



NOVA SCHOOL OF  
SCIENCE & TECHNOLOGY

**Interação Pessoa-Máquina**

**2022/2023**

# **Jacked Up**

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**Stage n: 2**



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## PROBLEM DESCRIPTION

A gym has opened nearby the FCT campus and has gained many members. João is one of the members. To better manage his time, João wants to go to the gym when it's not full, but he doesn't know the gym occupancy. João wants to get fit, but he doesn't have an easy way to communicate with his personal trainer. When he is not with his personal trainer, João does random exercises that he saw online because he doesn't have an exercise routine. João likes to play volleyball with his friends, but he doesn't like to stay in the queue in the reception to make a reservation for the volleyball field.

Other gym members also face the difficulties mentioned above and other kinds of issues concerning their fitness. As such, our project aims to mitigate and end those problems, so that the members can experience the gym at its greatest.

## USERS

User Characteristic	Teens/Young adults	Young adults to middle age	Middle age to senior citizens
Age	16-24	24-40	40+
Sex	Both male and female.	Both male and female.	Both male and female.
Physical Limitations	May have limitations that do not restrict the use of a smartphone.	May have limitations that do not restrict the use of a smartphone	May have limitations that do not restrict the use of a smartphone
Educational Background	Has to be literate.	Has to be literate	Has to be literate
Mobile use	Need to have some experience with mobile applications.	Need to have some experience with mobile applications.	Need to have some experience with mobile applications.

<b>Motivation</b>	Use the application as a complementary application to better the experience of the gym services.	Use the application as a complementary application to better the experience of the gym services.	Use the application as a complementary application to better the experience of the gym services.
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The app is meant to be used by all gym members, regardless of age, that want to have an easier experience in the gym. This is done by providing a way to organize the users workout routines and ease the use of other gym services such as booking classes and PT counseling.

## TASKS

- **Objective:** Register the user in the app.

**Pre-conditions:** User needs to be a member of the gym and needs to have a secret register code given by the gym staff.

**Sub-Tasks:**

1. User opens the app;
2. User inserts the secret code;
3. User clicks on the "Register User" button;
4. User inserts personal data:
  - 4.1 User inserts email address;
  - 4.2 User inserts password;
  - 4.3 User inserts name;
  - 4.4 User inserts date of birth;
  - 4.5 User inserts gender;
  - 4.6 User inserts height;
  - 4.7 User inserts weight;
5. User accepts terms and conditions;
6. User clicks sign up.

**Exceptions:**

- Secret code is invalid;
- Name contains forbidden characters;
- Weight and/or height contain invalid values.
- Already used email;
- Password is not strong enough.

- **Objective:** Book gym services (e.g: class, pitch, PT,...).

**Pre-conditions:** User needs to be logged in.

**Sub-tasks:**

1. User opens the app;

2. User scrolls through the home page and selects the reservations menu;
3. User scrolls and selects the desired service;
4. User chooses a preferred date and time;
5. User confirms the booking and completes the enrollment in the service.

**Exceptions:**

- There are no available gym services.

- **Objective:** Start a training plan.

**Pre-conditions:** User needs to be logged in.

**Sub-tasks:**

1. User opens the app;
2. User scrolls through the home page and selects the training plan menu;
3. User searches and selects a training plan;
4. User executes the plan.

- **Objective:** Access nutritional plan.

**Pre-conditions:** User needs to be logged in.

**Sub-tasks:**

1. User opens the app;
2. User scrolls through the home page;
3. User selects the nutritional menu;
4. User observes the nutritional menu.

- **Objective:** View exercise tutorial.

**Pre-conditions:** User needs to be logged in.

**Sub-tasks:**

1. User opens the app;
2. User scrolls through the home page;
3. User selects the exercise tutorials section;
4. User searches the desired exercise;
5. User watches the tutorial.

- **Objective:** Chat with the PT.

**Pre-conditions:** User needs to be logged in and needs a PT.

**Sub-tasks:**

1. User opens the app;
2. User scrolls through the home page;
3. User selects the PT chat;
4. User sends a message to the PT.

- **Objective:** Update user weight and height.

**Pre-conditions:** User needs to be logged in.

**Sub-tasks:**

1. User opens and logs on the app;
2. User scrolls through the home page;
3. User selects the profile menu;
4. User updates the weight and the height.

**Exceptions:**

- Weight and/or height value is invalid.

- **Objective:** Create a new routine.

**Pre-conditions:** User needs to be logged in.

**Sub-tasks:**

1. User opens and logs on the app;
2. User scrolls through the home page;
3. User selects routines menu;
4. User clicks a button to create a new routine;
  - 4.1 User clicks a button to add a training plan:
    - 4.1.1 Users selects the day(s) to do the training plan;
    - 4.1.2 Users selects the training plan;
5. User repeats step 4.1, 2 times.

- **Objective:** Create a customized training plan.

**Pre-conditions:** User needs to be logged in.

**Sub-tasks:**

1. User opens and logs on the app;
2. User scrolls through the home page;
3. User selects the training plan menu;
4. User clicks on the add training plan button:
  - 4.1 User selects an exercise:
    - 4.1.1 Users defines the number of reps and sets;
5. Users repeat step 4.1, x times.

## SCENARIOS

### REGISTER IN THE APP

My name is Marta Ferreira and I'm about to register myself in the JackedUp app. For this to happen I need to insert the secret code that was given to me in thy gym. After that, I need to insert my email "marta.f@gmail.com", my username "FCTense", a password like "User123\*". After that, I have to accept the terms and conditions and my account will be registered in the system. Finally, I insert my date of birth "30/01/1999", my gender "feminine", my height "162 cm" and my weight "47 kg".

### BOOK GYM SERVICES

I'm Carlota Lopes, I want to go to a zumba class at JackedUp. For this reason, I'm going to open the gym app on my mobile phone and I'm going to book a slot for this class. In order to do so, I'm going to choose the date "21/10/2022" and the time "18h15" desired.

### CREATE TRAINING PLAN

I'm Inácio D'água, I would like to create a specific training plan for myself. Because of this, I'm going to open the gym app on my mobile phone and I'm going to create a new customized training plan. After this, I'm going to choose three exercises. The first one is the exercise "Leg extension" and I'm going to select "15" reps and "3" sets that I would like to do and add the exercise to the plan. Then I'm going to choose "Dumbbell lateral raises" and

select “10” reps and “2” sets. After that, I’m going to pick “Push ups” and select “20” reps and “2” sets. Finally, my training plan is created.

### CREATE ROUTINE

I’m Diogo Valente, I want to create a training routine for myself, so that I can be consistent and gain muscle mass. Therefore, I’m going to open the gym app on my mobile phone and create a new routine. After that, I’m going to select two training plans. The first one I will do on “Monday” and it will be the “Upper Body” plan. The second one I will do on “Thursday” and it will be the “Glutes definition” plan. Hereafter, my routine is created.

### WATCH AN EXERCISE TUTORIAL

I’m Matilde Bettencourt, I need to access an exercise tutorial so that I can understand what I’m supposed to do. For this to happen, I access the exercise tutorials section and I choose the “Push ups” exercise. At last, I read/watch the tutorial and I execute the desired exercise.

## INTERVIEW CONCLUSIONS

We interviewed one user of each class, about their experience using other gym apps, and from the interviews we gathered some information regarding the pros, cons and suggestions that the interviewees gave us.

A feature that was highlighted was the existence of a graph with the evolution of the person’s body mass.

The interviewees mentioned that some gym apps that they use have very bad and unintuitive layouts. Apart from this, they suggested that the key used to enter the gym could be a QR Code, that the gym information about its capacity and the parking spots should be able to be visualized in the app and that we should have a way to make a member evaluation, we should be able to let the user see in which members the muscle mass has increased and in which ones is more deficient. Also, after that, we should have exercise suggestions for those specific members.