

App Proposal

Introduction

This app aims to help Badminton players track and improve their ability to play the sport, by letting them log and record their progress, and be reminded and passively coached into improving. It will also hopefully help inspire the users to stay active and fit, as well as staying motivated as they see their progress over time.

As well as this, the user will be able to request a personal coach, if they feel they need more detailed advice, which will be allocated to them from one of the users that are registered as a Coach.

Profile

The user will begin by creating their personal profile. This will contain their personal information (e.g. weight, height, age etc.) as well as a self-assessment on the user's ability, ranking how they feel they are in all of the aspects of badminton (e.g. net play, defence etc.). They will also be able to link their personal calendar app to record the days they are playing badminton so the app can send reminders of what to work on.

Progression

Once the user has created a profile, the app will come up with exercises and tasks to do and put them in the "To Do" section.

As mentioned above, the app will check when the user is scheduled to play badminton and send a task, as a reminder, from the "To Do" section for them to focus on in the session. Once the session is over, the user will be asked to give feedback on the session and whether they think they improved in the focused area. If they did then they can change their profile information to reflect this.

The user will also be able to make long term goals and milestones that can be ticked off and monitored in the goals section.

Database

Data will be stored both locally and globally, in two separate databases.

There will be a local database that is made of two tables. One that holds local user login credentials, and another that holds the local user's profile, records and any relevant data. Having this local database will allow the app to work primarily offline, only needing to use the internet to update and sync data between the databases.

There will also be an online database, using Firebase, that is a single table that holds all registered users from any device – making it a superset of the similar local user table. This table will also record all links between “coach” users and “standard” users.

We can use this global table to update local coach data to give them permissions to contact and coach standard users.

Access

When the user registers an account, they will be able to choose between being a coach or a standard user – their account will be given appropriate permissions accordingly. The new account will be checked with the firebase database to prevent any repeated accounts and to ensure that each account is unique. If the account is unique, then it is recorded in both databases.

When a user logs in to a previously registered account, the account will be searched for locally first, then on the firebase database if not found there. This will help reduce stress on the global database (ready for future expansion, if necessary) and keep the app offline for as long as possible.

Wireframes


The image displays three mobile app wireframes for 'Badmin-Tracker'. Each wireframe includes a status bar at the top showing the time as 7:27pm and icons for Bluetooth, Wi-Fi, and battery.

- Register Wireframe:** Features the app title 'Badmin-Tracker' with a heart icon. Below is a 'Register' section with a 'Username' input field, a 'Password' input field, and a question 'Are you a Coach?' with radio buttons for 'Yes' and 'No' (the 'No' option is selected). A 'Sign Up' button is at the bottom of the register section.
- Main Menu Wireframe:** Shows the app title 'Badmin-Tracker' with a heart icon. Below are five buttons: 'Profile', 'Calendar', 'Self-Assessment', 'Tasks', and 'Coach', arranged vertically.
- Profile Wireframe:** Shows the app title 'Badmin-Tracker' with a heart icon. Below is a 'Profile' section with a placeholder image for a profile picture and an 'Add Profile Picture' button. Below the image are input fields for 'Forename:', 'Surname:', 'Height:', 'Weight (kg):', and 'Years played:'. There is also a text area for 'About you:'. An 'Update' button is at the bottom.

7:27pm

Badmin-Tracker

Calendar



Allow **Badmin-Tracker** to access your calendar?

DENY ALLOW

☐ Recieve reminders before a session

☐ Ask for feedback after session

Apply

7:27pm

Badmin-Tracker

Self-Assessment

In each area of badminton, rate on the scale how good you think you are

Net play

0 1 2 3 4 5 6 7 8 9 10

Defence

0 1 2 3 4 5 6 7 8 9 10

Rear-court Attack

0 1 2 3 4 5 6 7 8 9 10

Mid-court Attack

0 1 2 3 4 5 6 7 8 9 10

Serving

0 1 2 3 4 5 6 7 8 9 10

7:27pm

Badmin-Tracker

Tasks

Here is where all of your tasks will be. We will create some for you to get started, based on your self-assessment, then you can add some of your own!

Area	Description	Done?
Net Play	Play a game with a friend using only the area in front of the service line	<input type="checkbox"/>
Defence	Practice the lift-smash-block-net routine. Keep repeating this cycle between you until you can confidently get more back - this will improve their smash too!	<input type="checkbox"/>

Add Task

7:27pm

Badmin-Tracker

Coach

Here you can apply for a personal coach that can recommend specific tasks better suited to your ability! You can also keep track of previous tasks they have given you

Your Coach is *Amanda*

Tasks:

Area	Description	Done?
Smash	You said you wanted to increase your power, try snapping your hips from side-on to front facing as you hit the shuttle, this will add a little extra kick!	<input type="checkbox"/>

Request new task