



NOVA SCHOOL OF
SCIENCE & TECHNOLOGY

Human-Computer Interaction

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TrainLink

Stage 4: Computational prototype



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Functionalities

✓ Implemented:

- Authentication;
- Home, Create Team, Join Team;
- Training Repertoire, Create Training, Prepare Field (Drag and drop only);
- Calendar (Routine only), Schedule Training, Cancel Attendance;
- Profile, Edit Profile, Logout.

⌚ Not yet implemented:

- Backend;
- Field Menu screen (buttons in the Training Menu screen);
- Prepare Field's sketch drawings;
- Calendar's monthly view

✗ Lacking functionalities:

- The 'Forgot Password?' label is a button in the Login screen that only suggests logging in with an email and a password;
- The "no visibility" icon is not a button, it only serves as an indicator that the input field text is hidden;
- 'Schedule' in the Calendar screen takes the user to schedule a training, meaning that, if a coach user has no teams or trainings, the respective dropdowns will be empty;
- Trainings can be scheduled to a modality different from the team's modality;
- Some of the UI elements in the Calendar screen do not match the rest of the application;
- As a player user, cancelling attendance does not logically do anything, it just prompts a notification as if it succeeded;
- The screen for editing the user profile does not allow changing the email or the password.

Tools

The functionalities above were implemented with the help of the following tools:

- **Visily:** Design and prototyping;
- **Android Studio IDE:** Application development;
- **Flutter:** User Interface SDK;
- **GitHub:** Version control.

Some other functionalities may be missing. The team decided to focus entirely on those more relevant to the interface in performing the scenarios.

Important Links

Trainlink project repository: <https://github.com/ipm13/trainlink>

Prototype APK download:

https://github.com/ipm13/trainlink/blob/main/apks/trainlink_0.1.0.apk

Briefing

This project originated from the idea of providing digital assistance to sports enthusiasts, namely coaches and athletes, from which it was decided to focus on training. As a group, a few approaches were discussed to decide how to improve and facilitate the training experience for any sportsman or sportswoman.

The first approach sought to provide coaches with some kind of training repertoire that would allow them to share training information with their athletes. This concept was promptly complemented with the idea of generalizing the application to multiple sport modalities, so that it can be useful for most, if not all conventional sports, and appeal to a wider audience.

The result of all this brainstorming was Trainlink, a sports assistance application that seeks to provide coaches the opportunity to:

- Create their teams (on the app);
- Manage their training plans with the help of an interactive and digital interface;
- Establish training routines for their players;
- Check/track player attendance.

The athletes also have their spot in the application, as they can:

- Join a registered team;
- Check any information regarding their scheduled training sessions.

With Trainlink, coaches will have a digital alternative to easily and effectively manage their teams while athletes are provided with all the training information they need, preemptively.

Instructions

The Trainlink application was developed for mobile devices using the Android platform with an SDK (Software Developer's Kit) version superior to 26, which is also known as Android 8.0 Oreo. Since none of the group's members owns a MacBook, it was not possible to build the application for iOS devices.

To test the application, the user should start by downloading and installing the corresponding APK (Android Package Kit) from the previously indicated group's website (or click [here](#)). Upon clicking the application's icon, the Splash Screen will be presented, followed by the Login Screen, marking the point where the user should follow the scenarios described below.

Scenarios

An assortment of scenarios was created during the third phase, '*Testing Day*', to assist users in performing tasks using the Trainlink interface. The scenarios were written informally, avoiding explicit mention of interface-related elements, as if the test users were casually explaining how they performed the tasks without explicit guidance. With that being said, the Trainlink team apologizes if the scenarios below lack clarity or helpfulness.

NOTE: See Annex.

Coach scenarios:

- **TrainLink Account Registry**

"I'm the sports coach João Lázaro and I've decided to use the new TrainLink app to manage my training plans and maintain contact with my athletes. After the splash screen, I only had to sign up to create my very own coach account and voilà!"

- **Create a Team**

"João Lázaro here, the head coach for Best FC. I wanted to register my team in the TrainLink app, so I logged into my account and created a football team right from the home screen. Only had to confirm after entering the required information."

- **Create a Training plan**

"I'm the sports coach João Lázaro and I recently registered an account in the TrainLink app. I can log in, access my training repertoire and manage training plans. Although the training fields feature is nice, I prefer creating only one for the first part of my training sessions and figuring out the rest during said session. Things do not always go to plan, but that's just how I operate."

- **Schedule Training**

"My name is João Lázaro and I'm a football coach. Now that I have a repertoire with all my training plans thanks to the TrainLink app, I can easily schedule training for my athletes. The app's simplistic looking calendar allows me to schedule any training plan from my training repertoire for any day of the week."

Athlete scenarios:

- **Join a Team**

"My name is Leandro Santos, I'm the newest acquisition for Best FC and my coach shared a special code that allows me to join my teammates in the TrainLink app. I still have to sign-up for an account, but I've heard that I'll only need to use that code to join my team right from the home screen. Sounds like light work!"

- **Drop Training Attendance**

"It is with utmost sadness that I, Leandro Santos, will not be able to partake in the next scheduled training session, as I am injured. I've twisted my ankle badly yesterday, but thankfully, the TrainLink app allows me to easily notify my coach. I pick the scheduled training in question from the app's calendar and justify my absence. Hopefully I heal up quickly now!"

Annex

As stated before, the Trainlink application does not have a backend. Despite this, the team created a few default objects to address the major challenges encountered during development:

- Coach:
 - Email: joao@gmail.com
 - Password: Password1@
- Player / Athlete:
 - Email: leandro@gmail.com
 - Password: Password1@

The default coach and player users were defined for the purpose of having login credentials for the users described in the scenarios. This is not entirely necessary, as the scenarios only refer to signing up to new accounts, but the option is there if the user so desires.

- Team:
 - Name: Best FC
 - Join Code: 7b640ac5-ea97-45d0

While exploring the application or during the 'Join a Team' scenario, the user may notice that the functionality to join a team via a team code does not yield any results, regardless of feedback. However, a default team matching the one described in the scenarios was created to ensure that, at the very least, one team can be joined as intended and function accordingly.