans**
- **Connect gym buddies** to work out with based on fitness goals and location.
- Recommends **suitable gym locations** with the necessary equipment to achieve their goals nearby
- **Target age group** is 18 – 40

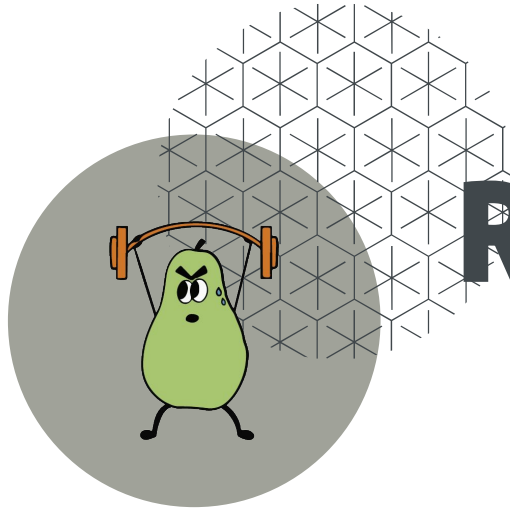
College students & Young professionals



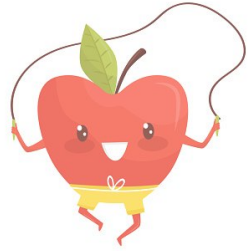
02

# Functional Requirements

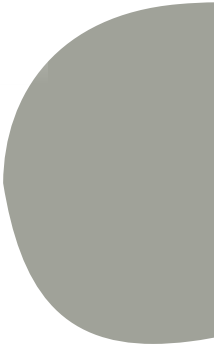
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# Registering an Account

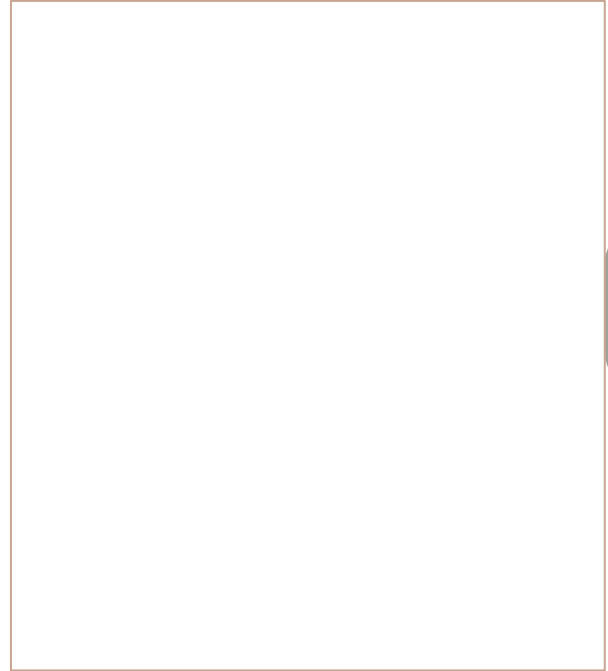


- Create new user account
- Phone Number/Email
- Username and Password



# Log into Account

- After registering
- Enter Username and Password
- Access all app features after







Login

username

password

go

or

Continue with Facebook

Continue with Google

Continue with Apple

New here?

Create Account



## Account Information



What is your email?

Password

Repeat Password

Back

Next



### Share your location

By sharing your location with us we can connect you with the best locations and people around you

Enable location

Skip

Back



## Personal Information

Get a personalized experience by providing some information about you

What is your name?

Age

Gender

Weight

Height

Next

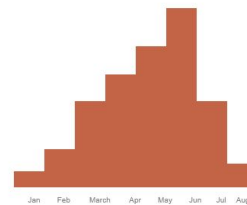


Progress



### Progress Analysis

Based on weight of 72 kg



20  
BMI

3,000  
Daily Cal intake

UPDATE WEIGHT



## Input Workout Preferences

- Workout Intensity
- Injuries (if any)
- Targeted Muscle Groups
- (No) Equipment

## View Fitness Progress

- Weight Change Graph
- BMI Changes
- Calories Burned



# View and Select Workout Plans

- Based on Preferences
- List of Workout Options
- User selects one

# Guide User through Workout

- Pictures and Videos to demonstrate each exercise
- Timer
- Motivating Alerts



## Connect Users

- Gym Buddies Feature
- Find and Chat with other Users

## Locate Local Gyms

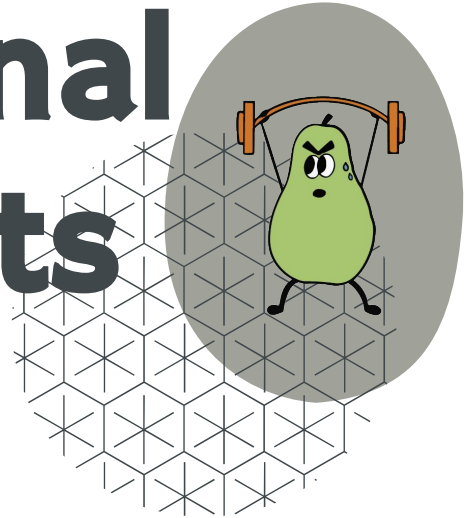
- Use location services to find nearby gyms
- Link to their website



03

# Non-Functional Requirements

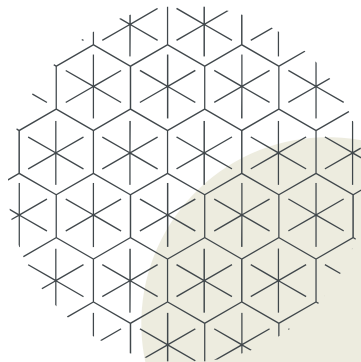
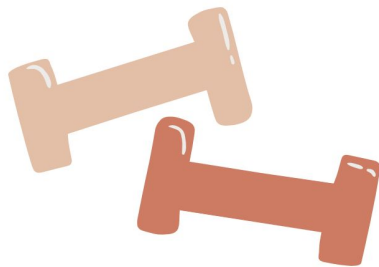
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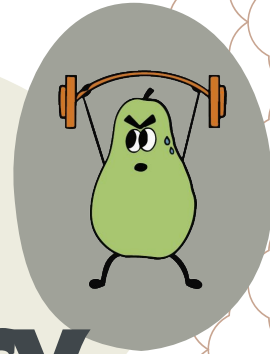
**Secure user's information:** User login data and information will be encrypted

**Preferences Matcher Compatibility:** Users match with others based on a user-defined percent compatibility threshold

**Reminder Notifications:** Users will receive app notifications reminding them when a match is found or when they have not signed in for workouts for a while




04



# Evolutionary Requirements

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**Suggested Diet Plan:** A weekly diet based on user's nutrition preferences and physical activity intensity

**Points-based Competition System:** allows users to compete with friends by gaining points after each workout

**Message Encryption:** User's chats with their matches will be confidential

**Personal Trainers:** Allows users to find or be personal trainers

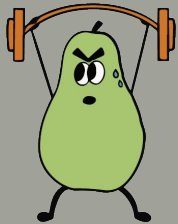




05

**System  
Constraints**

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# System Constraints

## Tool Constraints

- Mobile Application Framework Constraint
  - Node.js: fullstack and cross-platform

## Language Constraints

- Backend Framework
  - Javascript
- Frontend Framework
  - React.js – Javascript, HTML, CSS



# System Constraints (cont'd)

## Platform Constraints

- Mobile Application Platform
  - Both iOS and Android

## Hardware Constraints

- Hardware Constraints
  - Iphone, Android, Tablet
  - Minimum android 6.0, iOS 8.0
  - Internet Connection
- Storage Constraints
  - 25MB for initial download
  - Cloud services



# System Constraints (cont'd)

## Network Constraints

- Network Connection
  - Internet capabilities to connect local gyms and users
  - Some offline capability
- Messaging
  - Ability to transmit and receive messages

## Deployment Constraints

- Amazon Lightsail Deployment
  - Manages cloud resources
  - Built in database management capabilities



# System Constraints (cont'd)

## Transition & Support Constraints

- GitHub Version Control

## Budget & Schedule Constraints

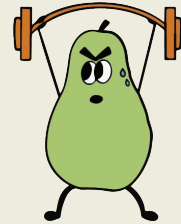
- Budget
- Due Date
  - May 2, 2022

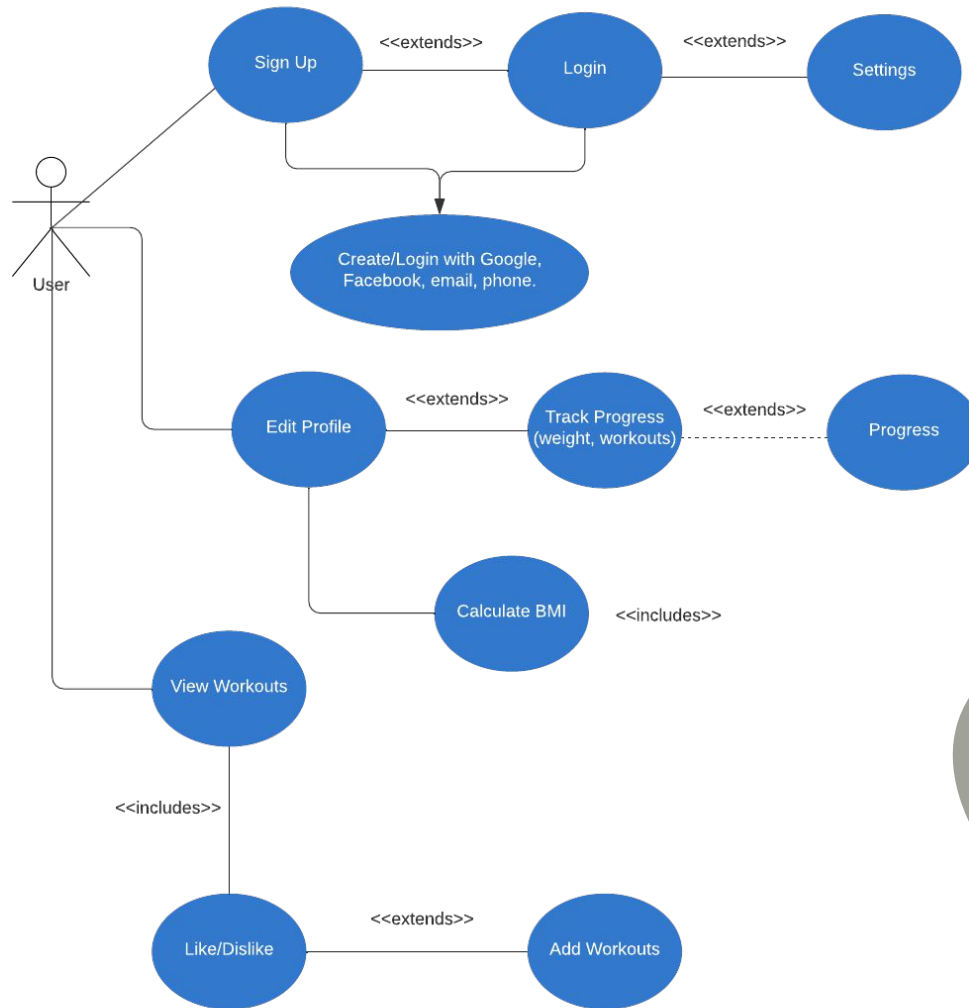


06

# System Design

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# Questions?

