

M.Des Design Project 3

Designing IIT Bombay's Sports App

Mansi Khedekar

22M2253

Supervised by

Prof. Jayesh Pillai



IDC School of Design
अभिकल्प विद्यालय

Declaration

I declare that this written document represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented, fabricated or falsified any idea, data, fact or source in my submission. I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.



Mansi Khedekar

22M2253

21st May 2024

Approval Sheet

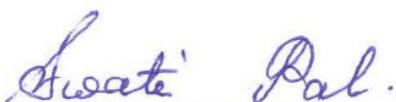
The M.Des Design Project 3 titled "Designing IIT Bombay Sports App" by Mansi Khedekar (Roll No. 22M2253) is approved in partial fulfilment of the M.Des degree at IDC School of Design, Indian Institute of Technology, Bombay.



Guide



Chairperson



Internal Examiner



External Examiner

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Abstract

Sports is one of the many activities offered by IIT Bombay to foster the holistic development of its students. However, the issue of students missing out on activities, particularly new students and those engaged in multiple activities, has become a pressing concern. To tackle this, this project has been initiated by the institute sports council to develop an app that will efficiently streamline event updates and announcements, and enhance user engagement through personalised content. The app will deliver real-time updates, personalised feeds, and seamless event registration to ensure that students are consistently well-informed about upcoming activities. Additional features will include complaint management for reporting issues, court bookings and detailed player profiles displaying achievements and participation history for player recognition. The project followed a non-linear development process involving wire-framing, prototyping, and iterative testing to refine the app's usability and ensure it effectively meets user needs. The app is poised to significantly enhance communication within the sports community and increase participation in sports activities.

Introduction

Excellence in sports directly reflects the stature and intellectual growth of an institute. IIT Bombay has always aimed to set a precedent for other institutions by laying utmost emphasis on the multifaceted development of its students, embodying the motto 'Citius, Altius, Fortius'. With a deeply ingrained sports culture, the institute has, over the years, channelled its resources to developing a state-of-the-art sporting complex. All the facilities are helmed by seasoned training staff providing beginners a chance to learn a craft as well as for an experienced athlete to receive requisite training.

A passion for sports has always been a part of the very fabric of the institute and this tradition is continued but the Sports Council organising a multitude of camps, championships and other competitive events.

IIT Bombay enrolls more than 12,000 students a year and each student is involved in the different facets of campus life. Amongst the plethora of activities organised in the Institute not just in sports but in Academia, Culturals, etc. it is difficult to keep track of the few events that one might be interested in. With the organizing bodies being students each having their academic commitments, there is a need for easy communication of information and updates. A centralised platform that can help with timely updates and easy access to interested students. With this in mind, this project aims to develop an App that can meet these needs identified.

Motivation

Part of the Sports Community of IIT Bombay Since 2016, I have been part of the different roles that are involved. Having experienced the problems as an Athlete as well as the organising body, I had a deep insight into the problems faced.

For this project, I was interested in developing UX Design skills relevant to designing a mobile Application. Designing a Sports App seemed an exceptional opportunity to contribute to the sports community.

Scope

- Focusing on designing an application that can integrate into the lives of students with minimum cognitive load.
- The design is limited to the app itself, discarding ideas that exist beyond the interface such as facility improvement, court supervision, etc.
- The project is limited to the design of the application as the development depends on an external team.

Primary Research

A small online survey was conducted to identify primary needs as well as to validate the project objective. About 70 students participated in the survey. The survey included the following points:

1. Participants' current involvement in sports
2. The current mode of receiving information on upcoming events
3. Need for a redesigned mode of communication
4. Interest in playing new sports
5. Difficulties faced in playing a new sport
6. Alumni's interests in current events

The current to justify the need for a better mode of communication. 45 out of 67 (67.164%) participants identify with the need.

The survey also suggested some other important needs:

1. 43.3% (29 participants) find it difficult to play their sport of Interest.
2. Difficulty in finding people to play with is a prominent reason followed by a lack of equipment.

This was followed by four interviews from participants belonging to the different types of roles in the sports community (from a beginner to an AlumisThis gave a deeper understanding of the difficulties mentioned previously.

Following this survey, the General Secretary of Sports Affairs and the Girl's Sports Nominee were interviewed to understand the council's goals. The Institute Council broadly identified the following three goals:

1. Centralise Information (Link to different groups, events, and competitions)
2. Encourage Participation
3. Help build better Alumni relations (Through podcasts and Alumni appreciation posts)

Further interviews (with 3 participants) involved understanding the running of all the activities on campus as this information is passed from one council to the next. One more survey with 9 participants, was conducted to gather further factual information from Sports Secretaries that are responsible for managing their respective sports on campus.

The following are the sports/activities available on campus:

Aquatics (Swimming & Water polo) Athletics, Badminton, Basketball, Board Games, Cricket, Football, Hockey, Kho Kho, Lawn, Tennis, Squash, Table Tennis, Volleyball, Weightlifting, Adventure Sports, Chess, Fitness.

Following is a list of events that are conducted on campus:

Inter IIT, Inter IIT Camp Trials, League, General Championships (GC), Crossy PG General Championship (PGGC), Triathlon, GC Practice Camps, Biathlon, Avhaan, Duals, NSO, NSO Trials, Opens, Fitness Camps Swimmathon, Racketlon, PG Sports Mania, Freshiesta, Freshie La Viesta, Femmer Festa, Runs, Treks.

Each sport has different types of facilities. It is important to know this as the lack of available courts during peak hours is a previously mentioned difficulty:

Sports	Available Courts	Maximum capacity
Football	Turf, main ground, all UG hostels	Turf - 15/16 Ground - 30
Basketball	2 Indoor Courts, 2 Outdoor Courts, 1 court near H15, 1 court each in H2, 3, 5, 9, half court in H12-14 and half court in H10	at max 20 people on a full court
Athletics	gymkhana grounds	1000+
Football	Hostel football grounds majorly h12, h3, h2, h9; turf and main ground. Also, playfield near H15	Turf - 7-a-side Ground - 11-a-side
Board Games	Indoor Board Games Room	20-25 people
Lawn Tennis	6 courts and one wall practice area	6 courts 4 people on each = 24
Aquatics	Swimming pool	40 in 50m pool 30 in baby pool
Weightlifting	Old sac weightlifting room. Old and new sac gyms	Weightlifting room capacity: around 30-40 people
Lawn Tennis	6 Tennis courts and one wall practice area	6 courts 4 players per court = 24 and 4 people on wall

Further information was gathered to understand the conduction of different events and the process and roles of different people involved. General event conduction involves sports-required permissions (done physically currently), scheduling, poster releases, and registration forms, WhatsApp Groups, Event conduction, results, medal distribution, and event photo releases. The Sports Council (the team of Secretaries + heads) are divided into groups like MnC (media and creative), Events, Admin, and Fitness as a certain event that is not under a particular Secretary eg. Freshie la vista).

The primary responsibilities of the Secretary include::

Looking after their specific team requirements.

The specific group secretaries/heads look after council-level events like Freshie la Vista and all, which are not specific to one sport. The MnC team looks after IITB sports social media pages and so on

Then there are club heads, who are not involved in any sort of council work. Their responsibility is to look after their club representation

Better understanding of a new student's introduction to IIT Sports:

As a new student, an orientation is conducted to give an overview of IITB Sports. They are required to register for NSO/NSS/NCO as part of the curriculum and are required to give trials for each. On selection, they are added to different different groups. Practice days and timings are fixed, an attendance sheet is maintained and a final exam is conducted according to the coaches' requirements.

There are limited seats for each sport and many don't get selected. It is important for the council to not lose these player's interest and give them other opportunities to be involved.

Secondary Research

Market Study

The secondary research for this project primarily consisted of looking at other universities/colleges that have websites/apps for their sports management.

I conducted a detailed examination of the following applications: Illinois State, Redbird, BGSU Athletics, BC Eagles, Michigan Athletics, Vanderbilt Athletics.

While these applications are efficient in providing event updates and related information, they are primarily designed for prospective recruiters and to sell their event tickets considering the level of competition is higher. The matches are amongst the different colleges as against our Intra-level competitions. This is the same as the IPL app. I followed this by looking at the Indian Institute (especially those with noteworthy sports facilities). Manipal, IIM Bangalore, IIT Delhi, TSG, Shri Ram College of Commerce and IIT Madras were some of the institutes with excellent sports facilities. These universities also lack a clear mode of communication relying on Instagram to announce their activities.

IIT Bombay has previously made attempts to maintain a website, primarily a platform with basic information about the facilities and the rules of conduct. The website is out of date and is currently not functional.

I also looked at sports booking apps to gain insights into a user's journey into booking an app.

Choosing between a Website, Web App or Native App

	Website	Mobile App
Pros	Boasts wide accessibility, cost-effectiveness, and search engine visibility.	Offers push notifications, native features, offline access, engagement opportunities, and strong branding.
Cons	Exhibits limitations in interactivity, lack of push notifications, and challenges with responsive design.	Involves higher development costs, update requirements, and platform dependencies.

A considerable thought was given to the type of platform being designed. The choice of an App over a website is clear but deliberate consideration was given to developing a Web App or a Native App.

When to Build a Web App:

- Want to reach a broader audience
- Audience primarily uses desktops.
- Plan frequent updates.
- Prioritize speed of development.
- Need a quick launch after product readiness.

Cons: A few limitations in accessing device features, offline usage, and engagement challenges.

When to Build a Mobile App:

- Users access the app frequently.
- Want to send push notifications?
- Require access to specific phone features.
- Need high performance.
- Users will often use the app offline or for navigation/location-based elements.

Cons: Involves higher development costs, update requirements, and platform dependencies.

The difference between a Web App vs a Native App is not quite large. Our users primarily use mobiles over desktops and the Institute Sports Council predominantly wants to develop an App. The design remains to be friendly to both platforms.

Building a Design System

As the project is handed over to the Institute Sports Council, the design of any future features should maintain consistency. As Design systems play a crucial role in ensuring consistency and scalability, existing design systems like Carbon, Material, Orbit and the Atlassian design systems were explored.

The Orbit Design system by Kiwi was considered the best for this project for its simplicity based on the following comparison between the design systems:

- **Orbit** is best suited for travel industry applications, offering high customisation but may be too specialised for other domains.
- **Carbon** excels in enterprise settings with strong accessibility and integration features, but its complexity may be overkill for simpler projects.
- **Material Design** provides a widely adopted and versatile framework suitable for various applications, though it can sometimes result in generic-looking designs.
- **Atlassian** is tailored for productivity and collaboration tools, making it ideal for users within Atlassian's ecosystem but less flexible for other industries.

Defining the Project

Project Brief

To design a college sports app that provides students with all the information and features they need to stay connected to their sports community. The app should serve as a central hub for updates, personalised feeds, event registration, complaint management, court bookings, player profiles, and more.

Project Goals

1. Centralise information for seamless access by new students.
2. Create a personalised feed based on the user's interests and preferences
3. Player profiles featuring participation, certificates and awards.
4. Facilitate complaint management and resolution for sports-related issues
5. Build an Alumni network
6. Allow users to book sports courts and facilities easily

User Profile

User 1: An IIT Bombay Student

Hema Sawant

Age: 23 years old

Background:

Hema Sawant is a second year Master's student from IIT Bombay. In the first year, she was part of the Aquatics team as she was the fastest swimmer and is now the captain of the girls team. Even if she is part of the swimming team, she is essentially a basketball player.

Frustrations:

- Being the swimming captain takes up most of her extra curricular time and leaves her with little time to play other sports. Failing to play different sports often, she wants to at least participate in the GCs.
- Swimming being an individual sport, she has not connected with many athletes struggles to find people to play with.
- On the days she manages to go play badminton, she is often left waiting for a court to empty up.

Motivation:

- Hema wants to make most of the facilities on campus in her final year.
- Keep herself fit while having fun playing different sports.
- To build her on land stamina up.

Needs/Wants:

- Hema want to be apprised of the events being conducted of the sports that she can play.
- She needs a way to meet people she can play basketball with.
- She wants to know if the courts are available to play at the moment she is free.

User 2: Admin

Atharva Nemade

Age: 19 years old

Background:

Atharva is part of the Institute sports council as the Aquatics secretary. He is not only the secretary but also part of the Water Polo team. He is a third year student and has started to prepare for the upcoming internship season.

Frustrations:

- As the aquatics inter IIT is scheduled around the same time as the swimming GC, Quiz 1 as well as resume verification, Atharva has to juggle between tasks making sure he doesn't miss out on anything.
- As the student's submit their resume for verification, they each attempt to contact Atharva on different platforms to make sure he verifies the point, especially closer to the deadline.

Needs/Wants:

- He needs a better form of managing the events under his control.
- He needs to utilise any free time that he gets to complete task even if he does not have his laptop on hand,
- He wishes to have verify students participation in his events well ahead of the time of the resume verification deadline.

Feature Ideation

From the information gathered, the following key features were considered as a starting point for the primary user:

1. Event Management:
 - a. Digitalise registration
 - b. Practice slot booking
 - c. Schedule
 - d. Rulebook
2. Court Booking: Pre-booking courts for events as well as current court availability information
3. Playing companions: Finding other players (of the same level of play) to play with at a common time of availability
4. Alumni Network: Creating podcasts of inspirational stories as well as articles.
5. Player Recognition: Player profiles with unique performances/awards/competition standings.
6. Gamification as an incentive for participation: Tracking workouts by checking in at venues, maintaining streaks, awards/badges
7. Inventory management: Availability of equipment on rent at the courts

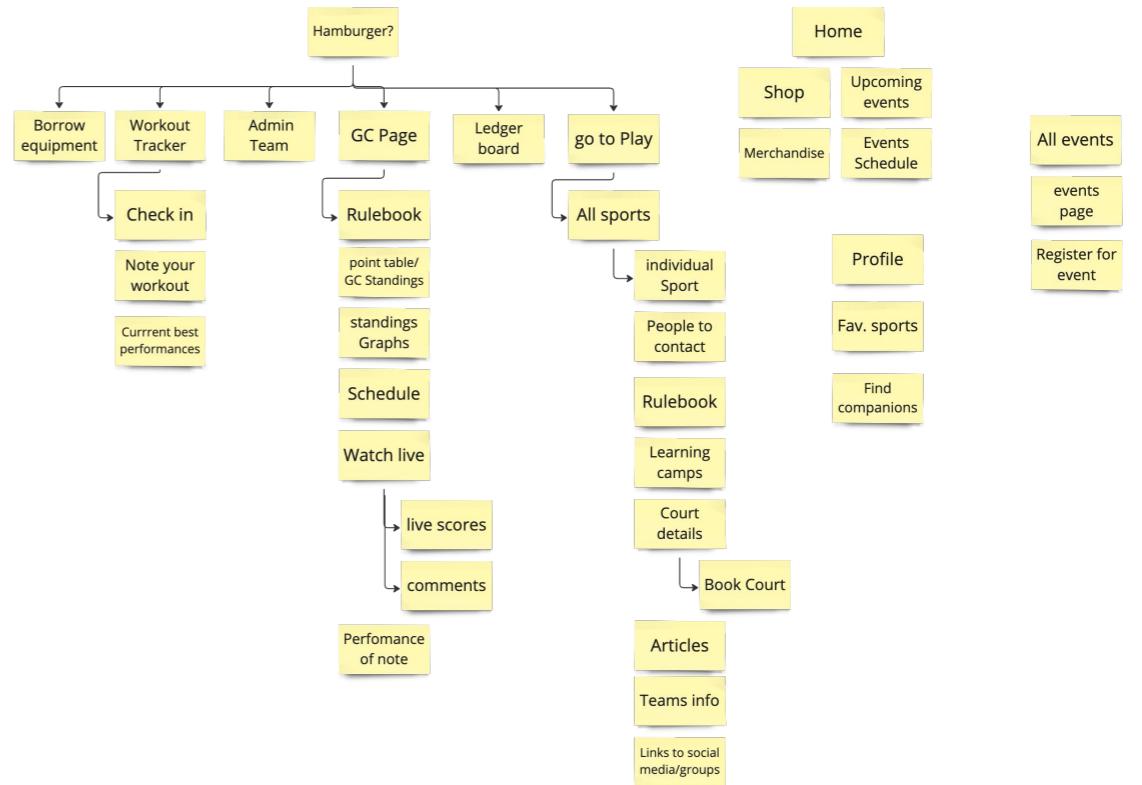


Figure 1: Card Sorting with member 1

Iteration 1

Iteration 1: Card sorting

After listing down all key screens, I attempted a card sorting exercise with the tech team members to gain their insights into the site map. The exercise was done by two members following a group discussion to help come up with the first iteration of the site map.

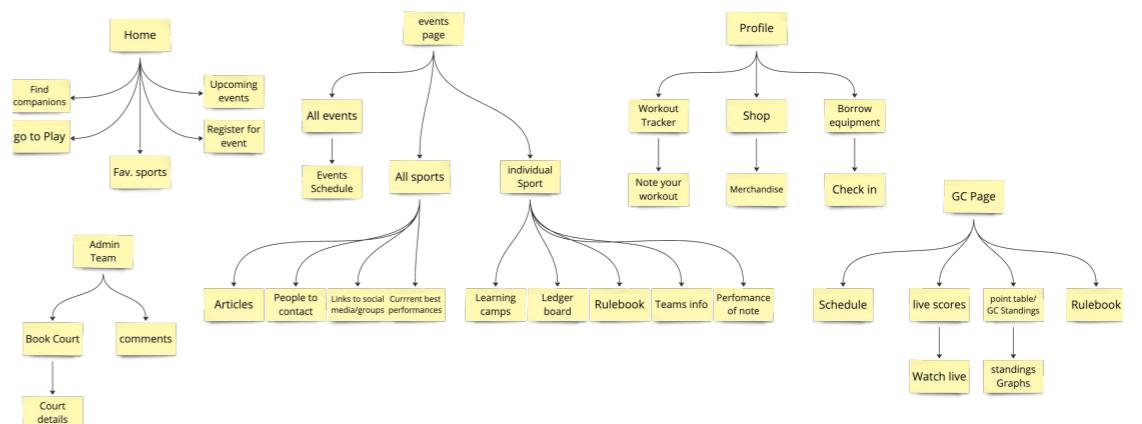


Figure 2: Card Sorting with member 2

Iteration 1: Site map

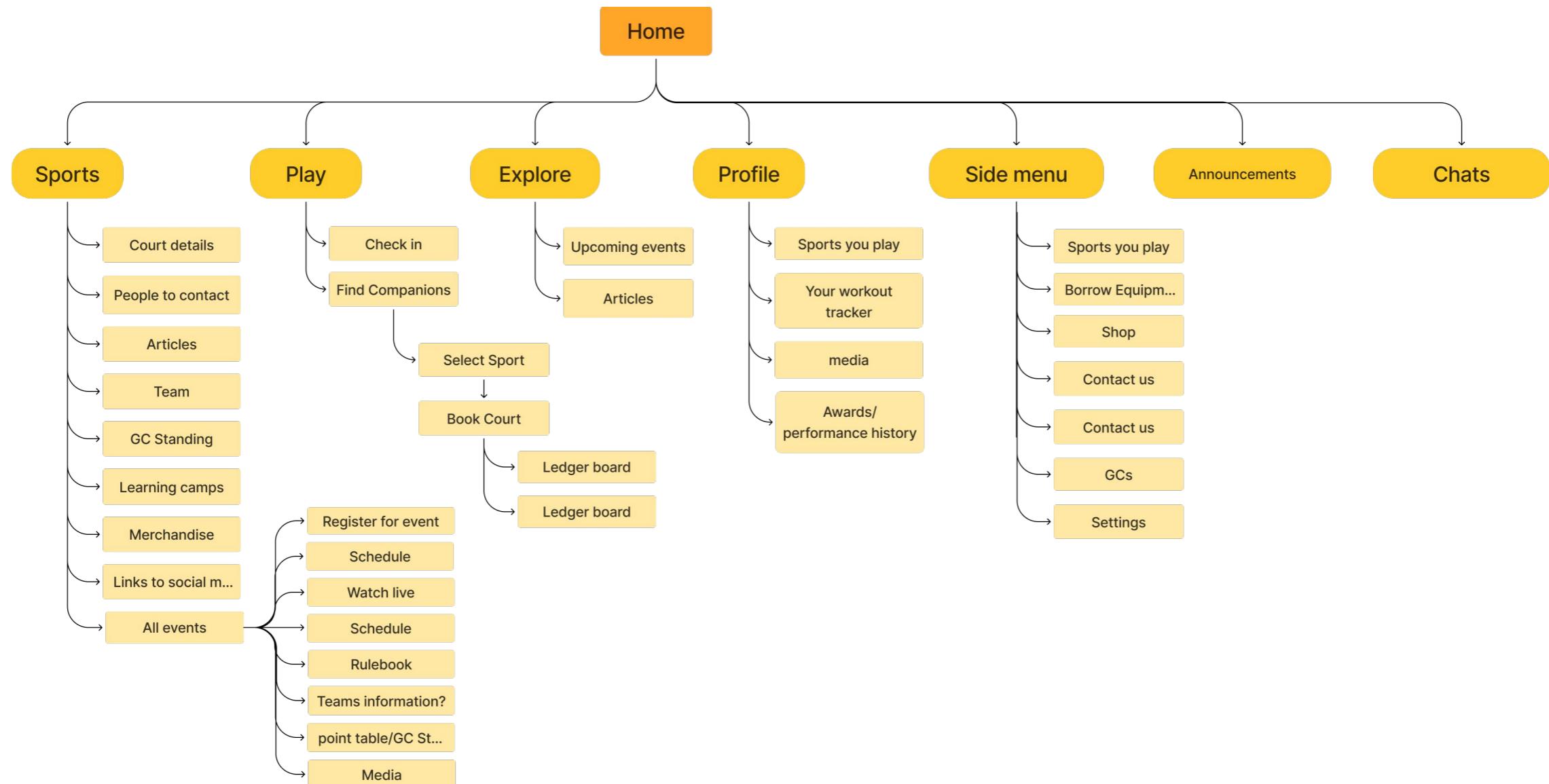


Figure 3: Site map created for Iteration 1

Feature 1 (Playing companions): Iteration 1

From insights gathered from the primary research, Playing companions was the prioritised new feature

Feature 1: User flow

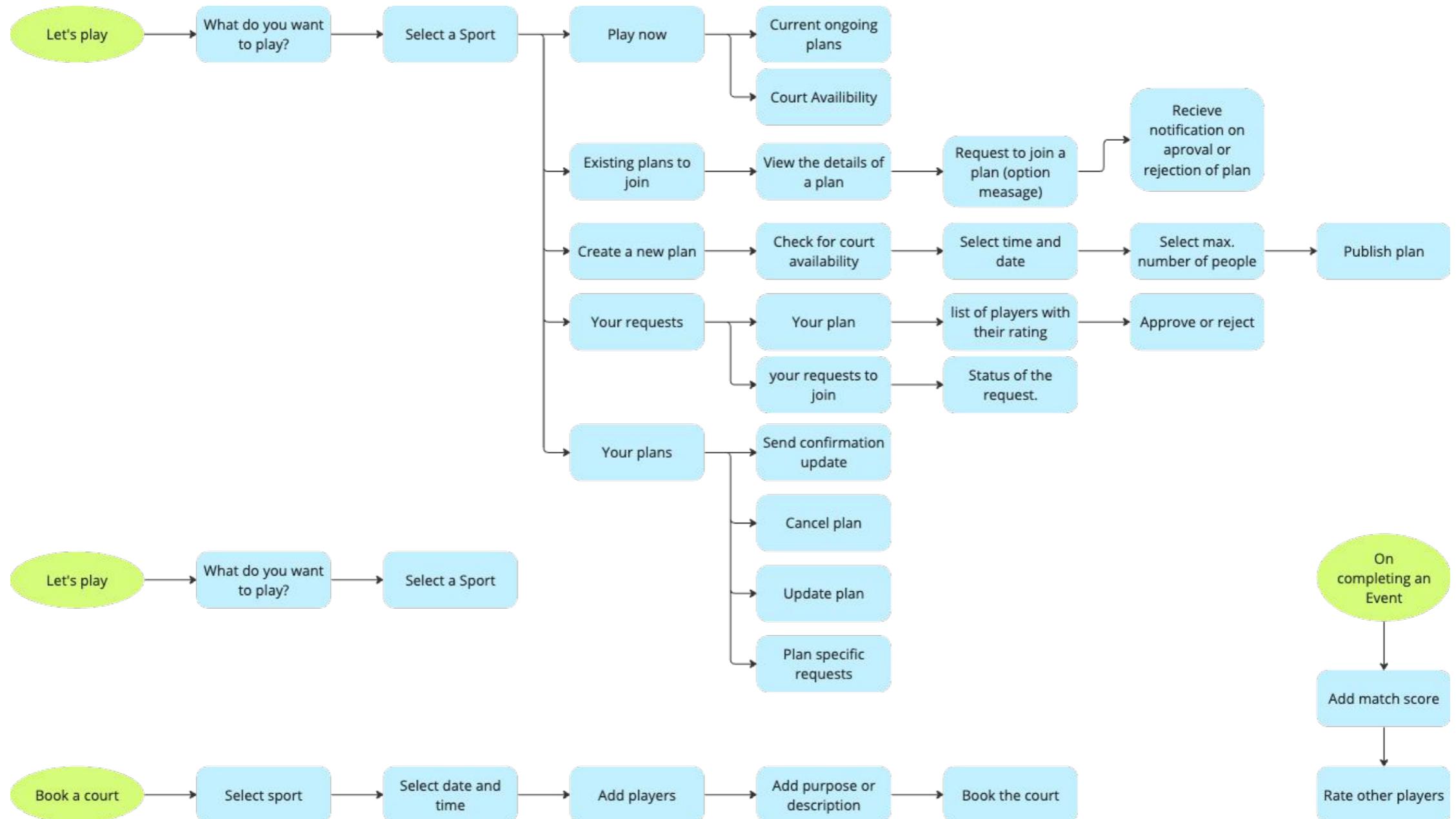


Figure 4: User flow for the playing companion feature

Iteration 1: Medium Fidelity Screens for Feature 1

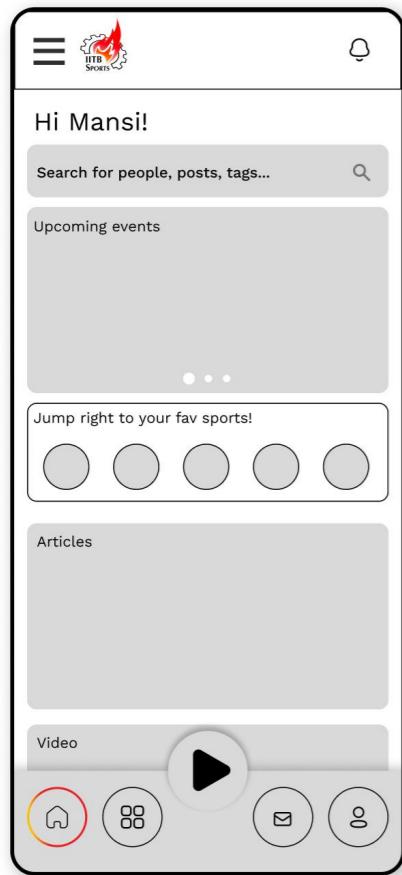


Figure 5: Homepage.



Figure 6: Play button activated giving users option to check in at the court or go play.

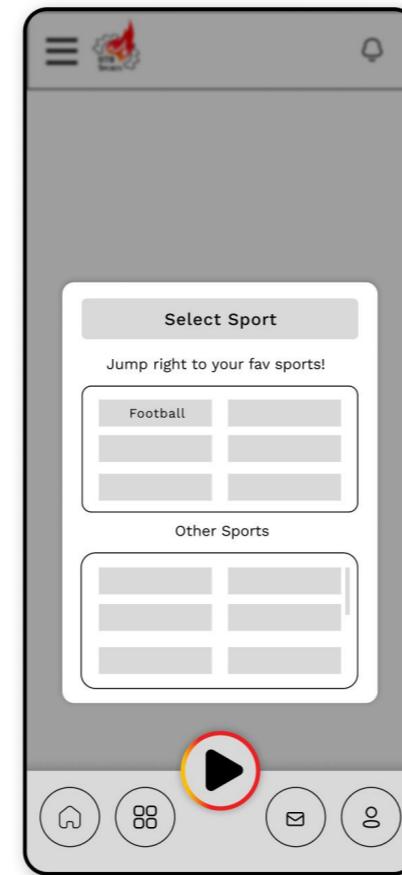


Figure 7: User chooses to go player and is let to select the sport.

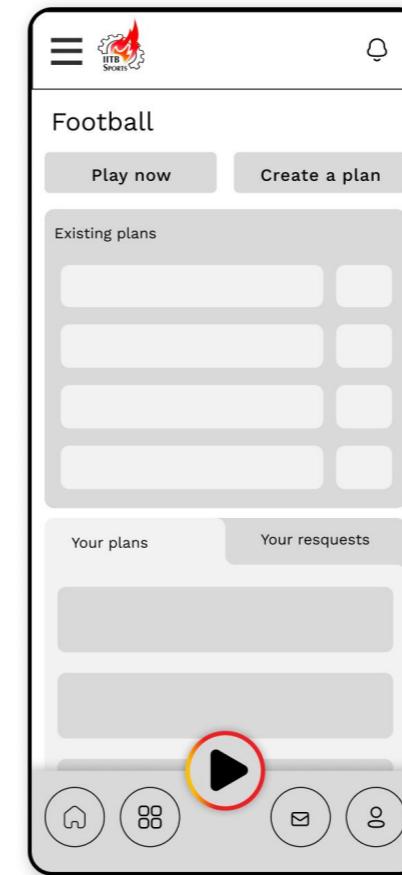


Figure 8: A action centre for playing football with options to join upcoming plans, start plans or to go play now

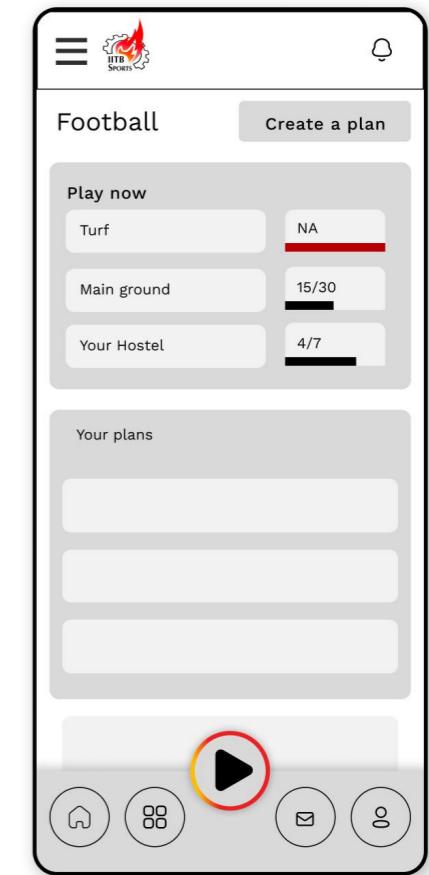


Figure 9: Iteration 1: As the user chooses to play now, they can see the availability of the court at present.

Iteration 1: Other Medium Fidelity Screens

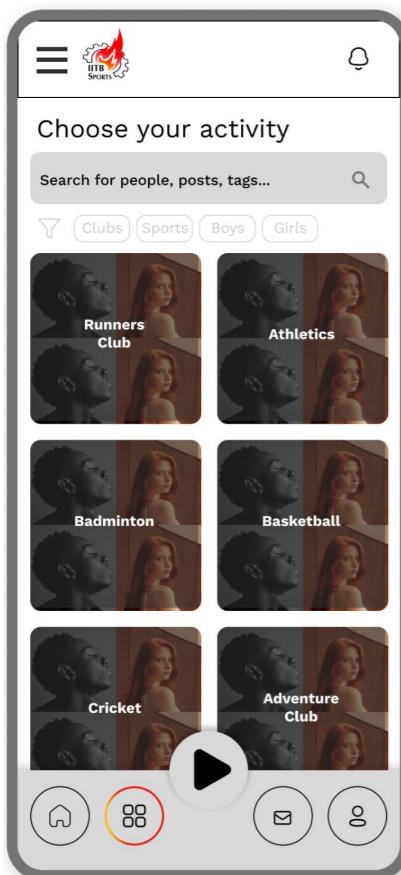


Figure 10: Explore page with an overview of all activities

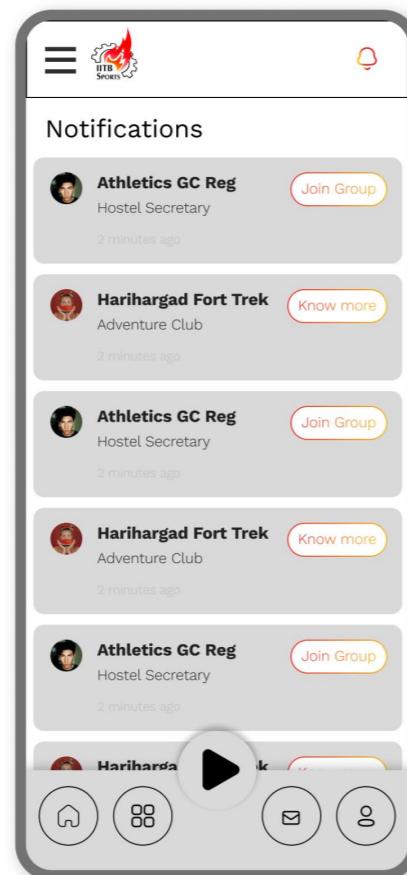


Figure 11: Notification page with announcements and their call to action

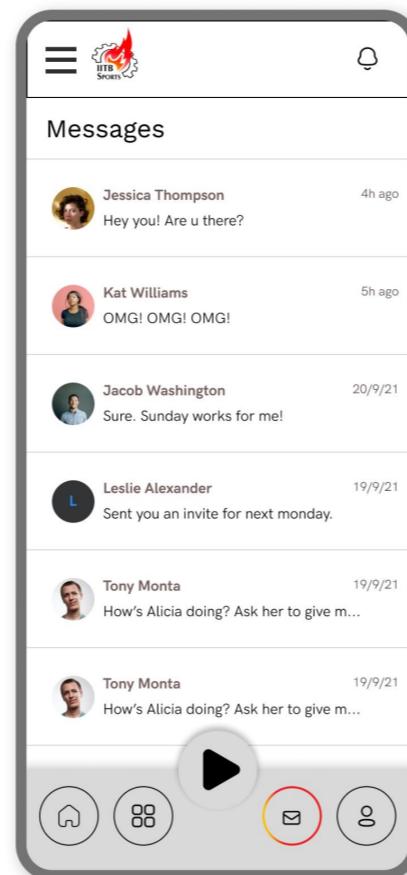


Figure 12: A message centre with messages from amongst players

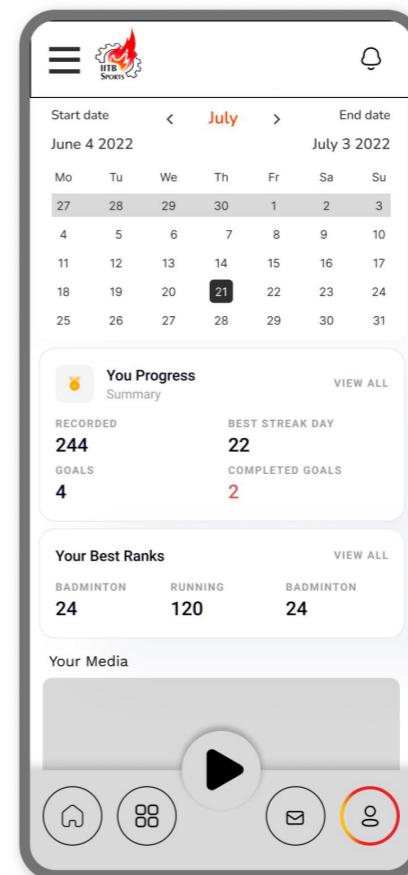


Figure 13: Personal Dashboard with your activity tracking.

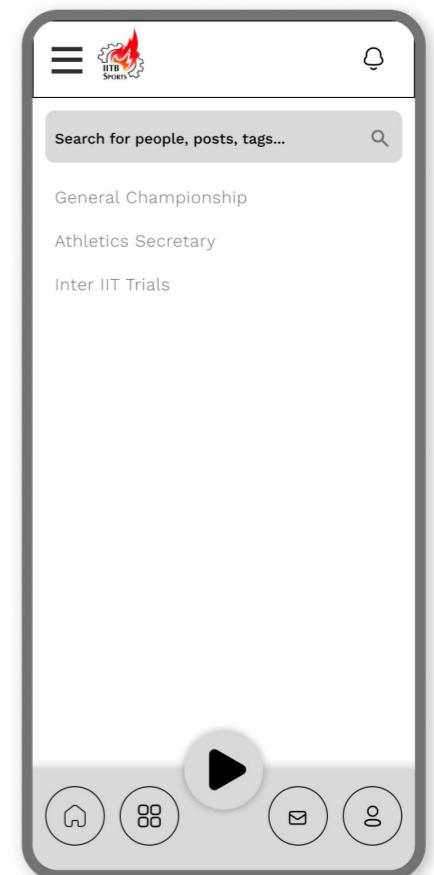


Figure 14: Search page that opens from explore page (fig. 10)

Feature 1: User testing

With a general explanation of all the Application features and the User flow diagram, preliminary user testing was conducted in the form of two interviews. While designing the feature, an ideal situation was considered. However, participants had several concerns as follows -

1. An individual's first step when they want to play is always to first ask their friends. Provided people connect over the app, they are less and less likely to connect over the App reducing the player network
2. While individuals want to find people to play with, they are not comfortable with meeting new people over the application
3. Participants training for Inter IIT are required to be ranked for their development as well as for team selection. However, the idea of rating another player or receiving a rating is not a comfortable notion.
4. As campus life rarely follows a schedule, the cognitive load required to control and manage plans constantly is high.

A participant suggested a live directory of people on the court. Players tend to group up if playing individually and eventually are familiar with each other. Knowing familiar names are currently on the court would encourage them to go play.

Feature 1 (Playing companions): Iteration 2

With the above points in mind, a simpler user flow was considered. The flow was made keeping in mind the number of people involved in the sport as well as the type of courts.

Feature concept:

An player interested to play will mark his or her willingness to play today on the chat space. As the count reached the required number, the players interested will be notified. The thought behind this idea is to let players feel comfortable starting a plan discussion on the group.

Feature 1: User flow

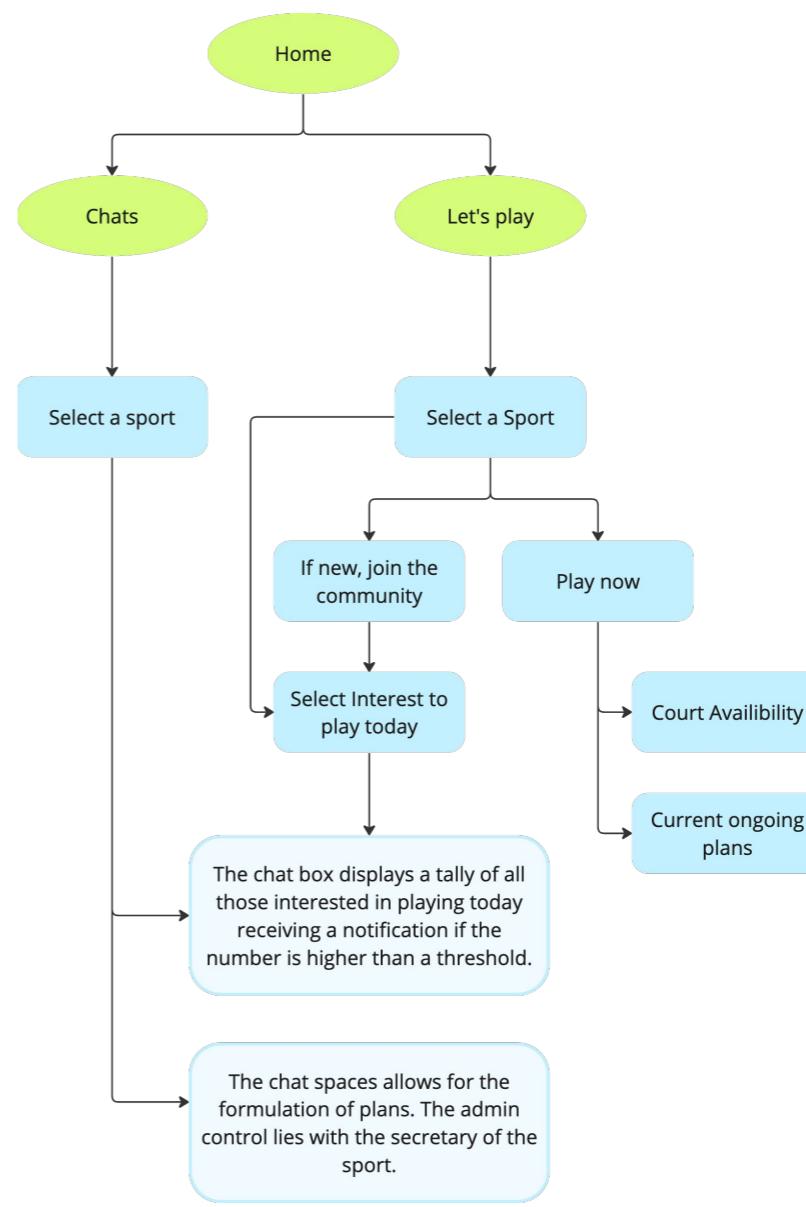
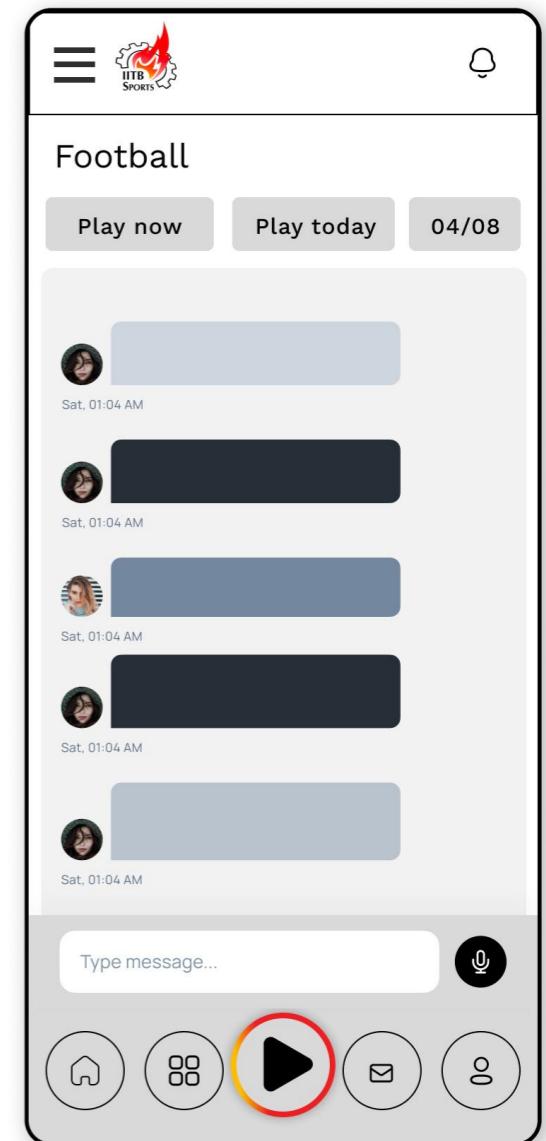
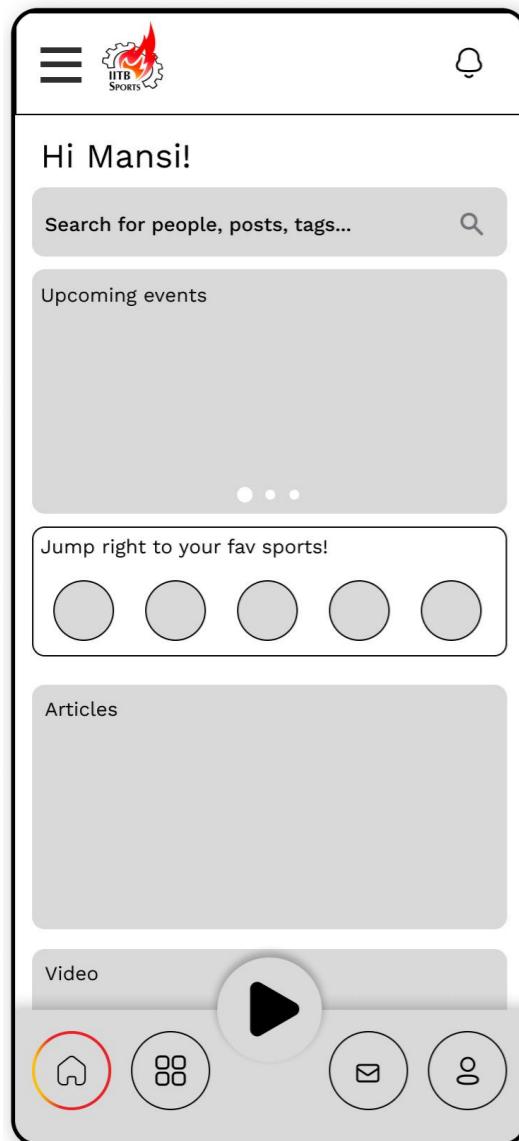


Figure 15: Second iteration of User flow for playing companion

Feature 1: Screens



Feature 1: Conclusion

The idea of comfort and reducing the hesitancy one might feel in starting a new plan were decided to be not sufficient reasons for replacing WhatsApp groups with Sports based chat spaces.

On the back of this feature also lies the core problem of court availability. More than half of the courts are outdoors and have no constant supervision. Even if a plan was made, one might find that the court is occupied.

With all the points considered, the idea was limited to providing easily accessible links to join the WhatsApp community groups for people to find other people to play with.

Feature 2: Live Court Availability

More than half the courts and play areas are not supervised. Player movement is hence difficult to track. The current indoor courts have supervision only at the main entrance of the gymkhana which means a single checkpoint for Basketball, Volleyball, Kho Kho as well as the indoor cricket nets. The deployment of the feature hence requires changes in the system beyond the scope of this project. It requires a system at the entrance of each court as well as the training of individuals supervising each court. This feature of live court availability was hence dismissed.

Iteration 2

With the addition of various features, the App's focus shifts away from its primary function. The project's direction was hence shifted away from adding more features to the app and focusing on a better user experience of the App itself.

Iteration 2: Project Goals

1. Centralise Information
2. Personalised Activity Updates
3. Player recognition
4. Build a better Alumni network
5. Equipment Inventory Management

Keeping these goals in mind, features were prioritised focusing on event updates, players profiles and a sports feed. In the second Iteration, we have also attempted to create the Design style of the Application.

Iteration 2: Site Map

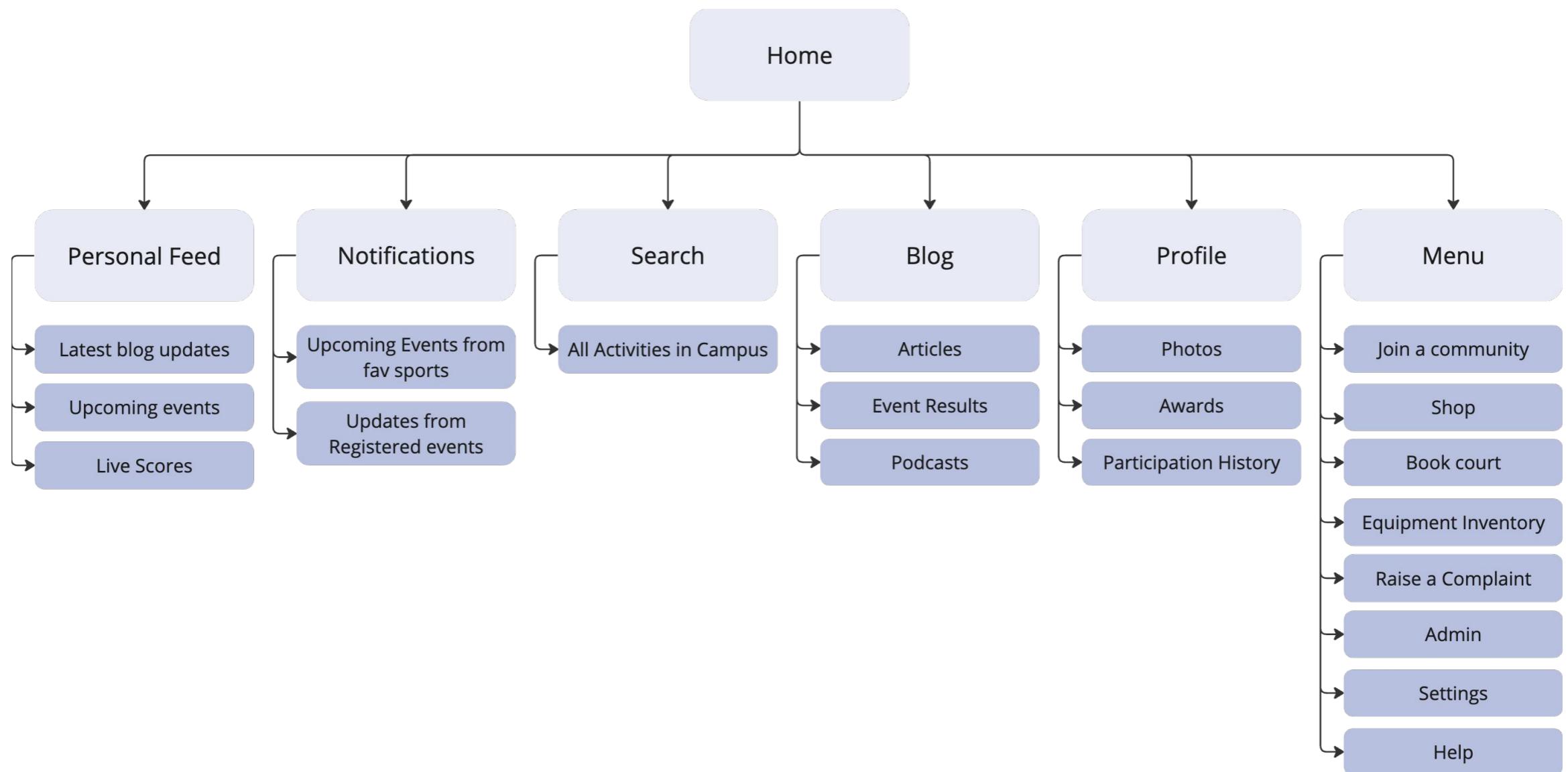


Figure 20: Site map for iteration 2

Iteration 2: Style guide

Using the 4pt system, the design used margins, paddings and font size in multiples of 4. Looking at different trends in UI as well as an attempt at exploration, a minimalist design was chosen using large padding and small margins for the cards.

Typography

Manrope

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm
Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz
1234567890!@#\$%^&*()

Colour system

The colour blue was selected as the primary colour after taking the following factors into consideration:

1. The IIT Bombay Logo Colour is Blue
2. The IIT Bombay Flag Colours are Blue and Maroon



Primary

#173497

rgb(23, 52, 151)



Red

#ff0101

rgb(255, 1, 1)



Green

#239d48

rgb(35, 157, 72)



blue-100

#fcc546

rgb(252, 197, 70)

Iteration 2: Ideation

Idea 1

To make sure the students receive the all updates, we categorised the updates as events and blog updates such as event results, interviews, articles etc.

Latest Updates



Figure 21: Blog updates on home page of Iteration 2

Upcoming Events

Most recent:



Based on your interest:

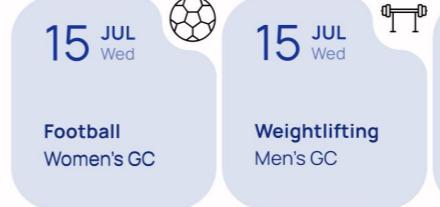


Figure 22: A carousel card with upcoming events part of the homepage

Idea 2

We create a section that allows users to see live scoring of events. The Live scoring feature is only for finals and other important events (for eg. Inter IIT) due to the limitation of personnel for maintaining this feature during event conduction.

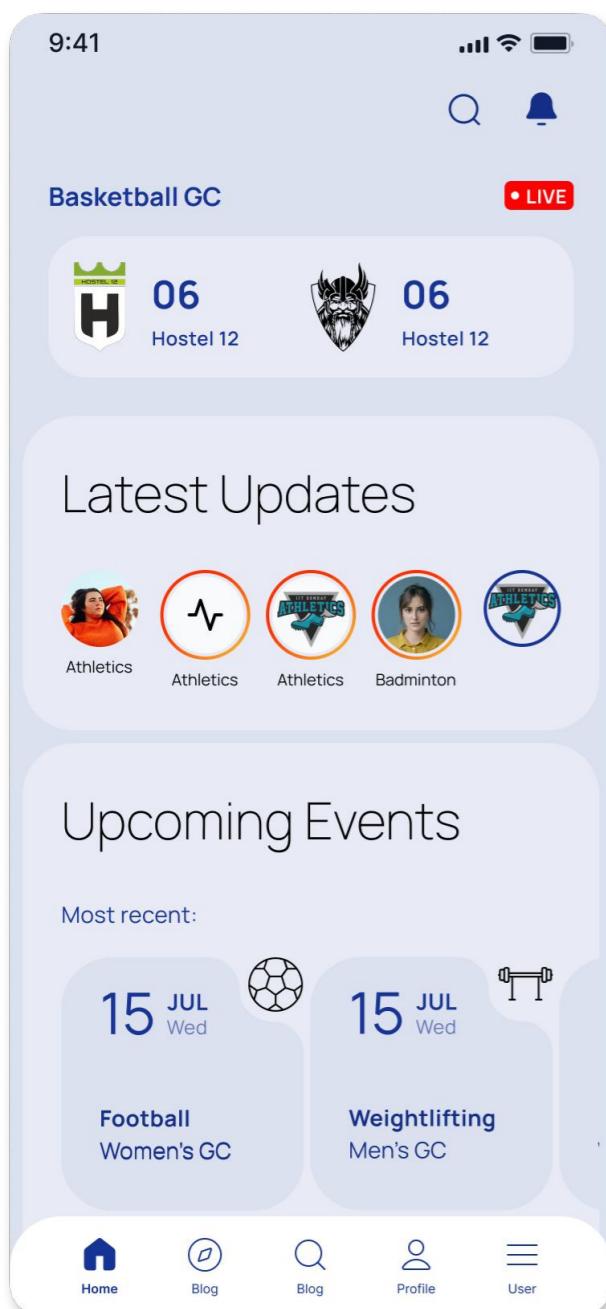


Figure 23: Home page for Iteration 2 with the Live section card active

Idea 3

The search page (as shown in fig. 23) was designed with the idea of providing an overview of all the different activities on campus.

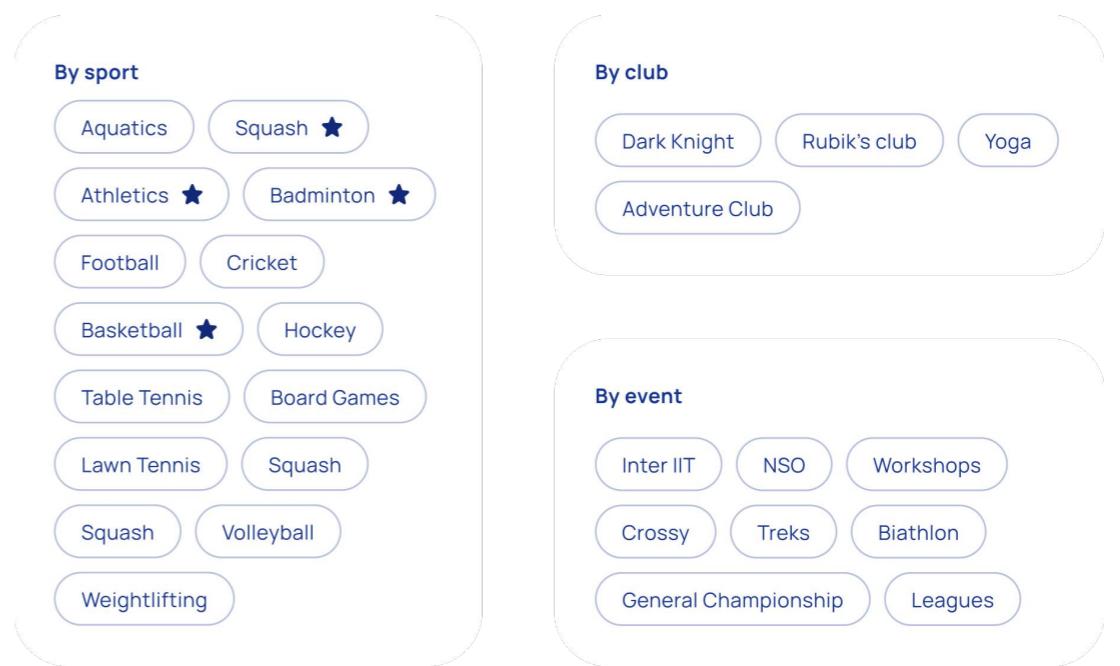


Figure 24: Cards that categories links for easy access on the search page

Iteration 2: Key Screens

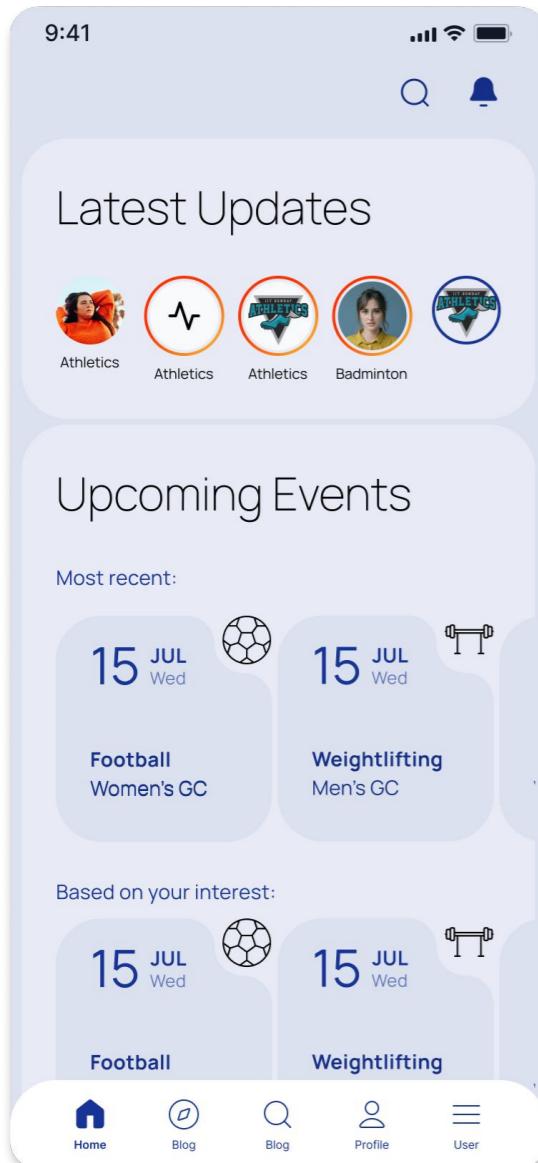


Figure 25: Home page for Iteration 1

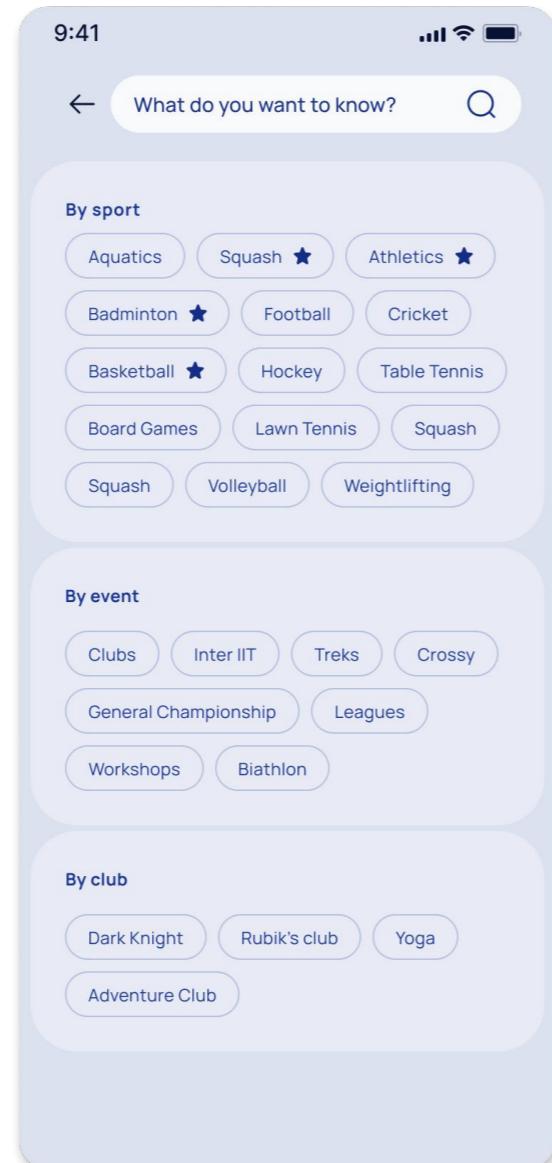


Figure 26: Search page for Iteration 1

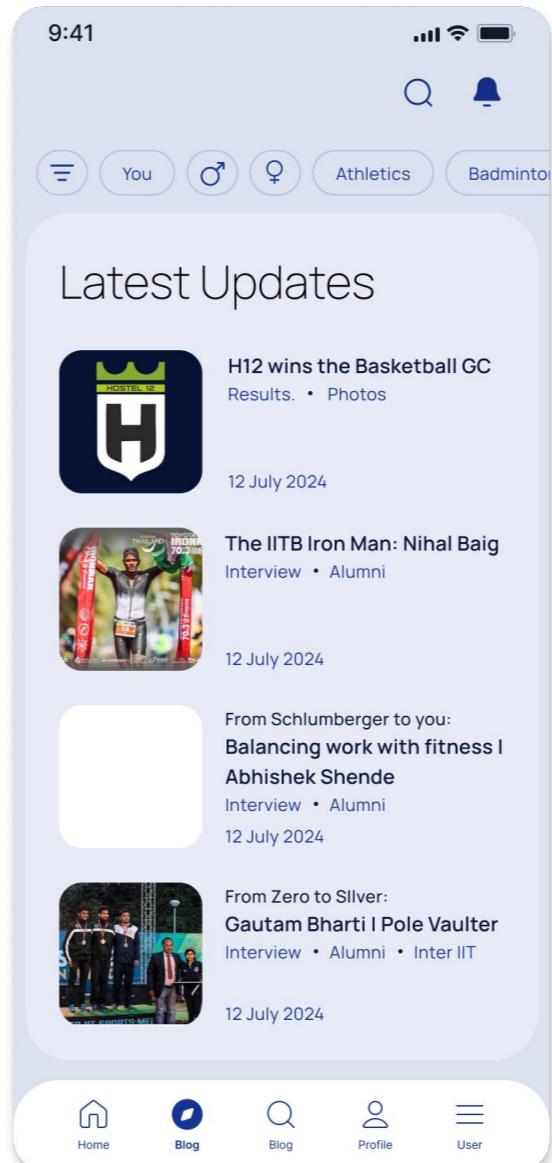


Figure 27: Blog page for Iteration 2



Figure 28: A blog page with a link to connect with the interviewed player

Iteration 2: Evaluation

A **Peer review** with 3 individuals suggested the following drawback in the selected design style for the UI:

1. The overall impression of the app is mellow failing to create a sense of dynamic energy as should be the impression from a Sports App.
2. The use of cards adds unnecessary clutter to the page which can be replaced with creating sections and hierarchy through spacing.
3. The difference between the blog contents and upcoming events is unclear, expressing a reduced interest in events other than the ones they play.

The profile page consists of the following:

1. Sports of Interests
2. A small bio for introduction
3. Photos from participated events
4. Upcoming events one has registered for
5. Participation history
6. Links to other forms of contact
7. Yearbook link for final year students

More actions page

This page was added to club together all other links which are important but not required daily. Actions like booking a court, account and notification settings, sports facilities map, etc.

Final Design - User 1

Concept details

Home page

A personalised feed section at the top, followed by a general overview of all events to keep users informed about other activities. (See fig. 28)

Notification page

To avoid unnecessary notifications, like the home page, we have a for you selection for users to receive notifications about the sports or activities they are interested in followed by all announcements.

Sports page

As new users wanting to find information might not know what to search for, the sports page allows them to navigate to the information required through their sport of interest (See fig. 29)

Search page

This screen is an additional form of navigating to the information required through tabs and categories of all activities other than the search engine. (See fig. 30)

Profile page

One of the key features of the app was player recognition which was achieved through maintaining one's profile page. (See fig. 28 & fig. 29)

Features

Resume verification:

As the player profile contains a participation history that is verified by the relevant council member, the link to the profile can act as proof for resume verification. This feature is added keeping in mind the overload of verification emails that the council is bombarded with during the resume verification process.

Book a court:

While limited to booking the football turn for now, this feature is limited to booking the football turf.

Raise the complaint:

As students face problems with equipment problems, this feature allows them to register the complaint without worrying whom to contact. The complaint is received by the person in charge and one can check on the status of their complaints through this.

Adding Achievements:

The events that a student participates in on campus will be updated automatically after the development of the app, however, one can add their achievements (for eg. a marathon or any old achievements) or add an image to their event.

Live scoring

For sports that the users plays, the home screen adjusts to create a live section. This feature is especially designed with Inter IIT in mind, where camp players not in team, Alumni and friends/family of players may follow the scores.

Site map

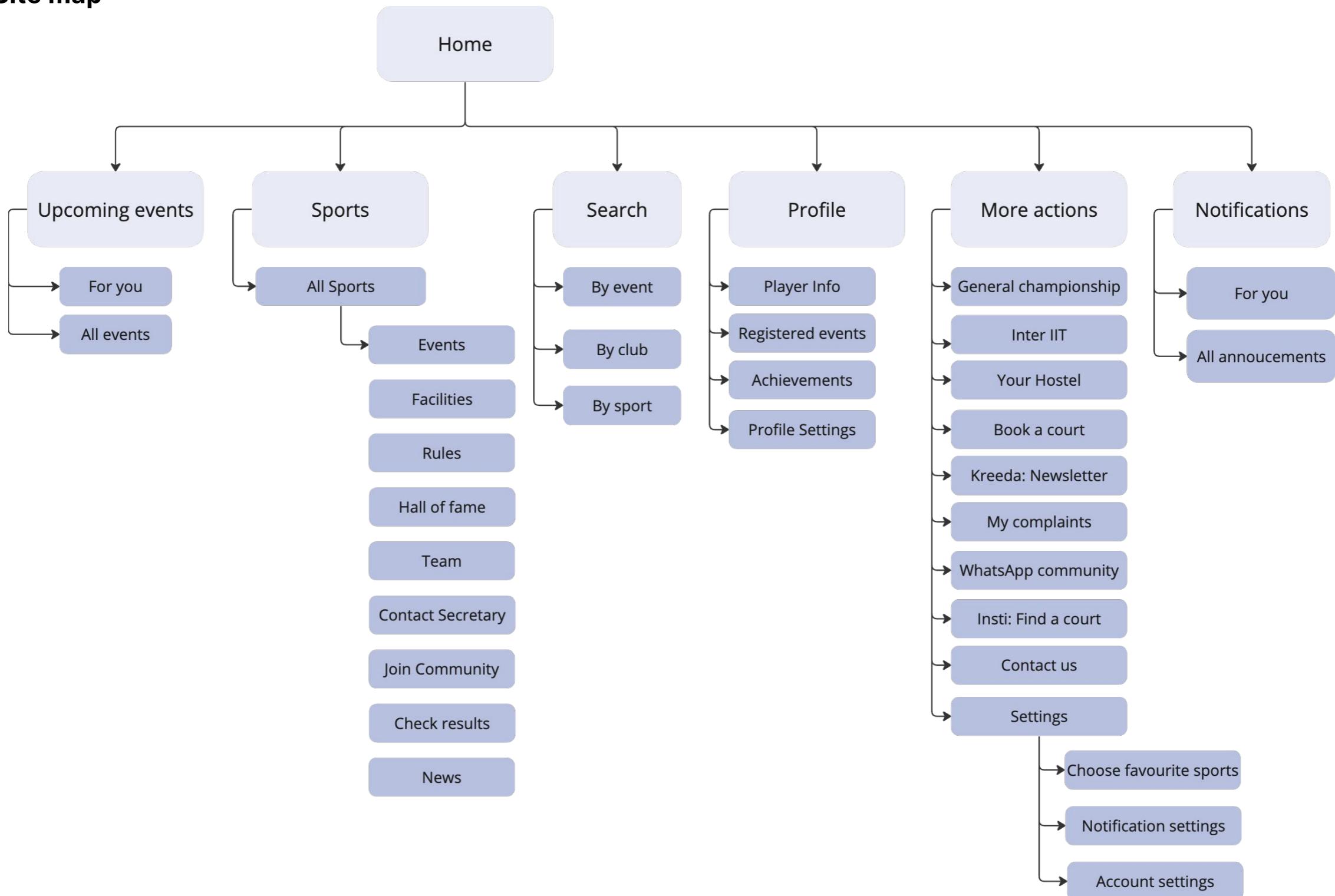
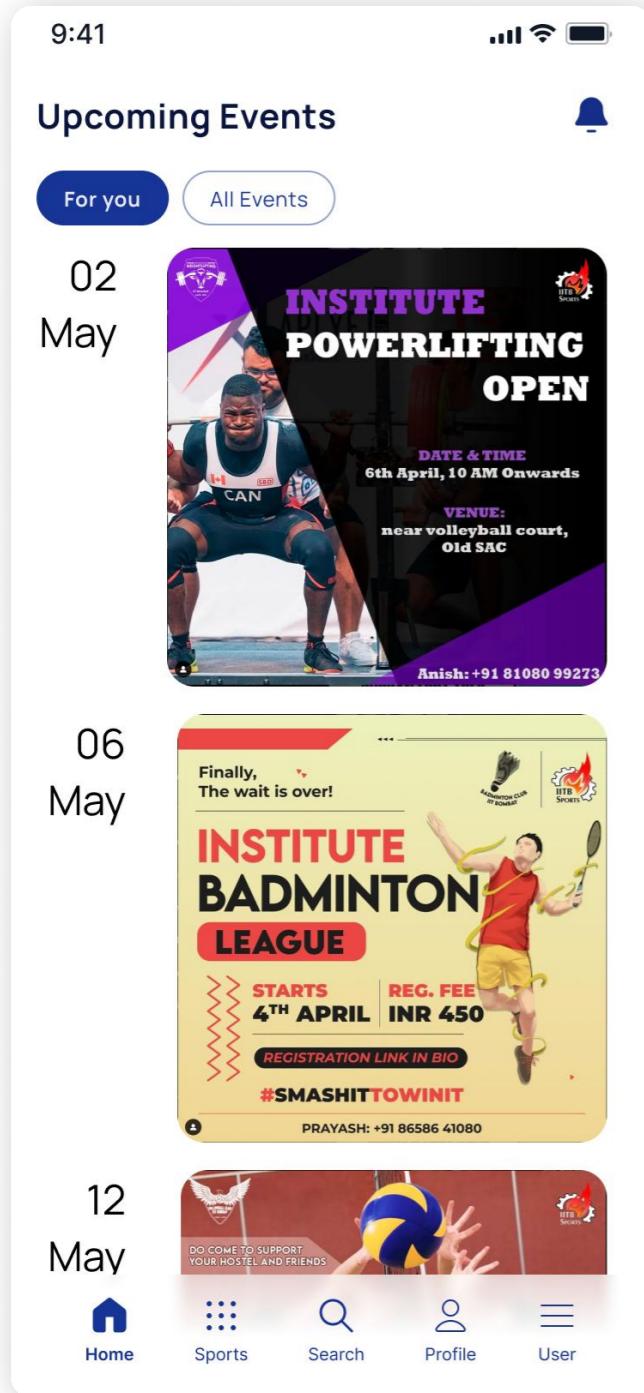


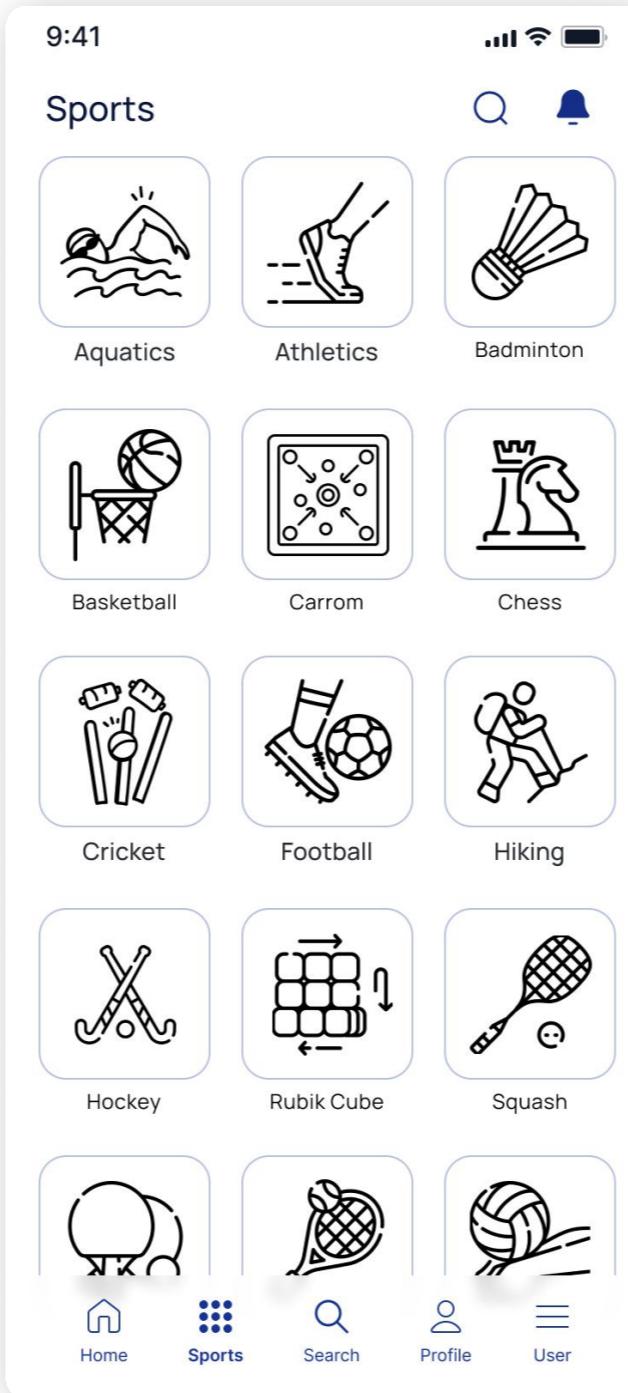
Figure 29: Site map of the final App for User !

Key pages

Home page



Sports Page



Search page

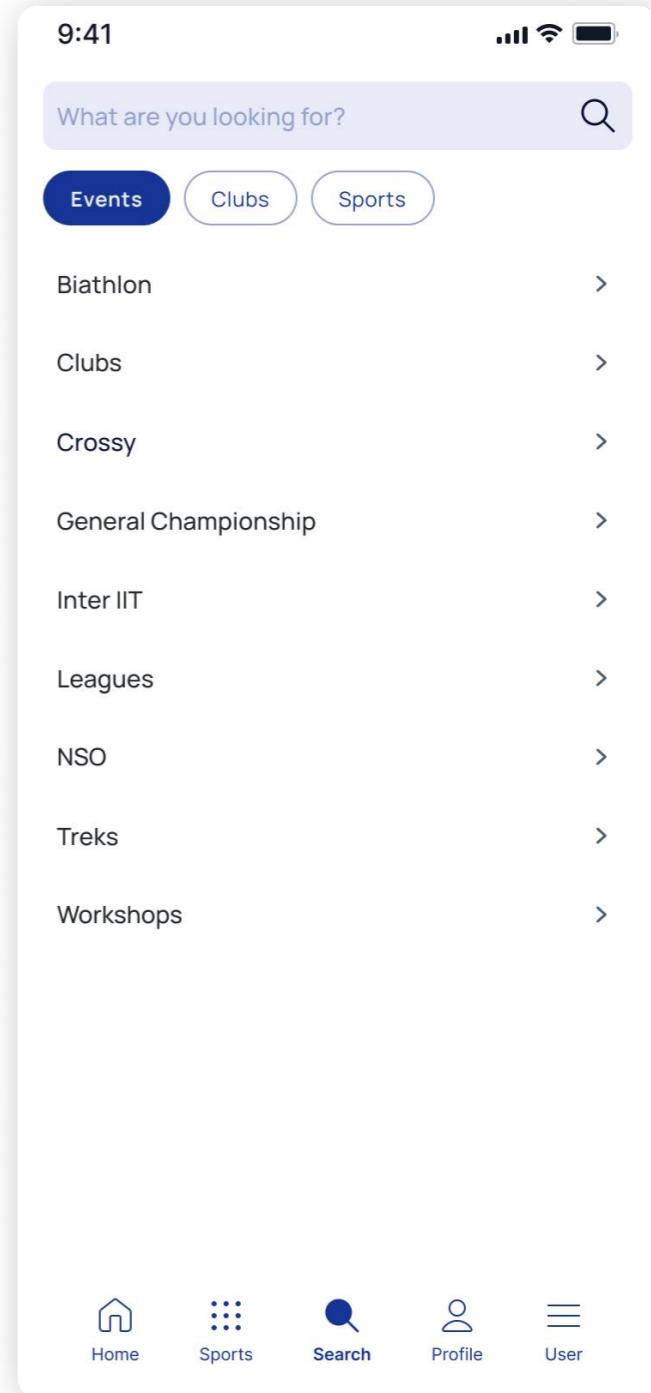


Figure 30: Home page containing upcoming events

Figure 31: Sport page for easy navigation to all information related to a particular sport.

Figure 32: Search page with links to all relevant sections of the app as prompts.

Key pages

Profile page

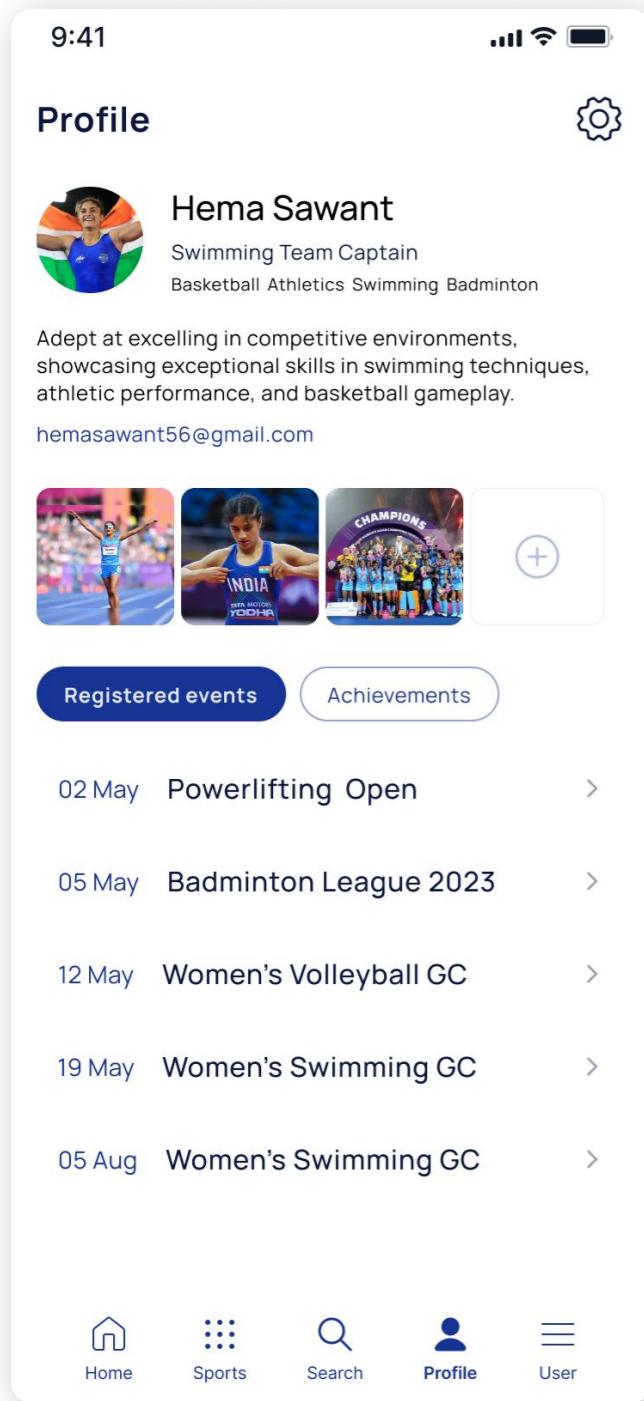


Figure 33: Profile page as seen by the user with the events that the user has registered for

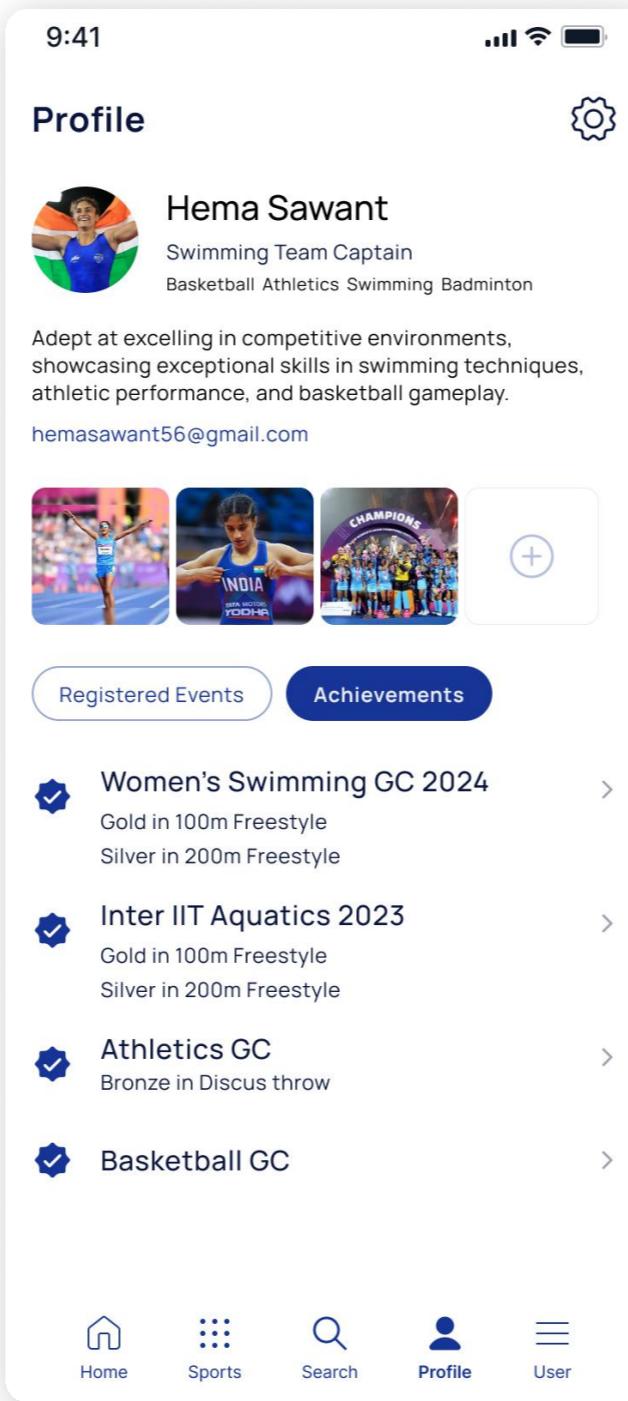


Figure 34: Profile page as seen by the user with the user's achievements

More actions

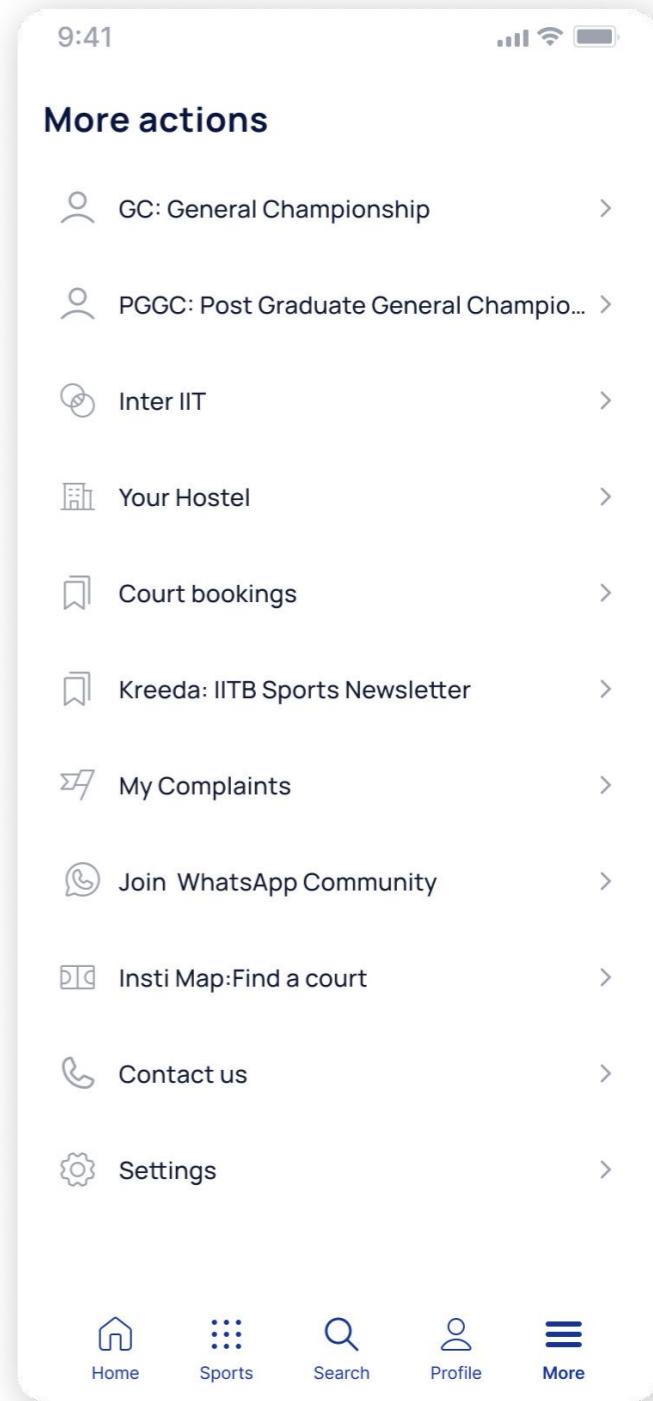


Figure 35: More actions page with links to different actions

Key pages

Personalised notifications

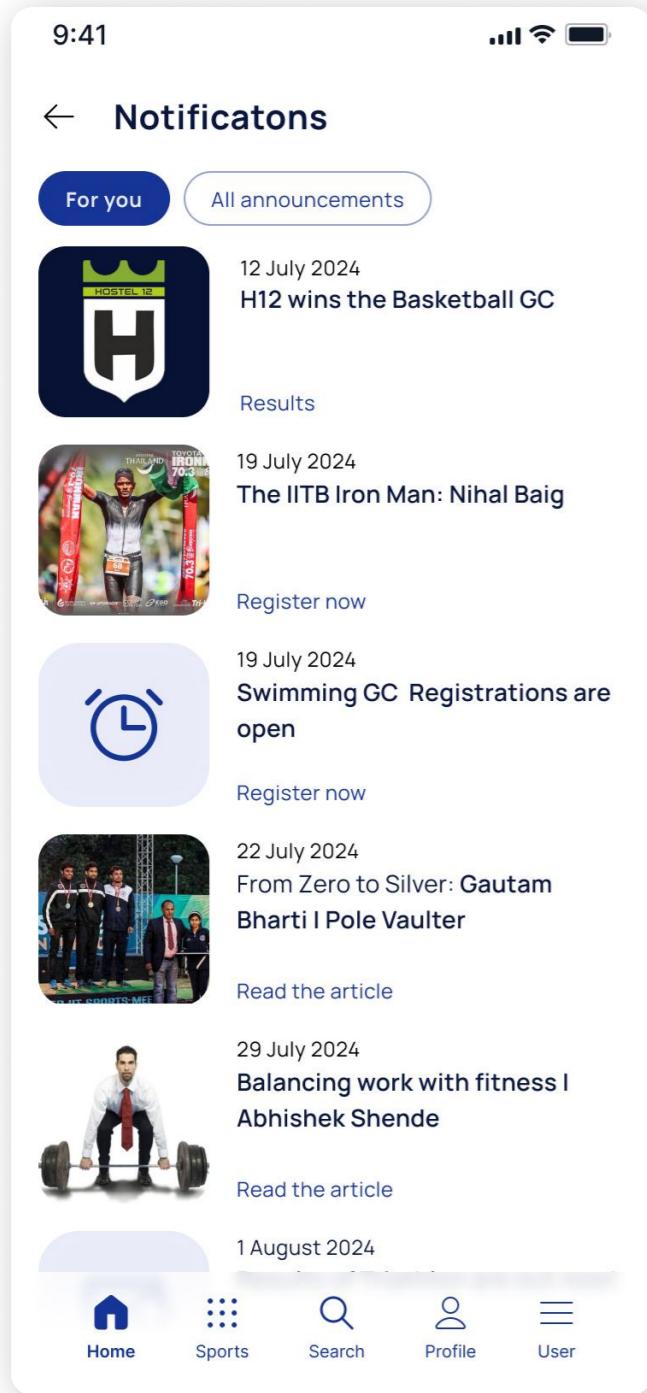


Figure 36: Notification page with user's personal alerts.

General notifications

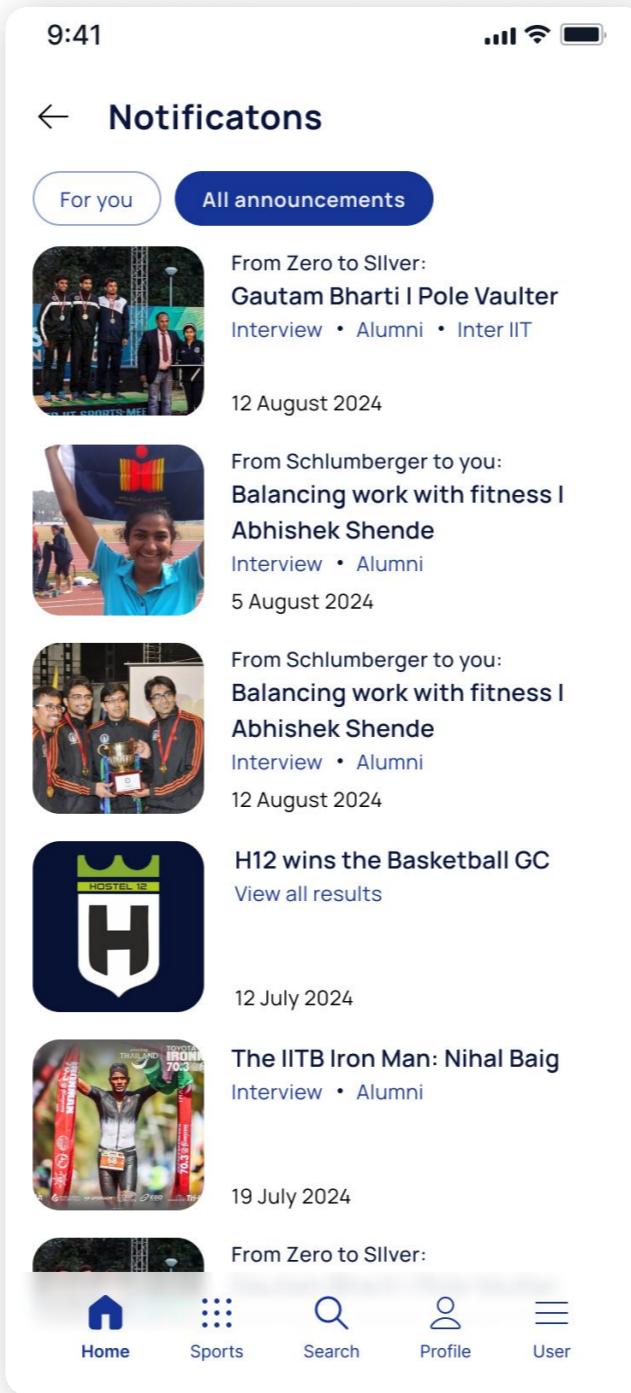


Figure 37: Notifications page with all announcements

User flows

Flow 1: Onboarding



Figure 38: Splash Screen with the IIT Bombay Sports logo and caption

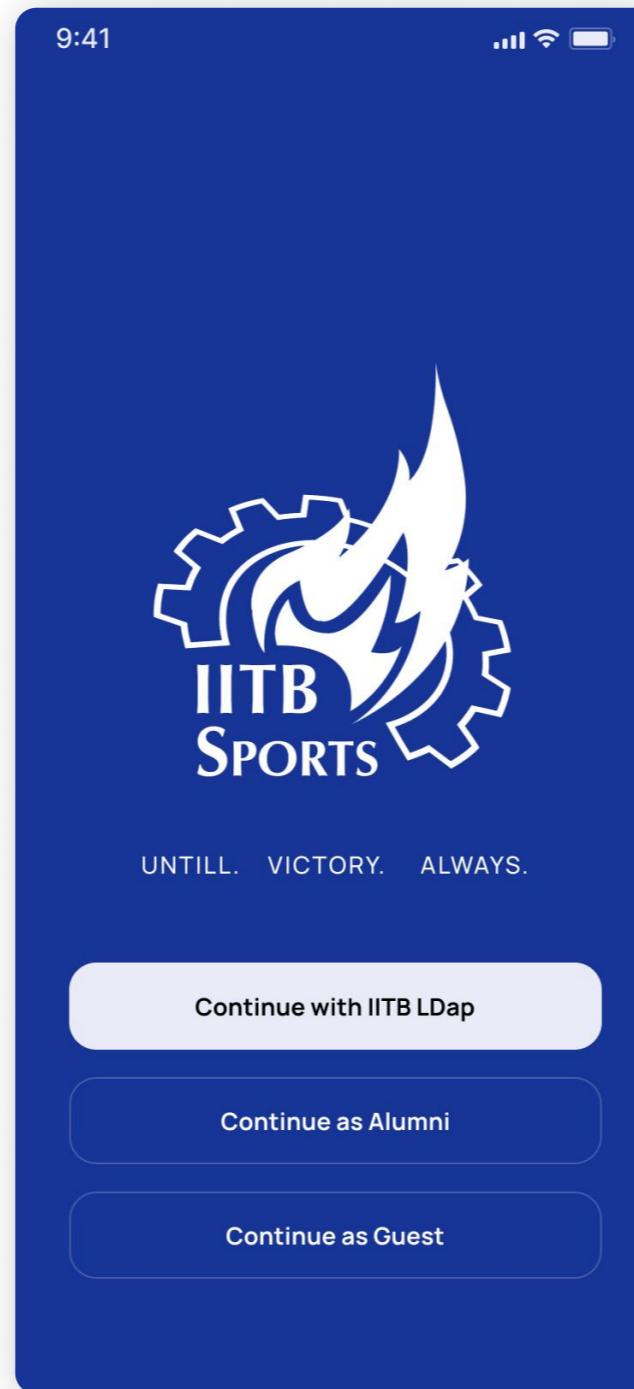


Figure 39: Log in options for potential different users

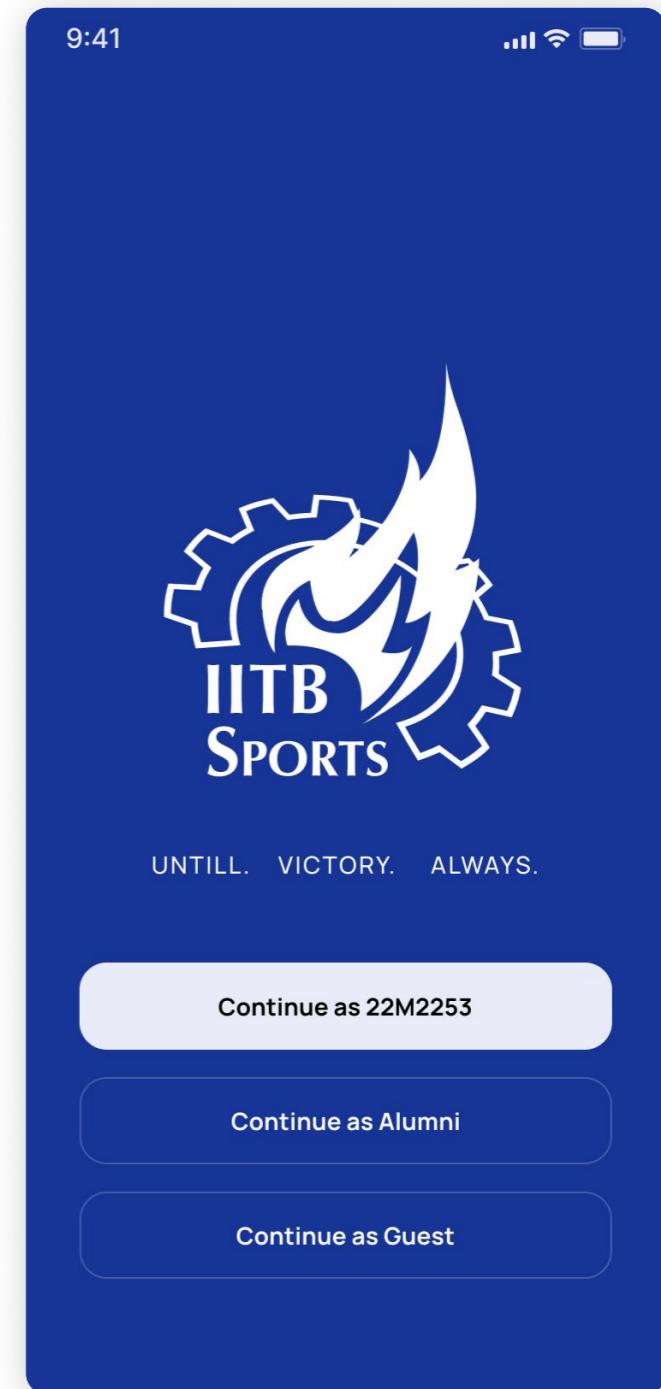


Figure 40: Log in page for a returning user (as SSO remembers the user's device)

Flow 1: Onboarding continued

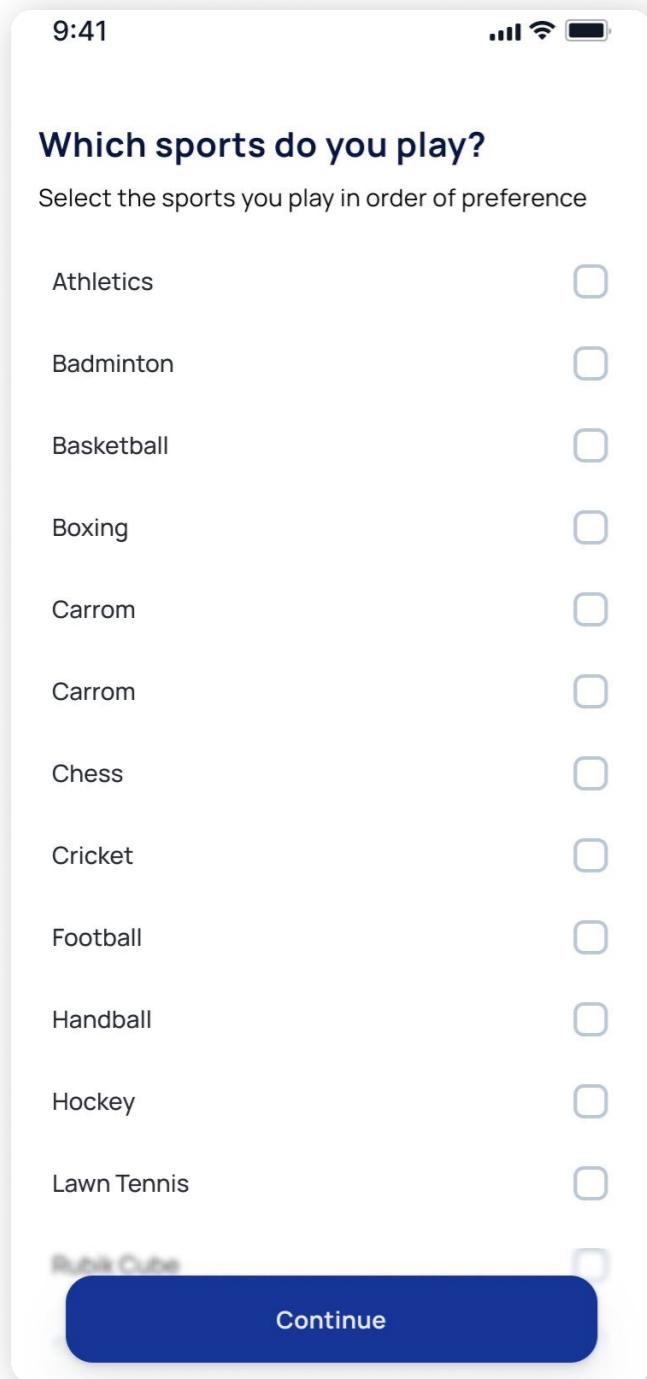


Figure 41: The user selects the sports they play to build up their player profile and receive alerts relevant for event participation

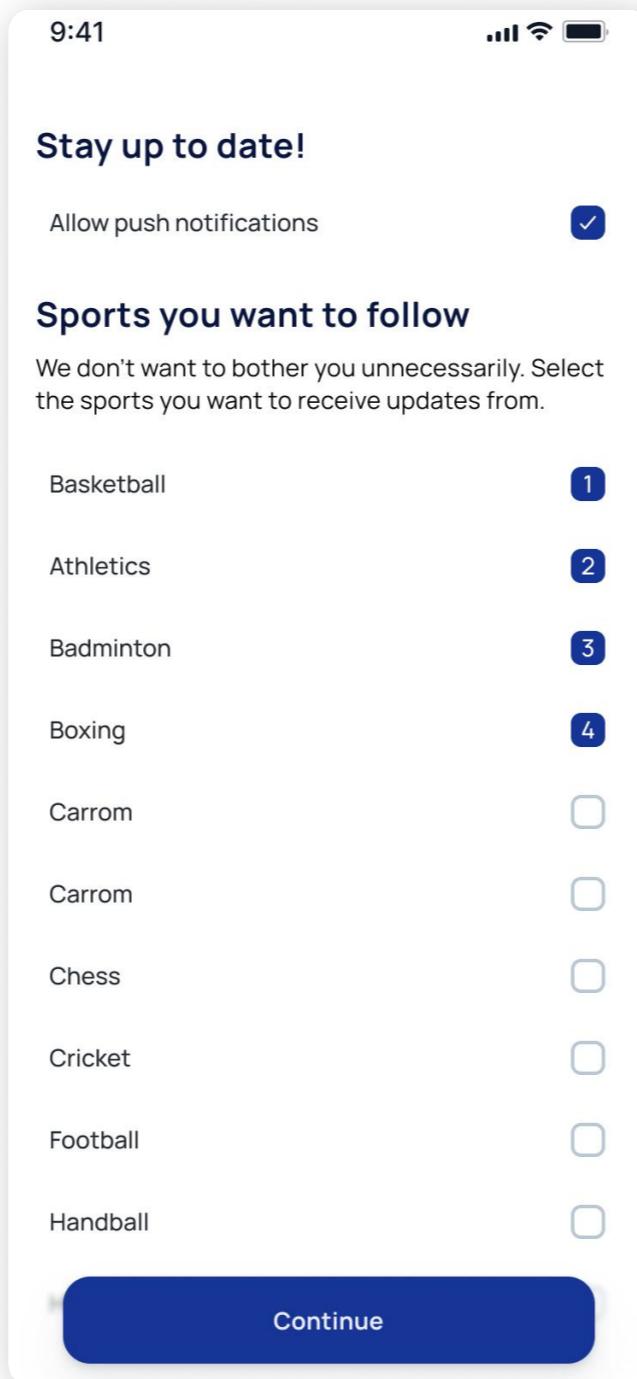


Figure 42: As players follow sports other than the ones they can play, here the user can choose other sports to follow and receive alerts relevant to spectating a sport

Flow 2: Setting up one's profile

As the users are logging in through their LDAP ID, we already have their names and any position that they may hold.

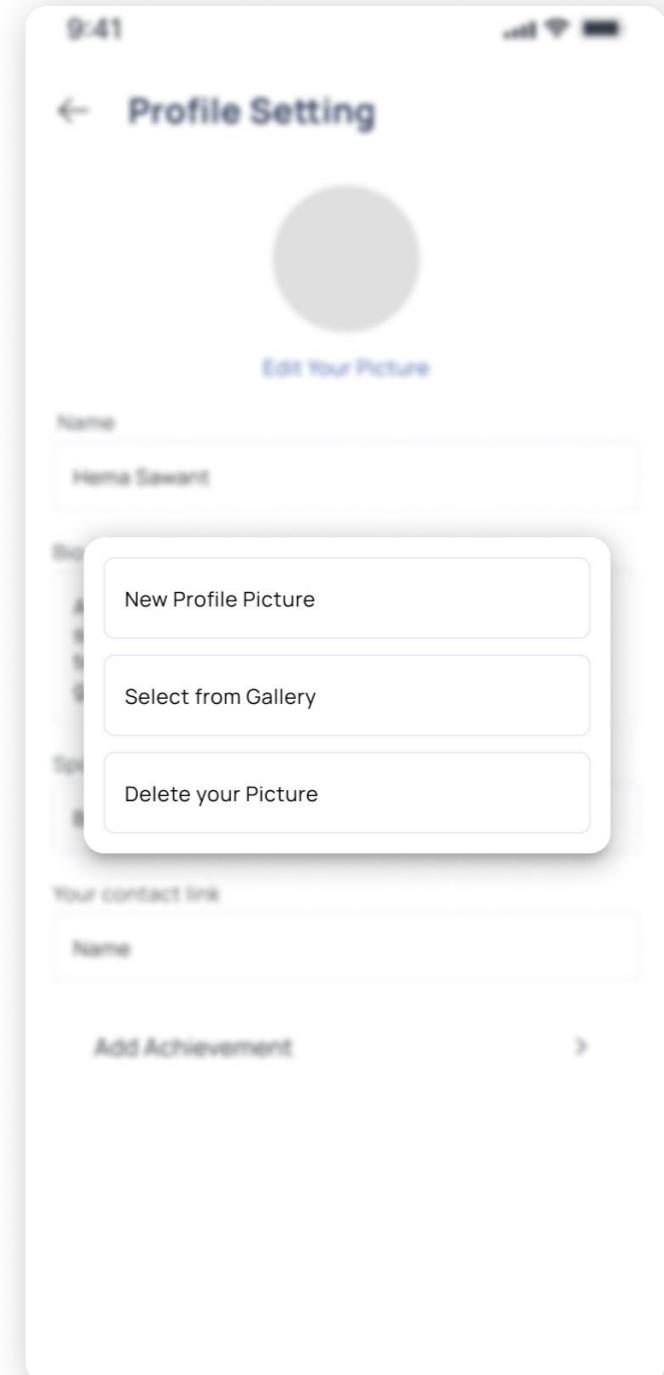
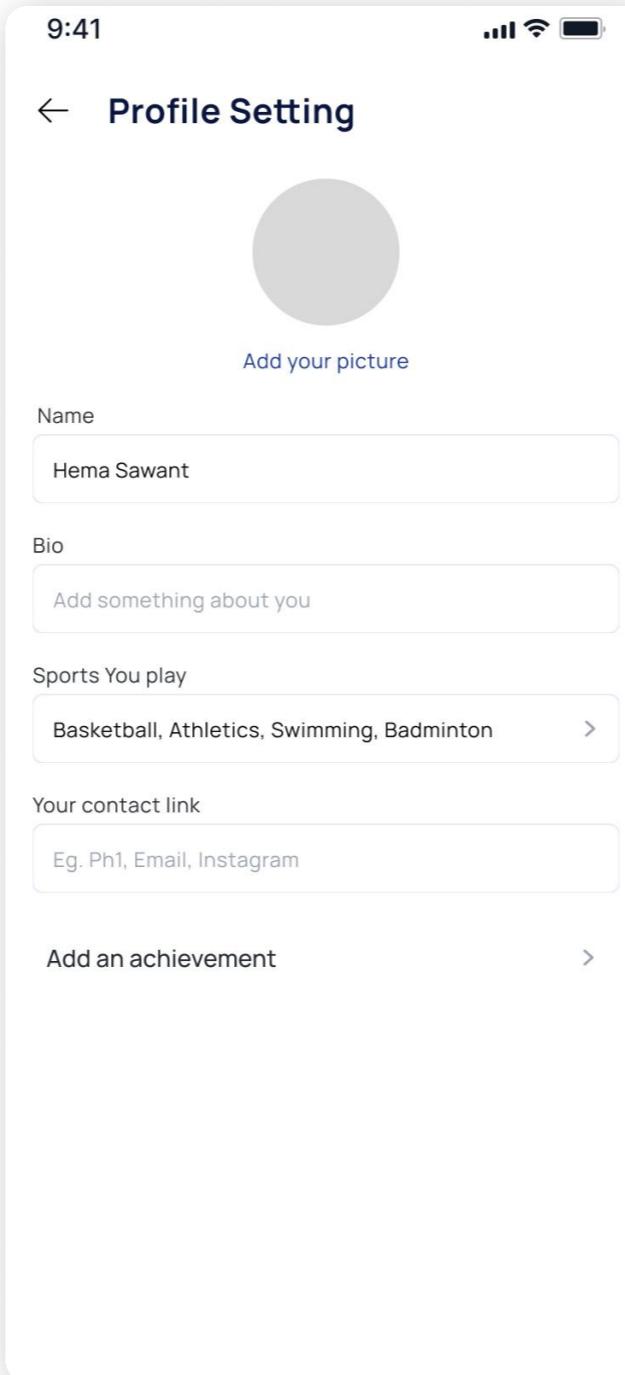
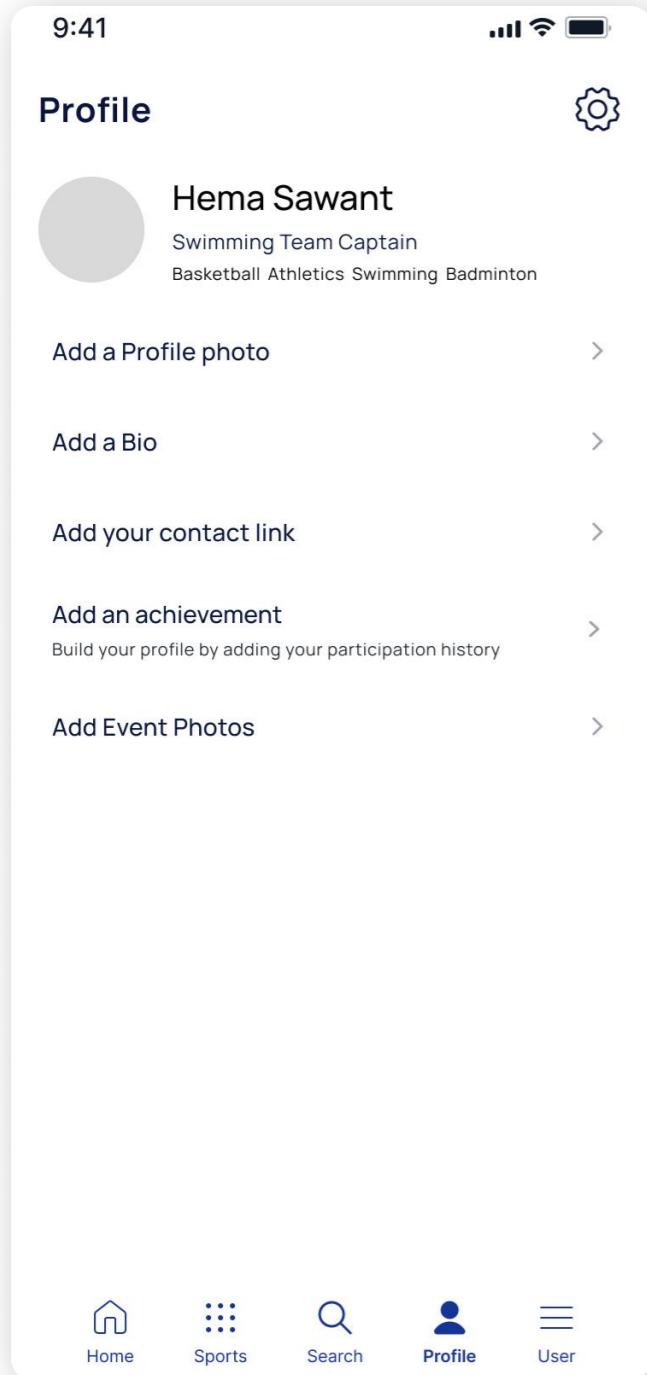


Figure 43: A new user's profile page with links to setting the their profile

Figure 44: Profile settings for a new user

Figure 45: Options for adding or changing one's profile photo.

Flow 2: Setting up one's profile continued

As players might not want to add a bio, we do not prompt users to add the bio again (see in fig. 43). However, we continue to prompt them about the contact link as it helps players connect with each other making it an essential section of the player profile (see fig. 44). Depending on the players comfort, we allow them to add any contact link that they feel safe about sharing and not make it a necessity.

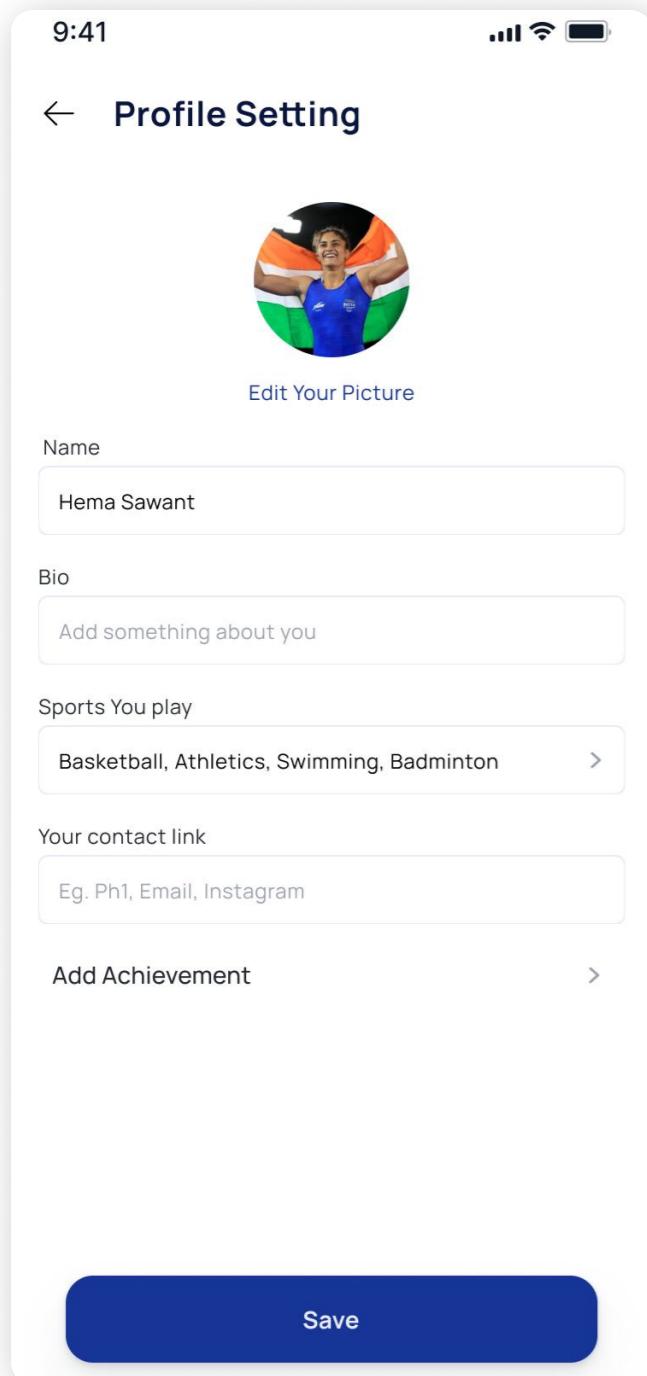


Figure 46: Profile settings for a new user with profile picture added

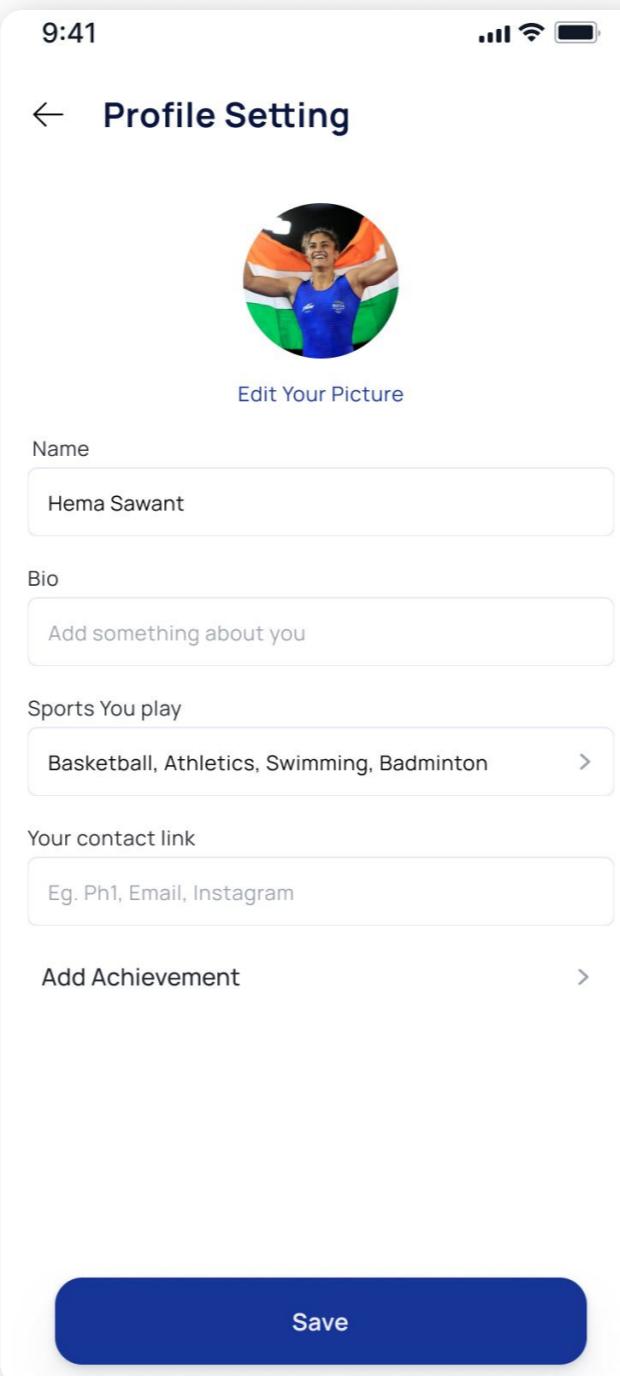


Figure 47: Profile settings for a new user with their contact link added

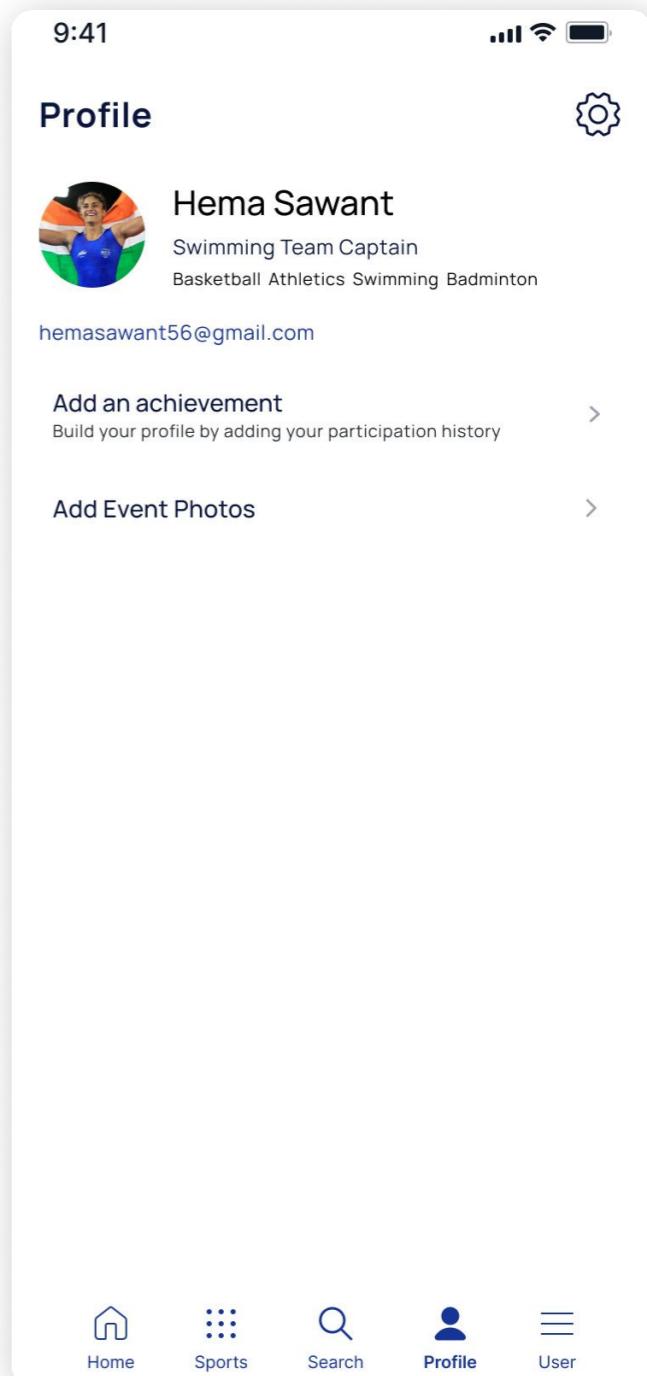


Figure 48: Profile page if the player chooses skip adding their bio section

Flow 2: Setting up one's profile continued

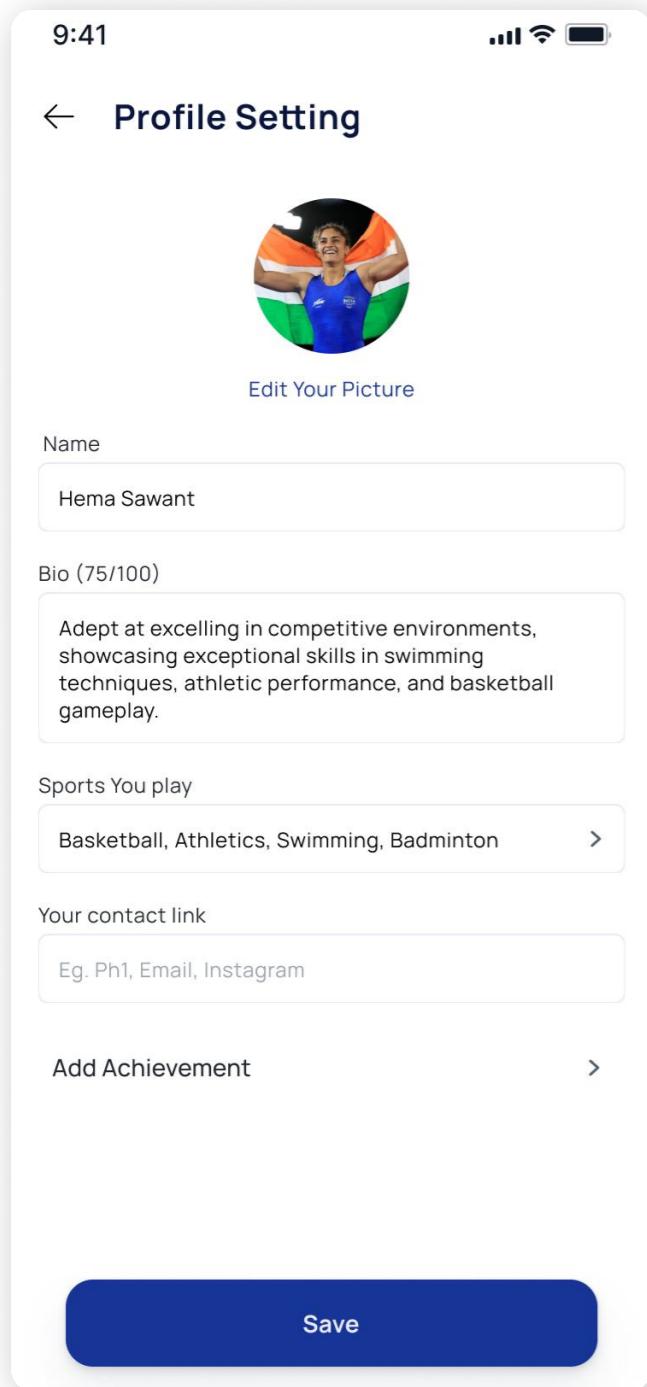


Figure 49: Profile settings for a new user without the contact link

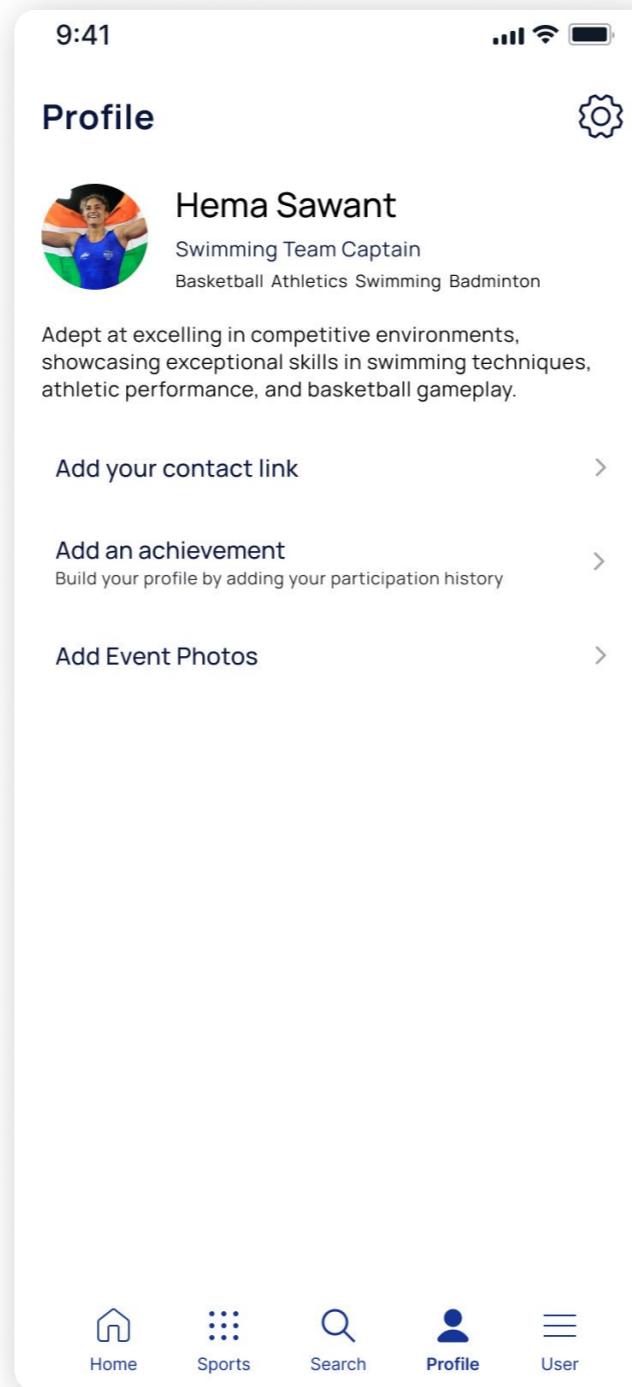


Figure 50: Profile page for a new user without the contact link added

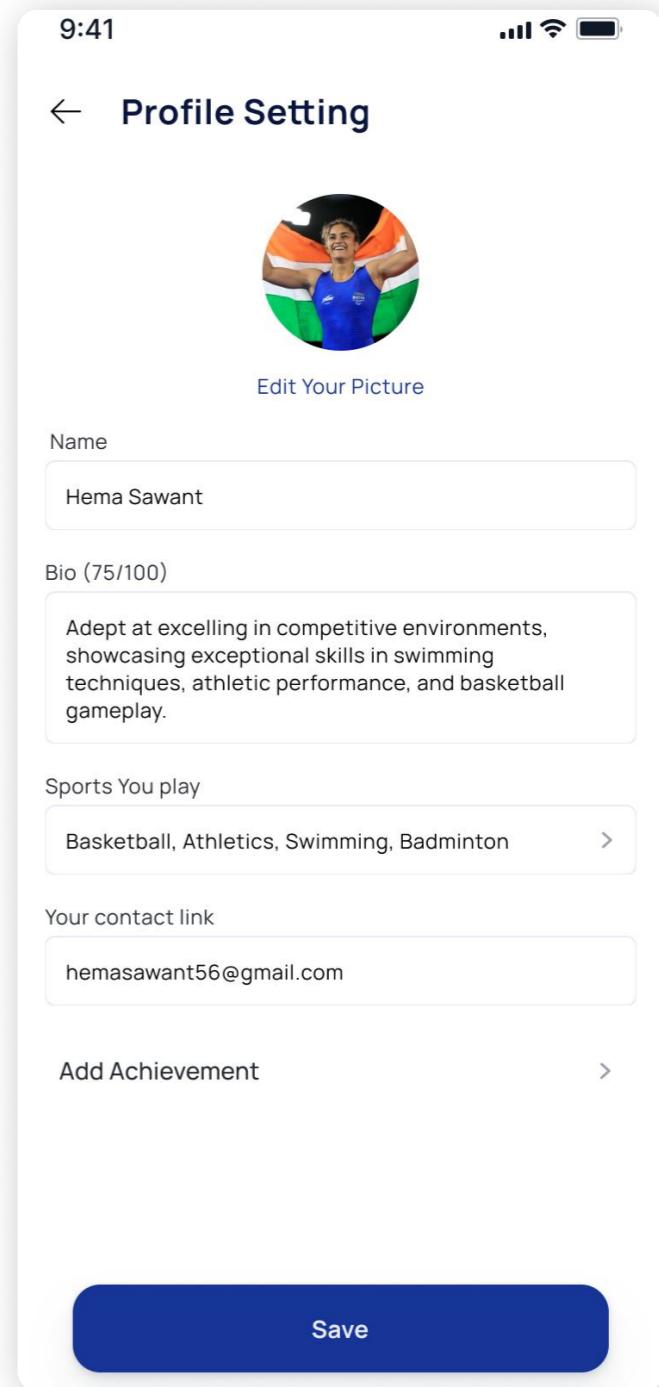


Figure 51: Profile settings page of a completed profile

Flow 2: Setting up one's profile continued

Even if an achievement is added to the profile, we still continue to prompt the users to add their contact link as shown in fig. 48.

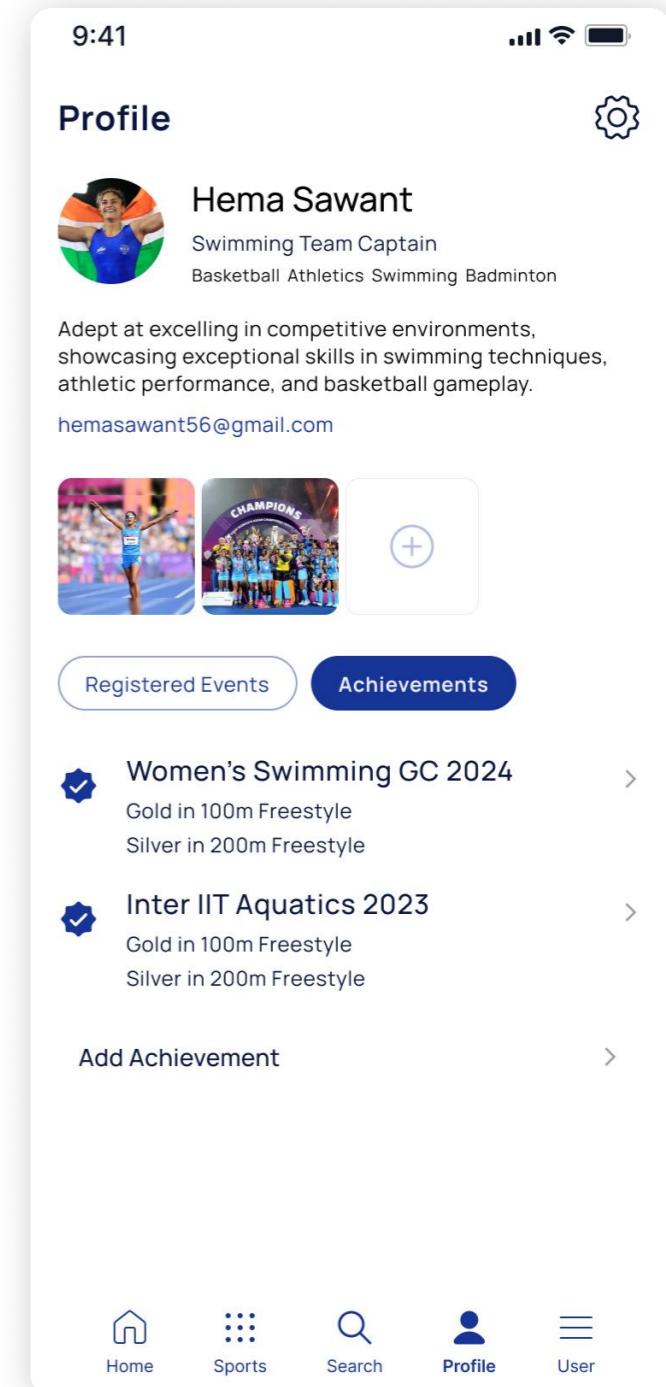
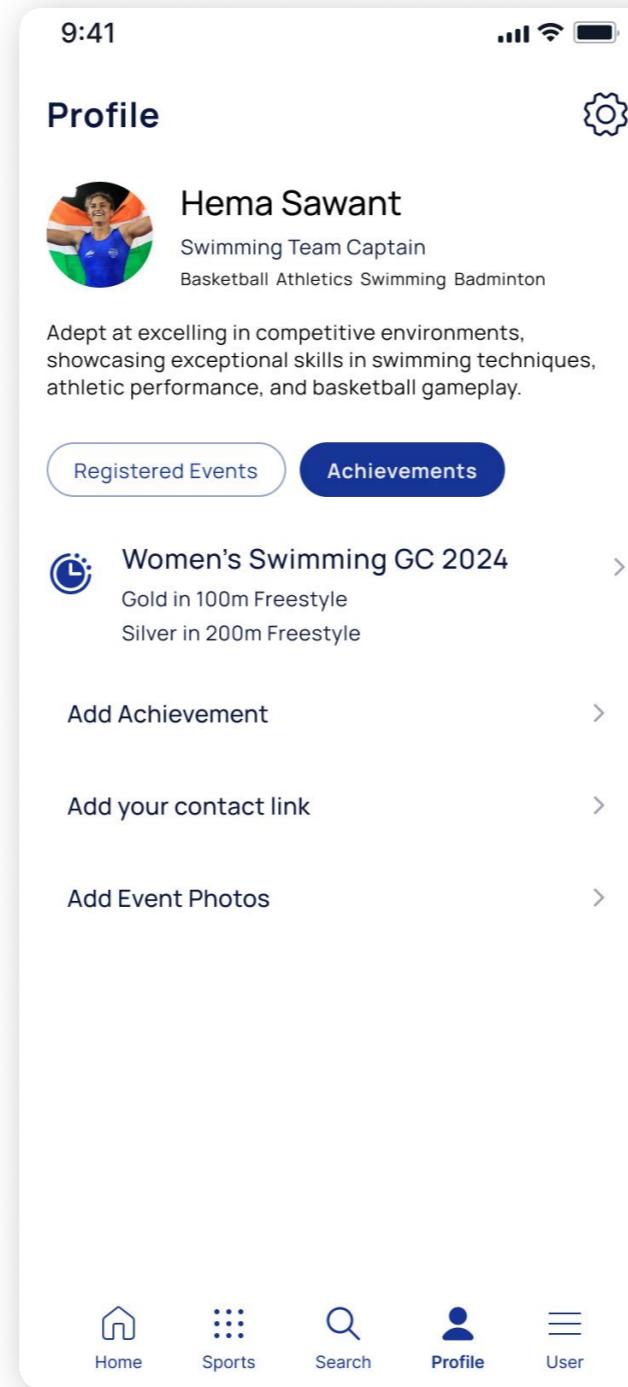
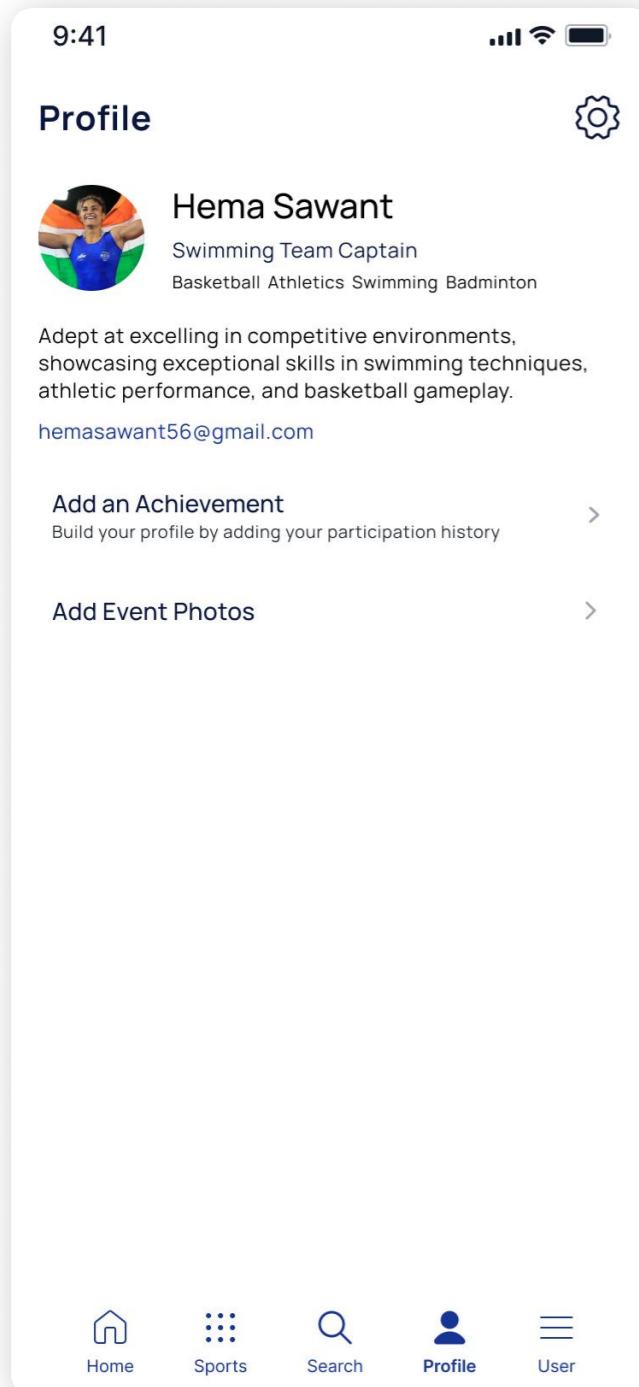


Figure 52: Completed Profile page of a new user

Figure 53: Profile page without contact link with a single unverified achievement added

Figure 54: Completed Profile page with verified achievements added

Flow 3: Adding an event to your achievements

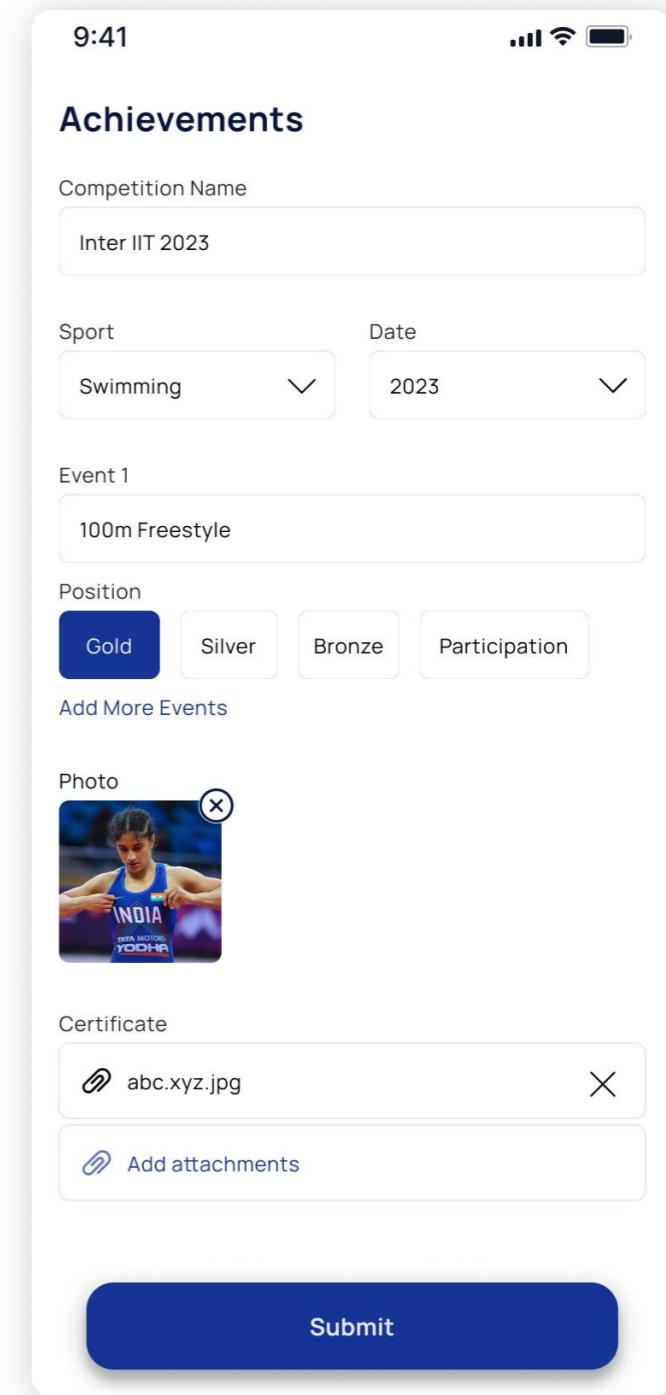
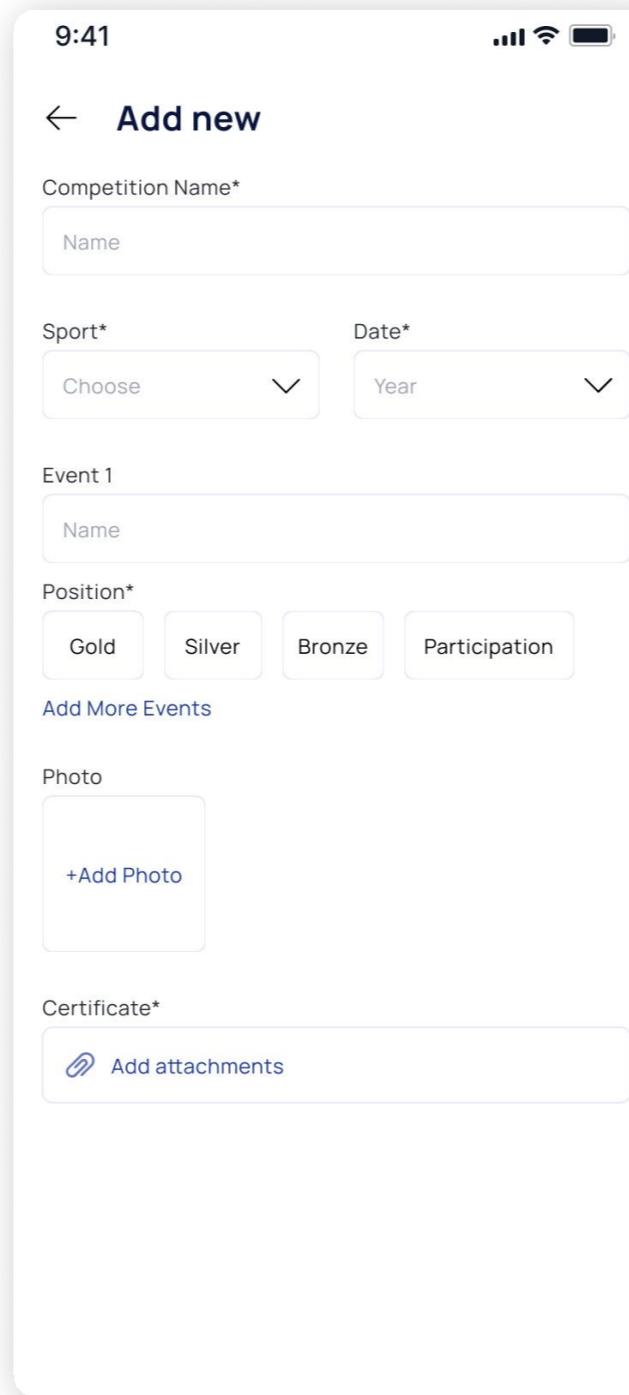
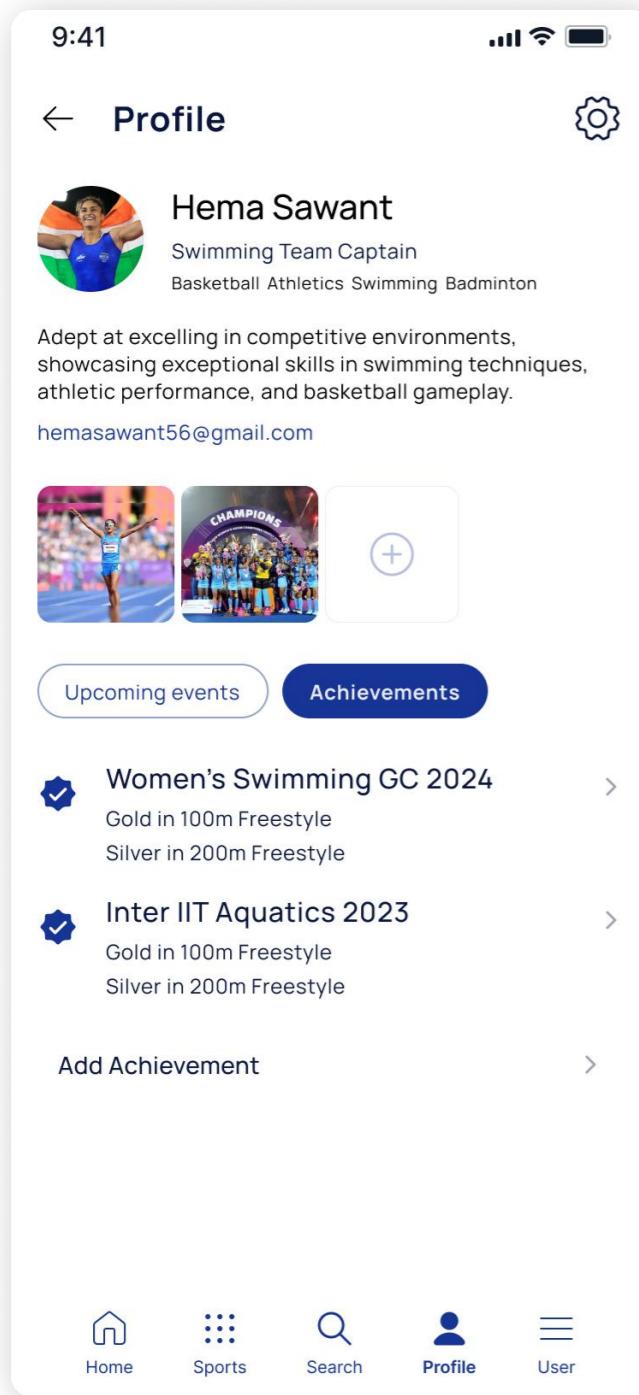


Figure 55: Profile page of the user with the Add achievement link

Figure 56: An empty add new achievement page

Figure 57: Add new achievement page with filled text fields

Flow 3: Adding an event to your achievements continued

When an event is uploaded, its status remains pending. The achievement is then verified by the secretary of the sport of the event. In case of an error, the player receives feedback a comment and can then make the necessary changes to the achievement or contact the person in charge.

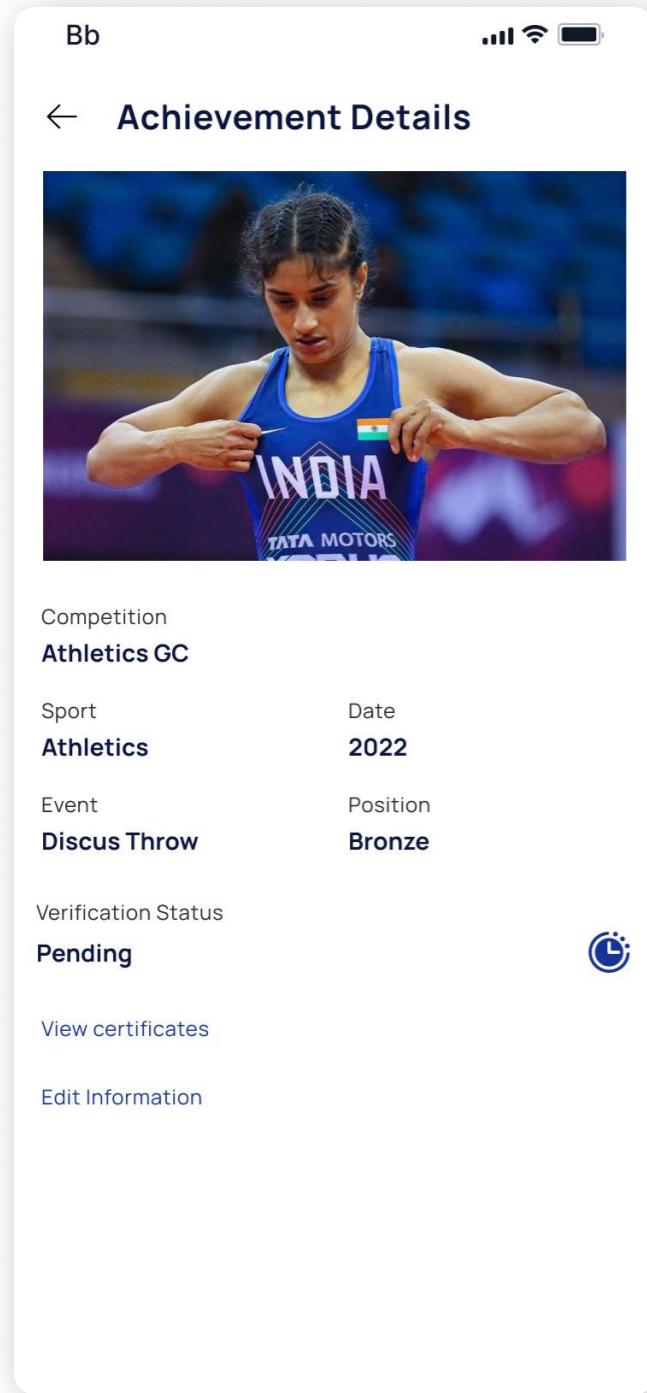


Figure 58: An achievement details page pending verification

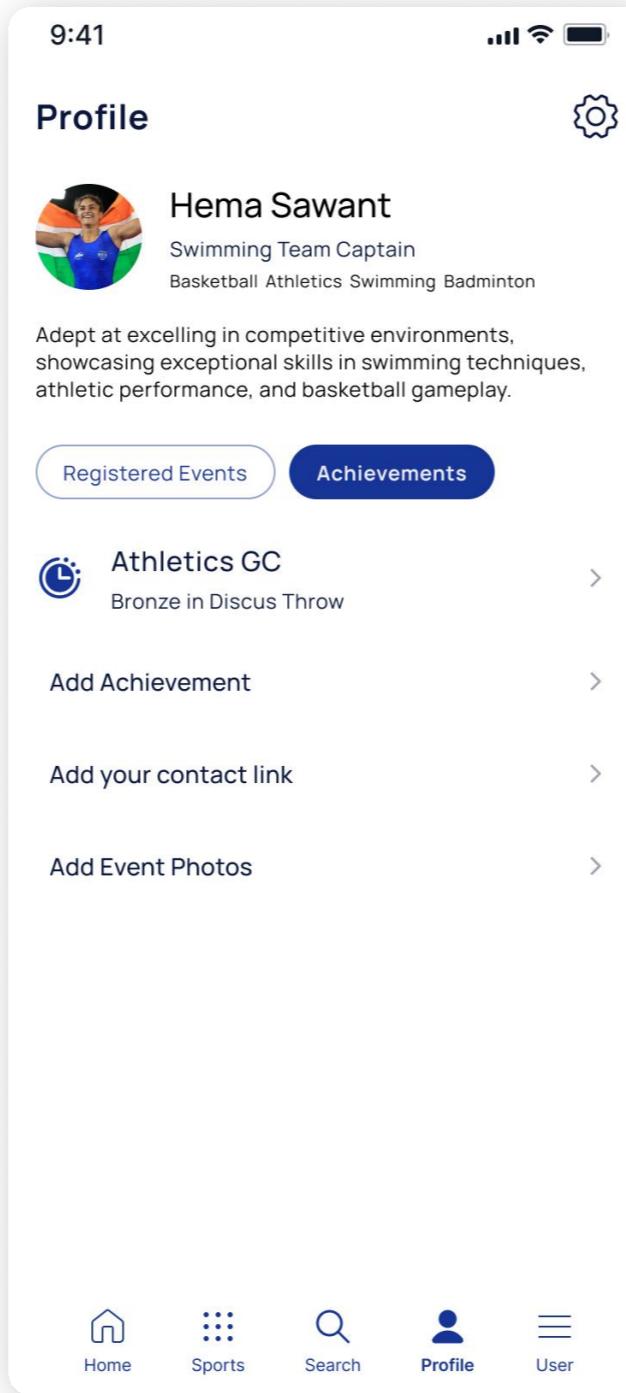


Figure 59: Profile page with an achievement that is pending verification

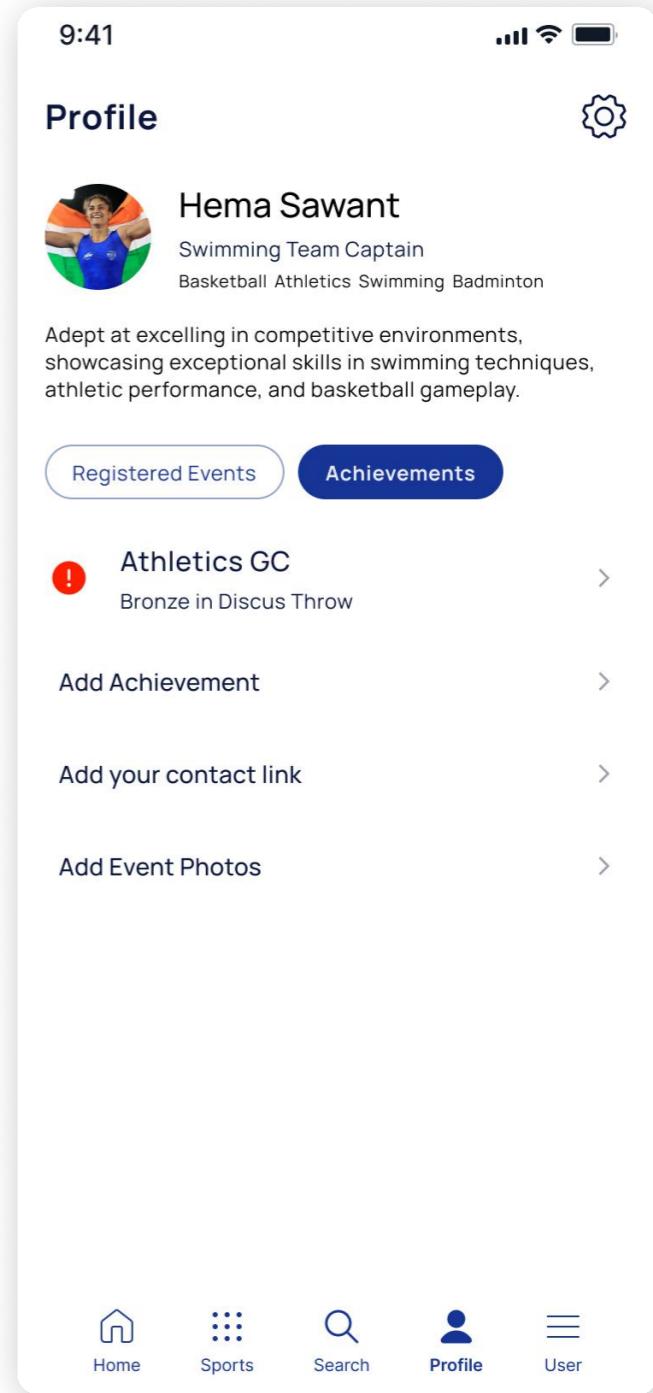


Figure 60: Profile page with an achievement that has failed verification

Flow 4: Choose the sports you play

While we ask users to add the sports they play during onboarding, users can choose to skip the step. In that case, the user can continue to select the sports they play at a later stage.

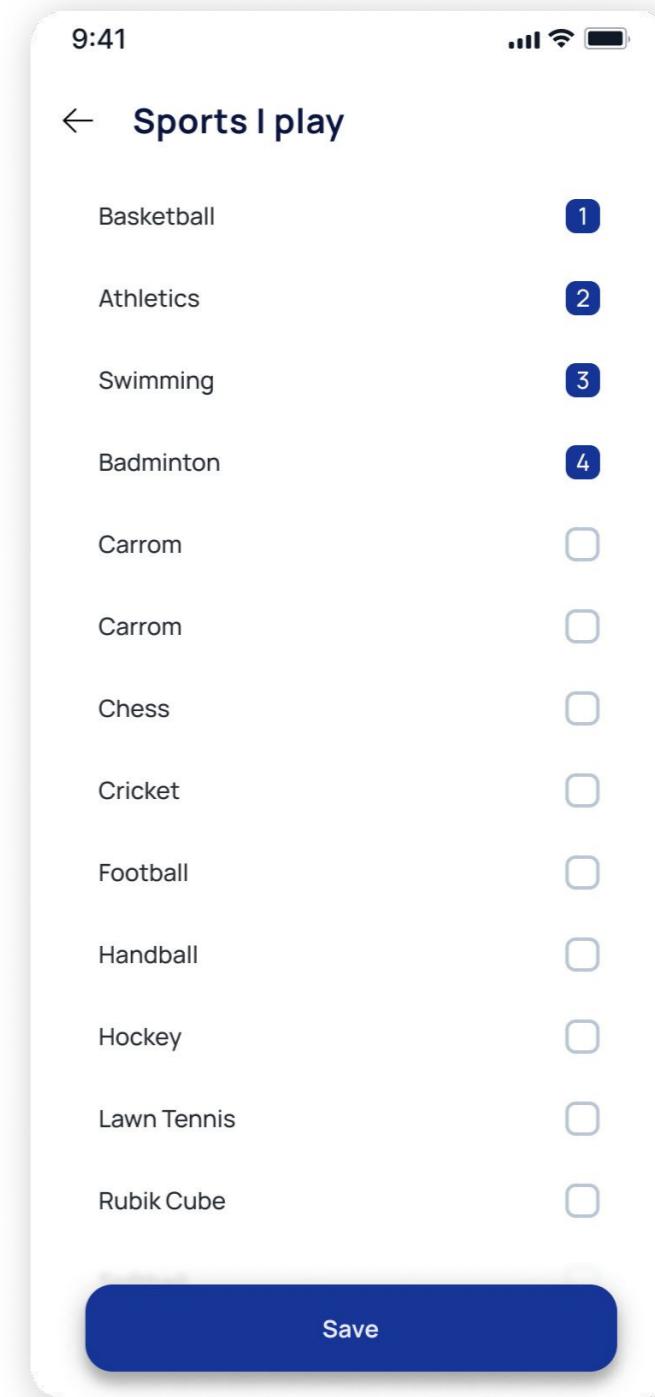
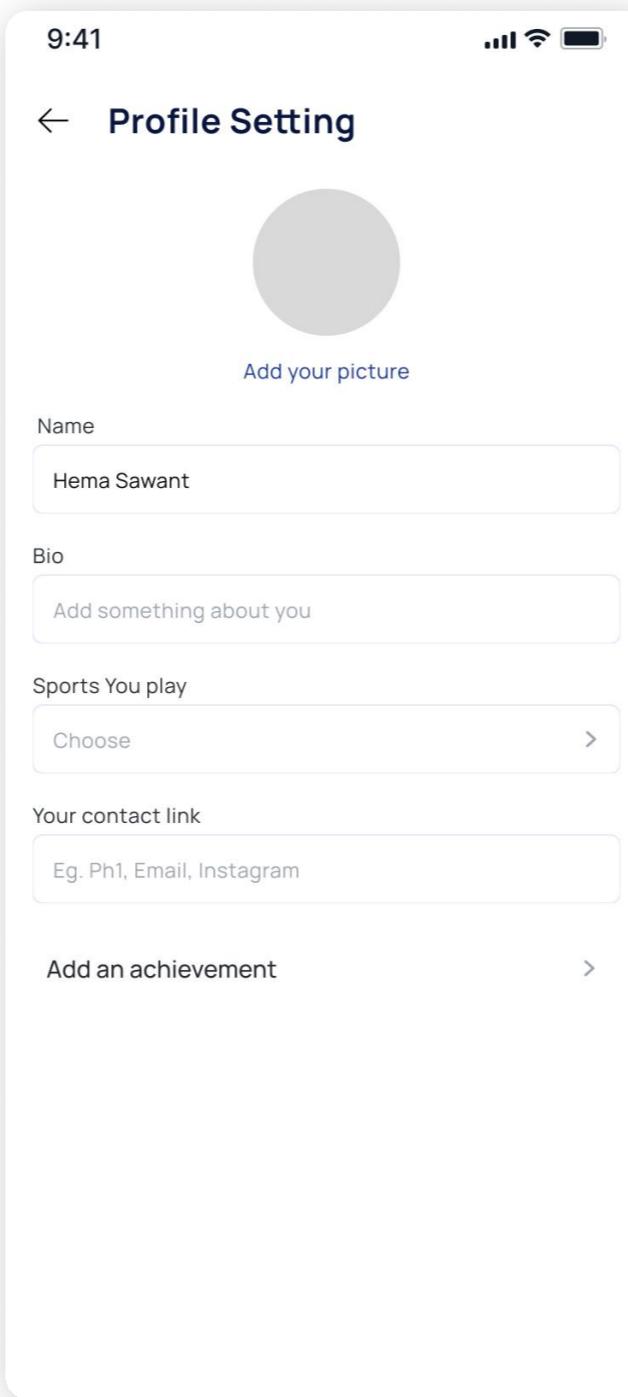
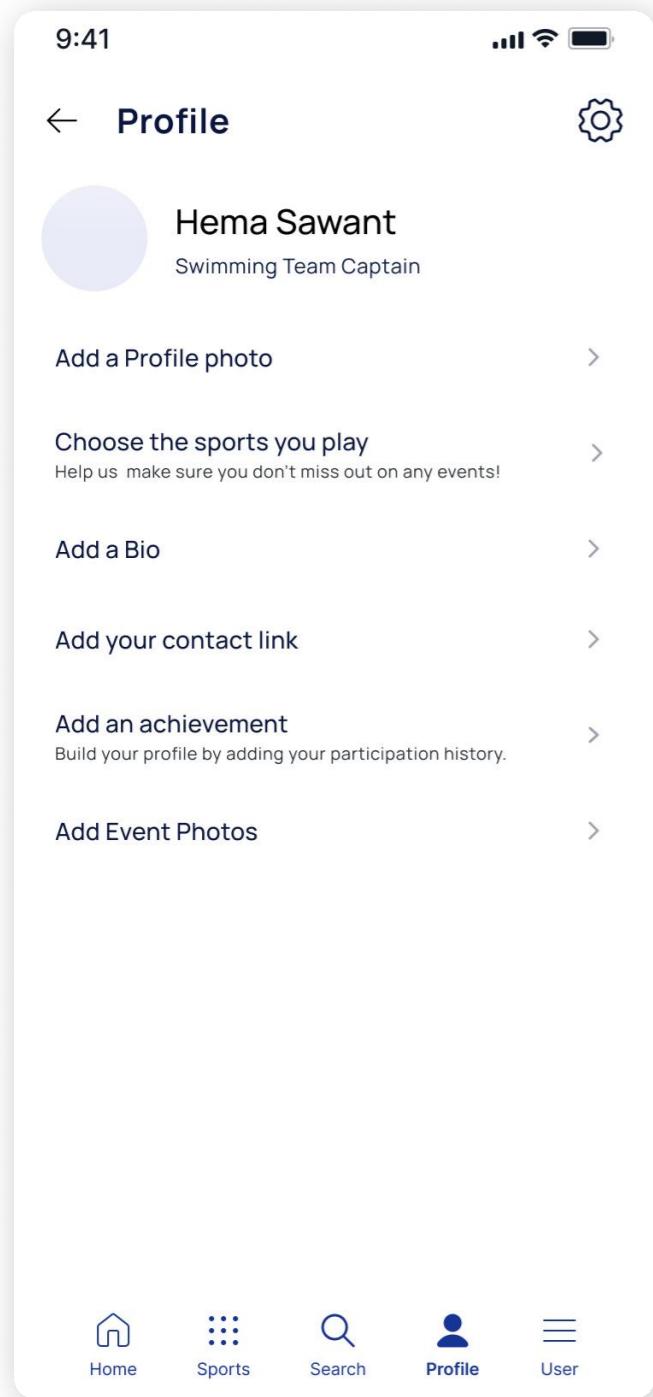


Figure 61: Example of a Profile page if the user does not add the selected sports

Figure 62: Profile settings of an new user

Figure 63: List of sports to select the sports that a user plays after selection

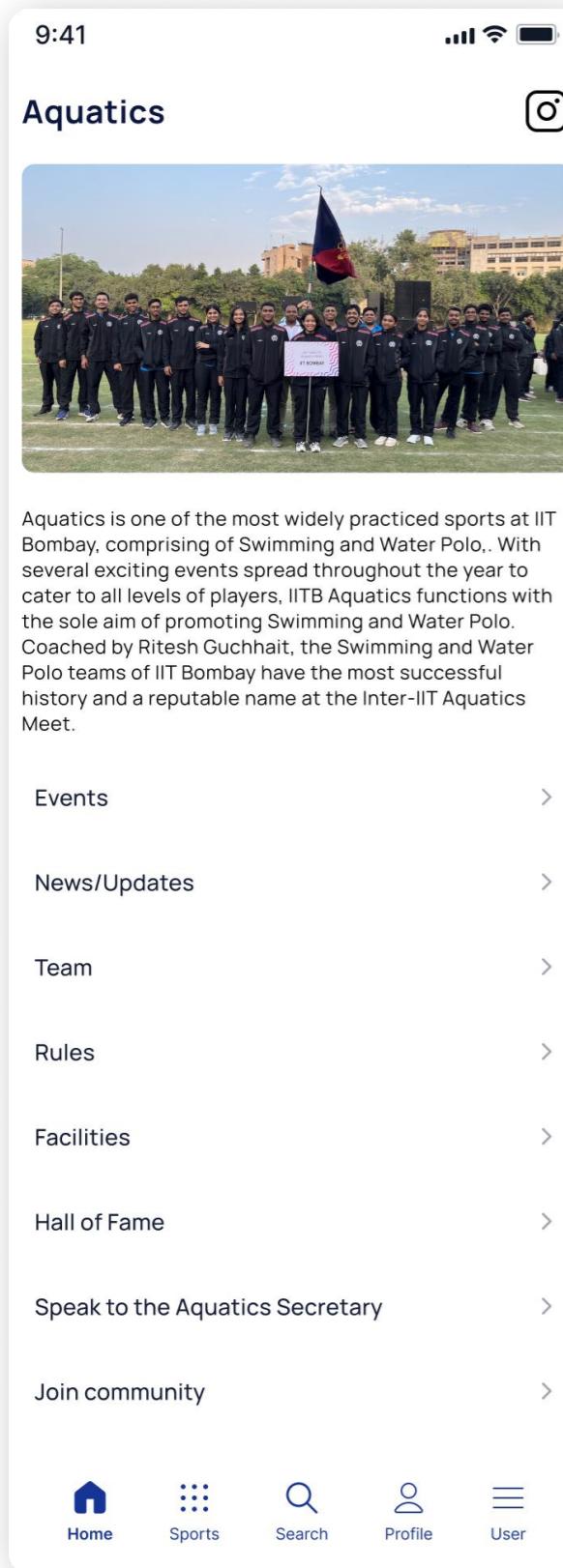


Figure 64: Example of a sports page with all link relevant to the sport

Flow 5: Finding Information about a sport

Users can either search for the sport or browse the sports page for the relevant sport.

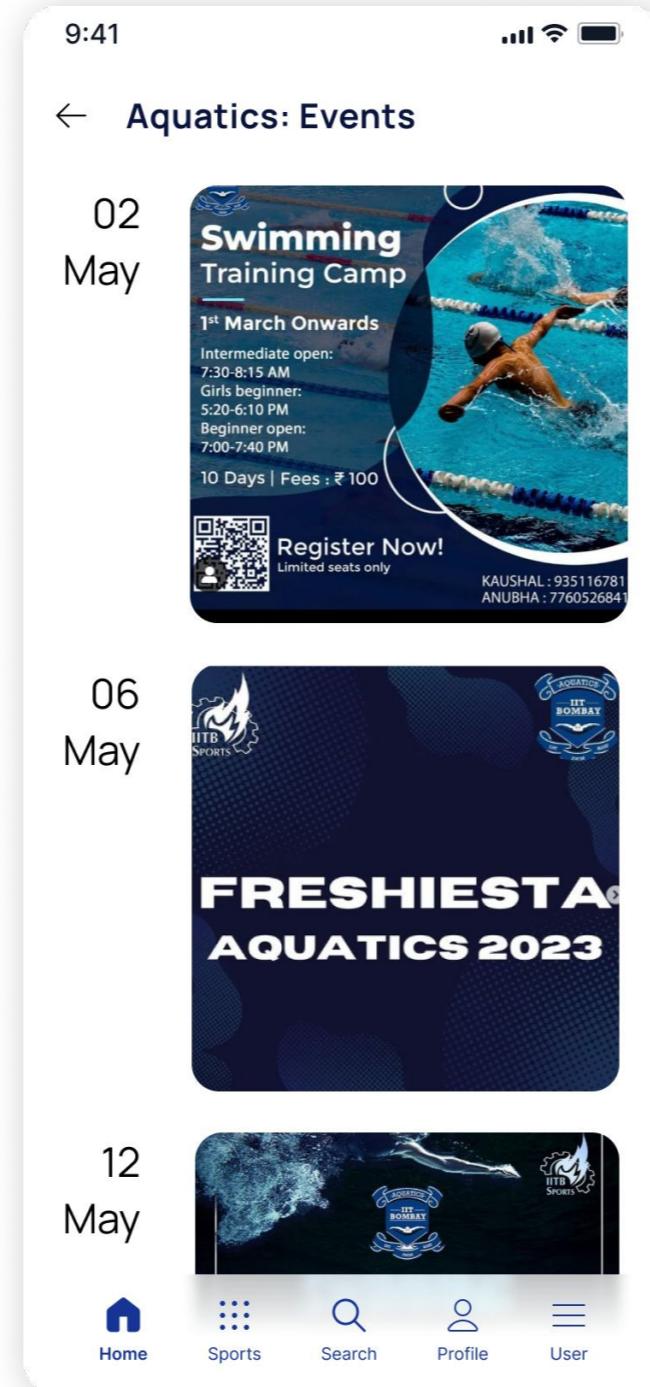


Figure 65: Example of a events page of a sport with all events conducted by the sport

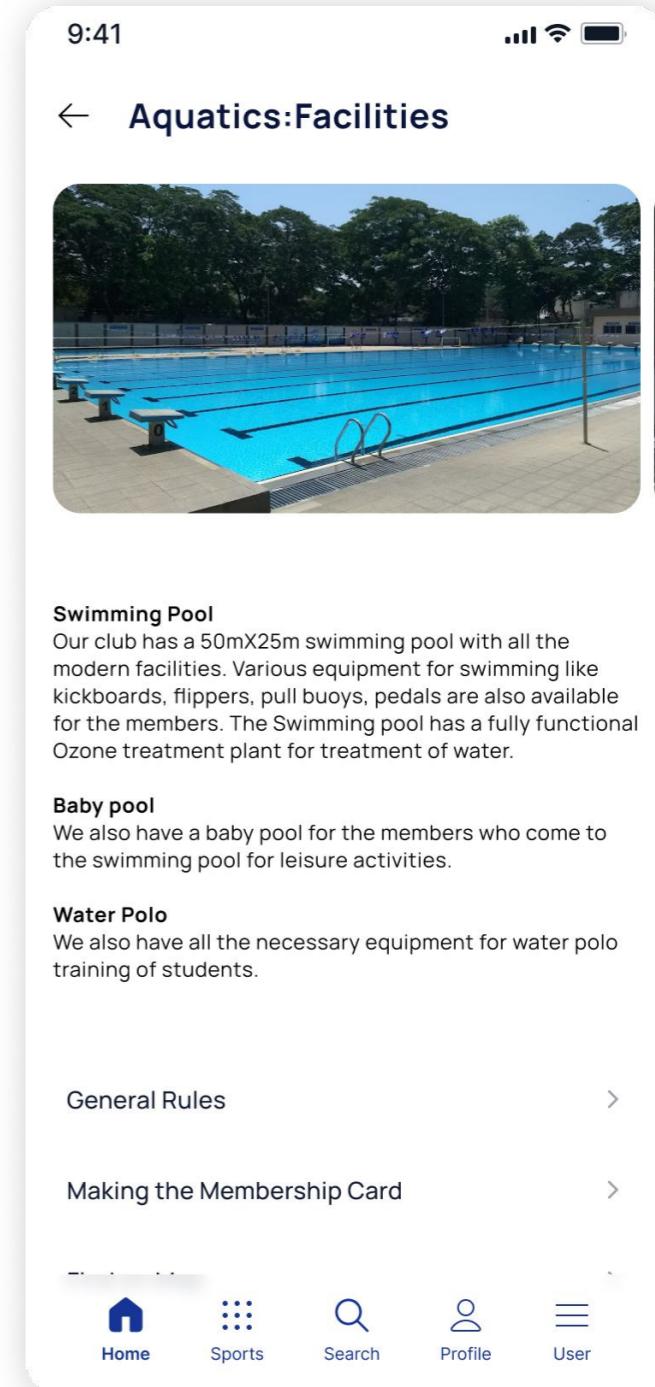


Figure 66: Example of a venue/facility of a sport with all links relevant to the facility

Flow 5: Finding Information about a sport continued

If marked interested, the user gets all updates as push notifications about the event. Users can unfollow the event by tapping the “following” button.



Figure 67: Example of an event page with a link to follow the event and receive updates about it



Figure 68: Example of an event page that the user is following

Flow 6: Registration

If the event registration is open, the “follow this event” button will change to a “register now” button that updates a database. As user are logged in through their LDAP ID, no additional information is required.

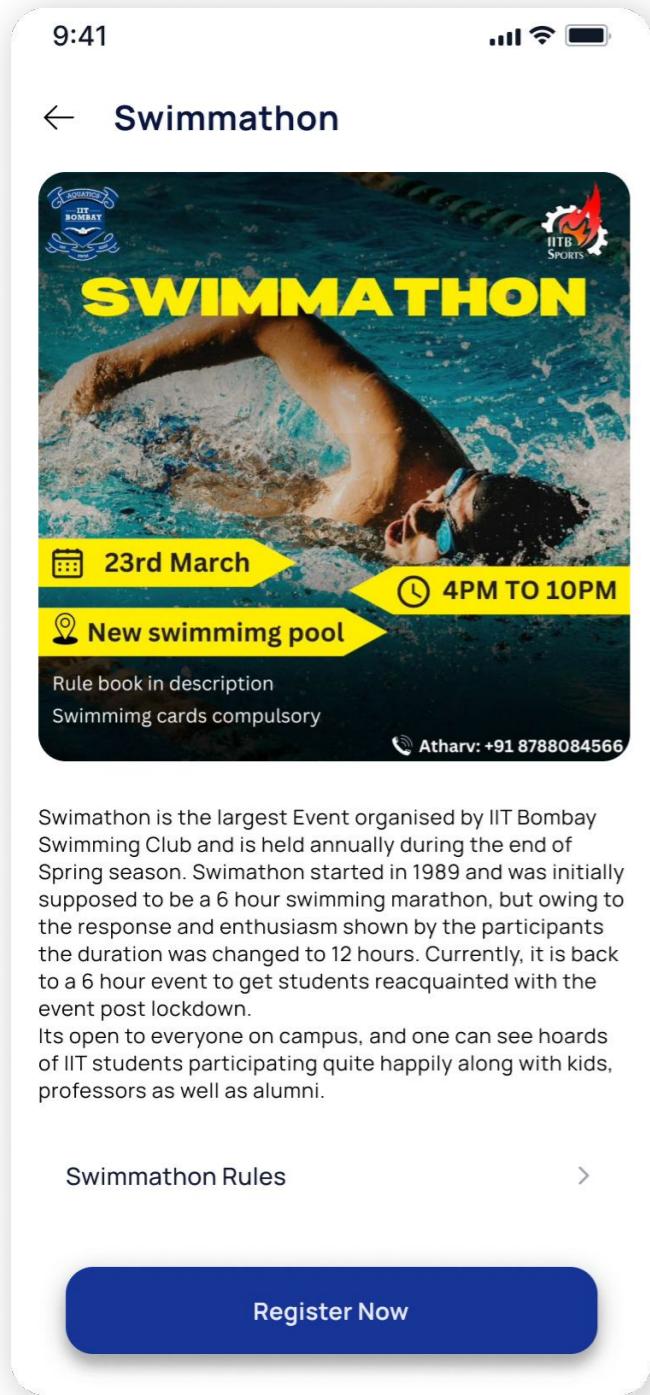


Figure 69: Example of an event that is accepting registrations

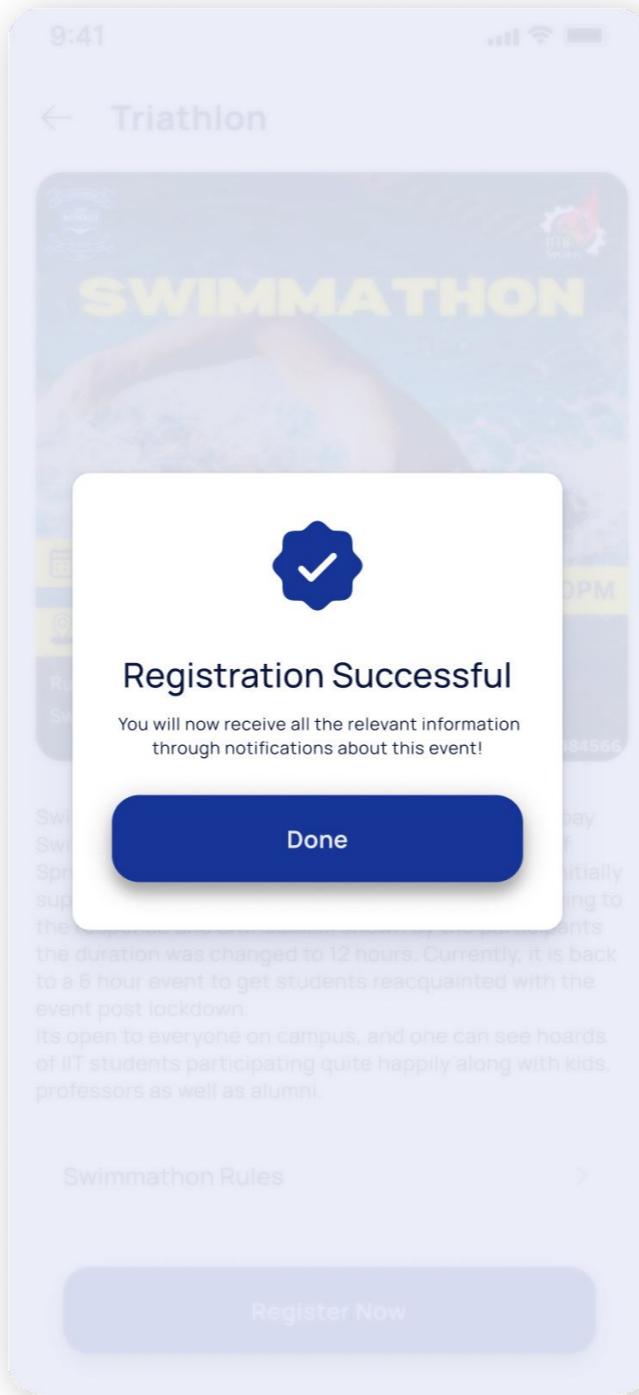
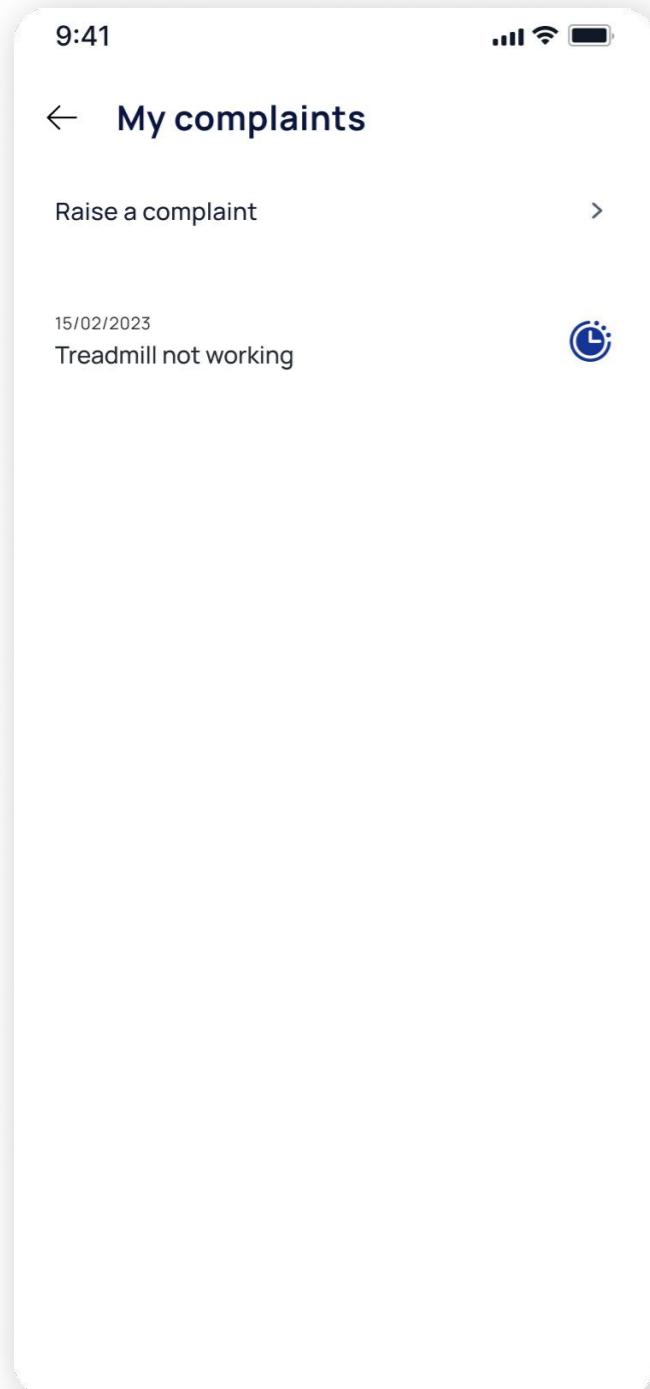


Figure 70: Profile page with an achievement that is pending verification

Flow 7: Raise a complaint

Allowing players to order the sports they play ensures their profile reflects their primary interests.



The screenshot shows the 'Raise a complaint' page. The title 'Raise a complaint' is at the top left with a back arrow. The page contains several input fields: 'Subject' (placeholder 'Add Information'), 'Whats your concern?*' (placeholder 'Give us details'), 'Location' (placeholder 'Choose'), 'Sport' (placeholder 'Choose'), and 'Photo' (button '+Add Photo'). At the bottom is a grey 'Done' button.

The screenshot shows the 'Raise a complaint' page with all fields populated. The 'Subject' field contains 'Leaking Cooler'. The 'Whats your concern?*' field contains a detailed description: 'The water cooler in New SAC has been constantly leaking, and its proximity to the washroom is creating a cesspit that is attracting insects. This situation is not only unhygienic but also poses a health risk.' The 'Location' field contains 'New SAC', the 'Sport' field contains 'Non Sport', and the 'Photo' field contains the '+Add Photo' button. At the bottom is a blue 'Done' button.

Figure 71: Complaints page (accessed from the More actions page as shown in fig. 33)

Figure 72: New complaint page

Figure 73: New complaints page with all added text fields

Flow 7: Raise a complaint

Allowing players to order the sports they play ensures their profile reflects their primary interests.

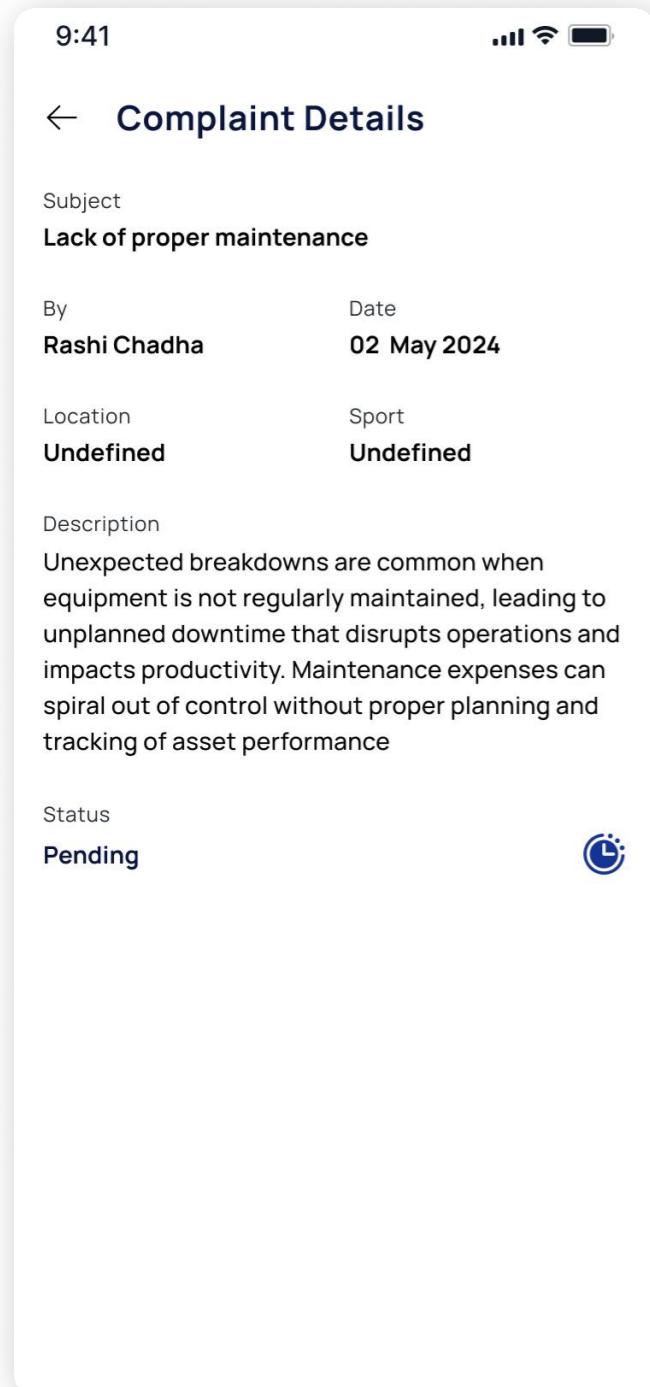


Figure 74: Complaint details page with the status of the complaint as pending.

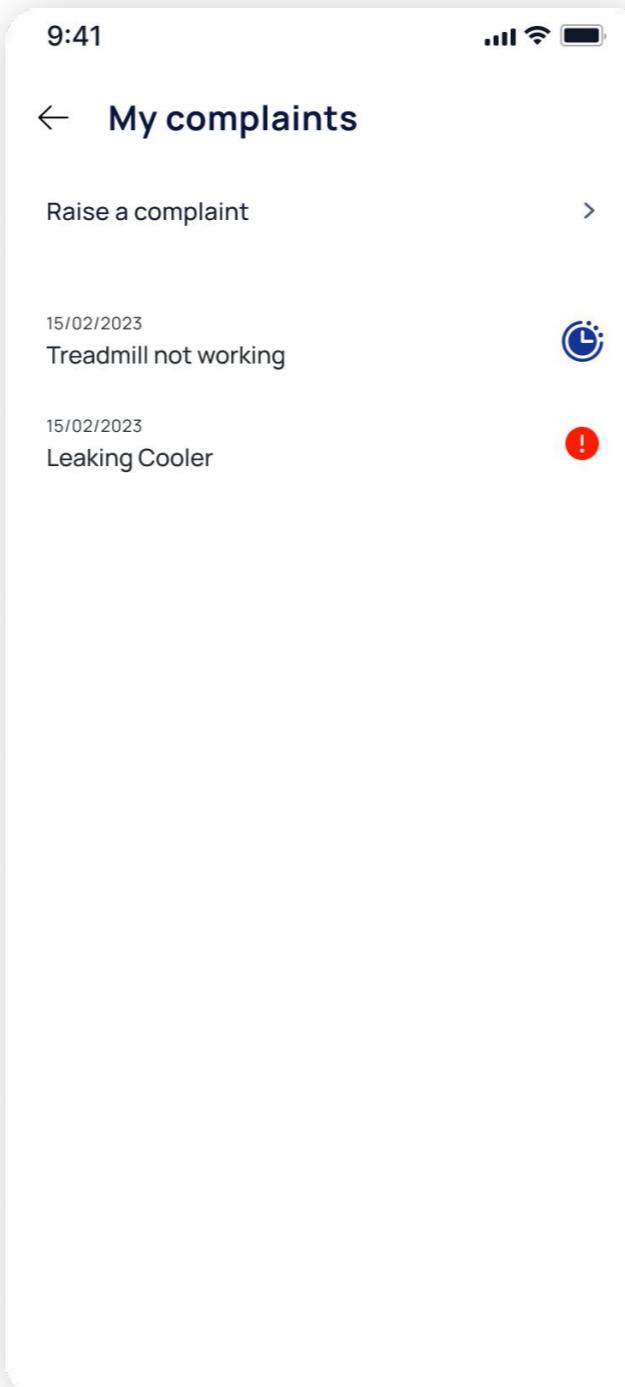


Figure 75: Complaints page with one pending complaint and one rejected complaint

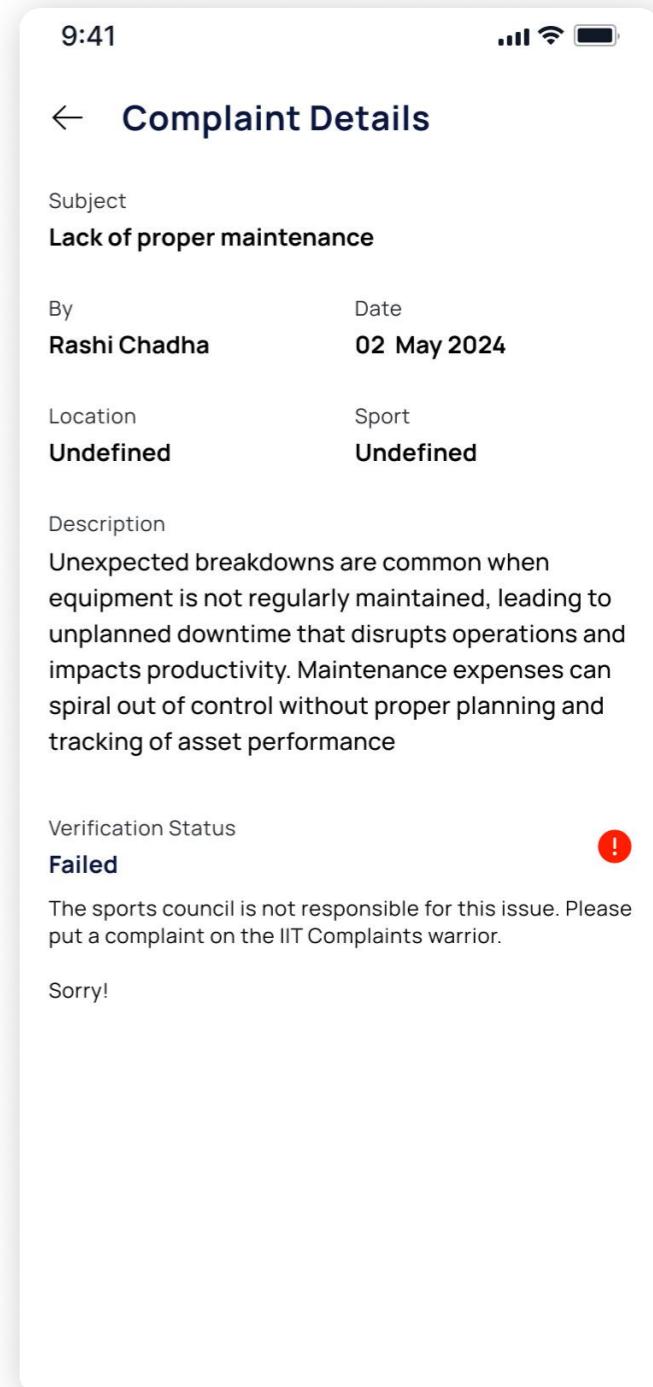


Figure 76: Complaint Details page for a failed complaint

Flow 8: Notifications Settings

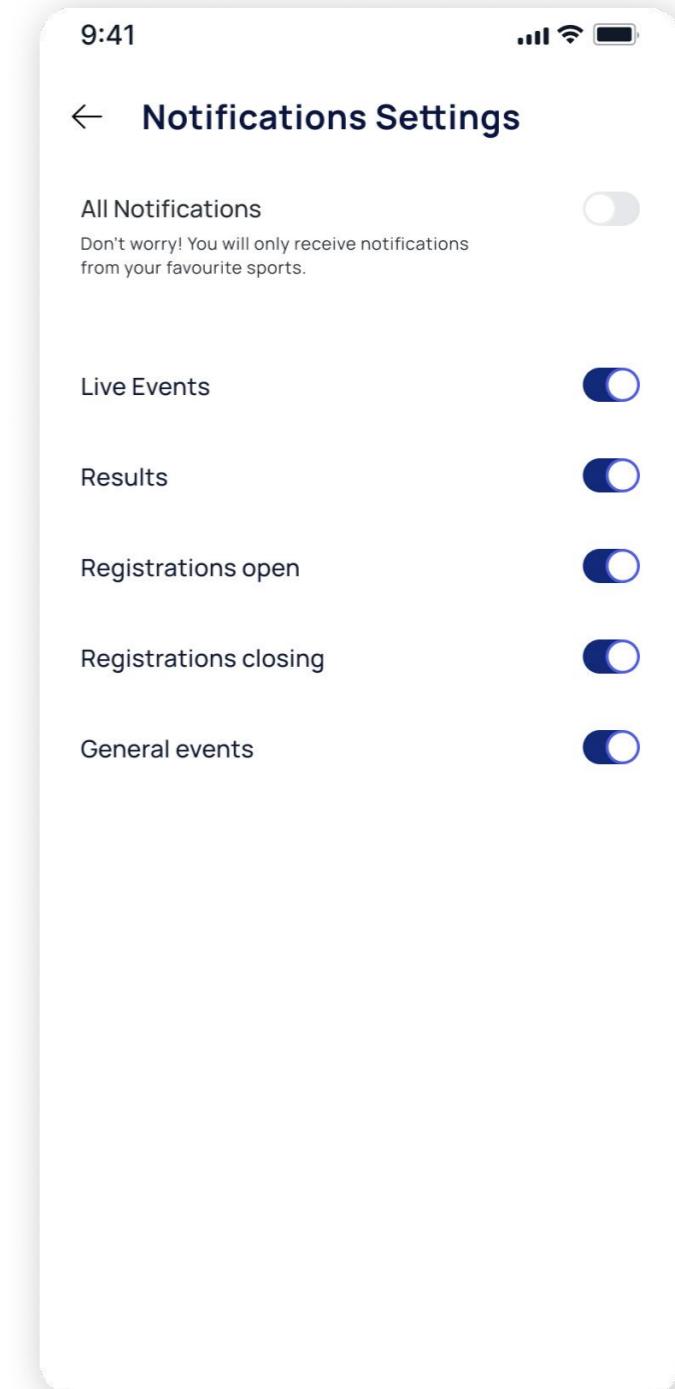
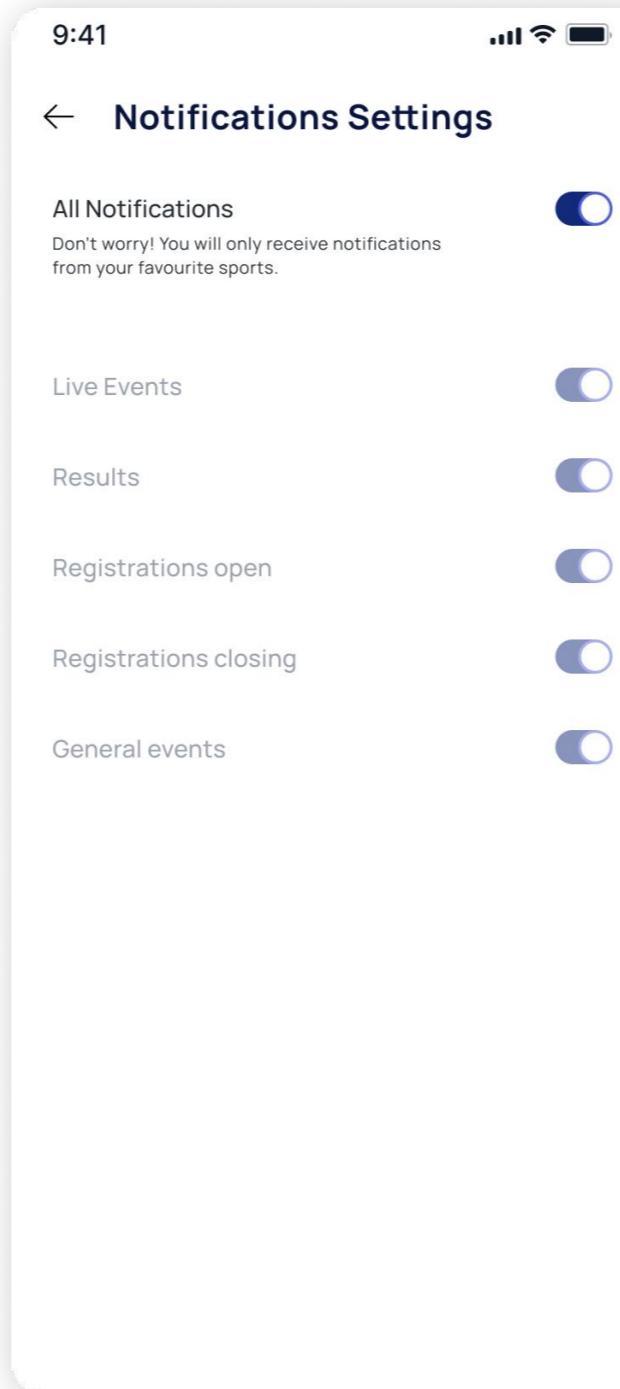
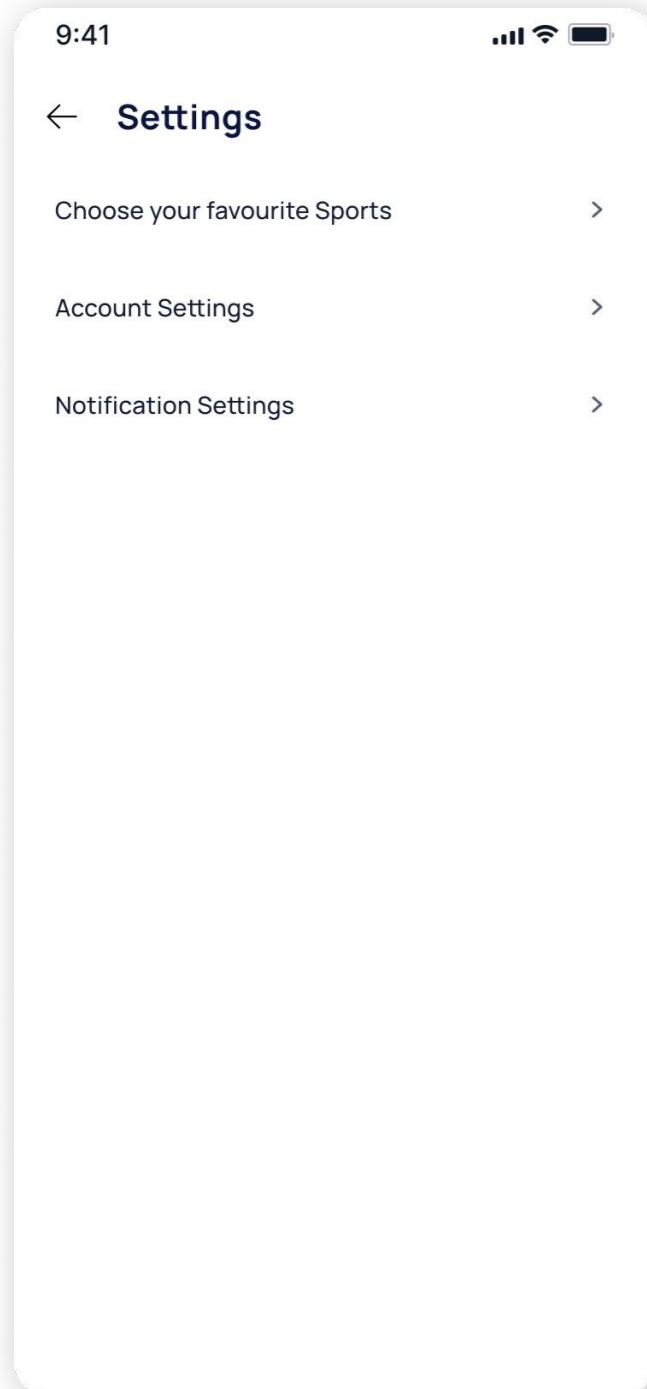


Figure 77: Settings page (accessed from the More actions page as shown in fig. 33)

Figure 78: By default all notifications would be on on the notification settings

Figure 79: Notification settings allowing control in the type of notification the user wants to receive

Other pages

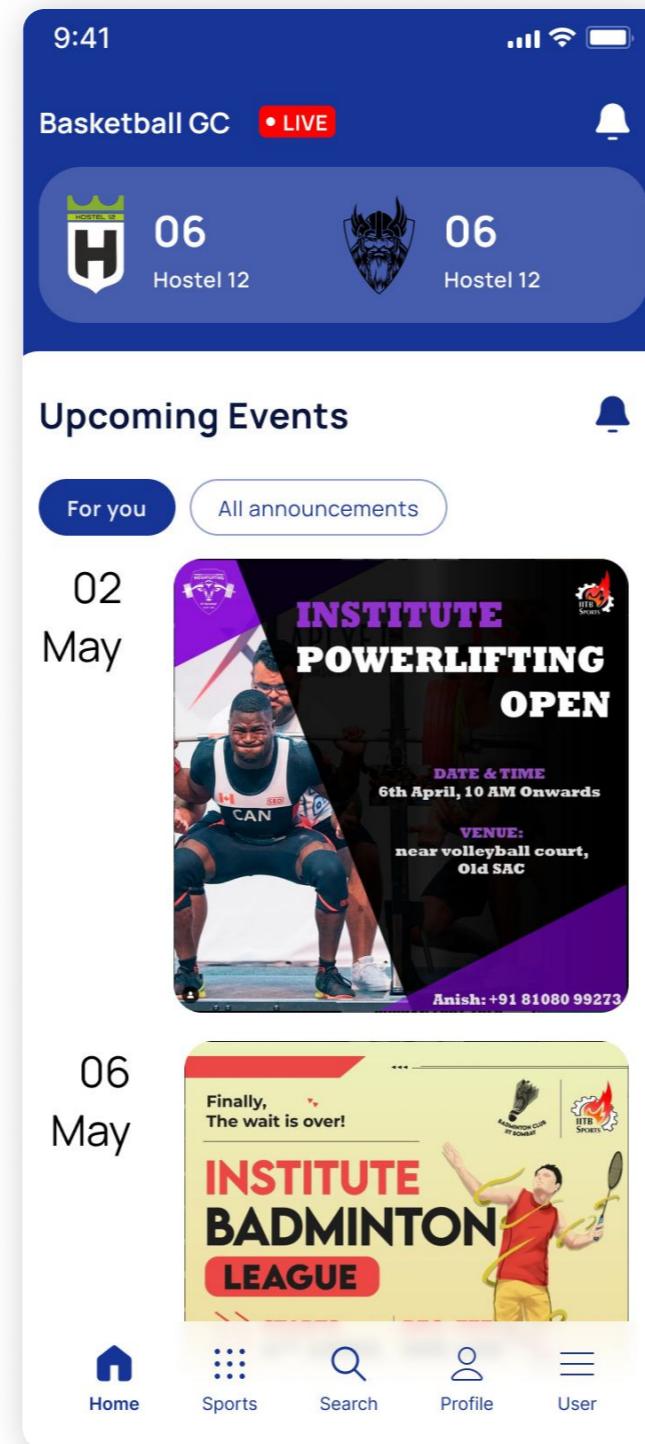
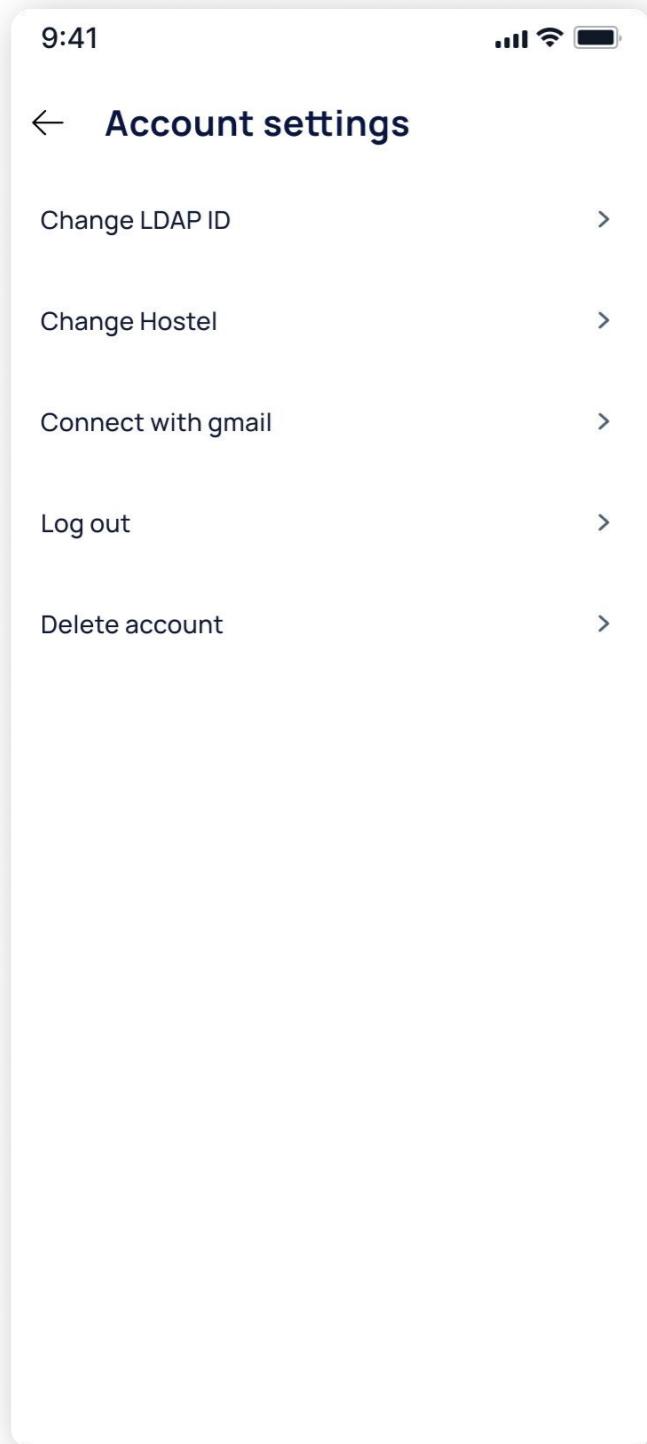


Figure 80: Account Settings page (accessed from the settings page as shown in fig. 75)

Figure 81: Home page with a live section

Figure 82: An example of a blog/article page

Final Design - User 2

The following work is a still in progress and work done so far has been documented below. It is yet being tweaked but the intention is to give an idea about the direction of the project. User 2 is an Admin User, with controls for the functionality of the app.

Concept details

As the Admin users are also players, we attempt to integrate both users in the same app. We do so by switching the sports page with admin page. We take this decision knowing that Admin users are familiar with the sports community and the sports page was especially made for new users (new students in IIT Bombay) can easily navigate to the information they need.

Admin control

The Admin control page, being the first to load on switching to Admin mode, is a dashboard for easy and quick actions that the user might need.

Events page

As secretary often help each other out, we do no restrict a secretary from accessing events from other sports. Here we can also add a new event. The event page all links necessary to manage the event page such as event description, rules, results, records, etc.

Notifications

An admin user receives notifications of four types, from queries and complaints and for verification and booking requests. Although booking request is limited to turf booking at present.

Site Map

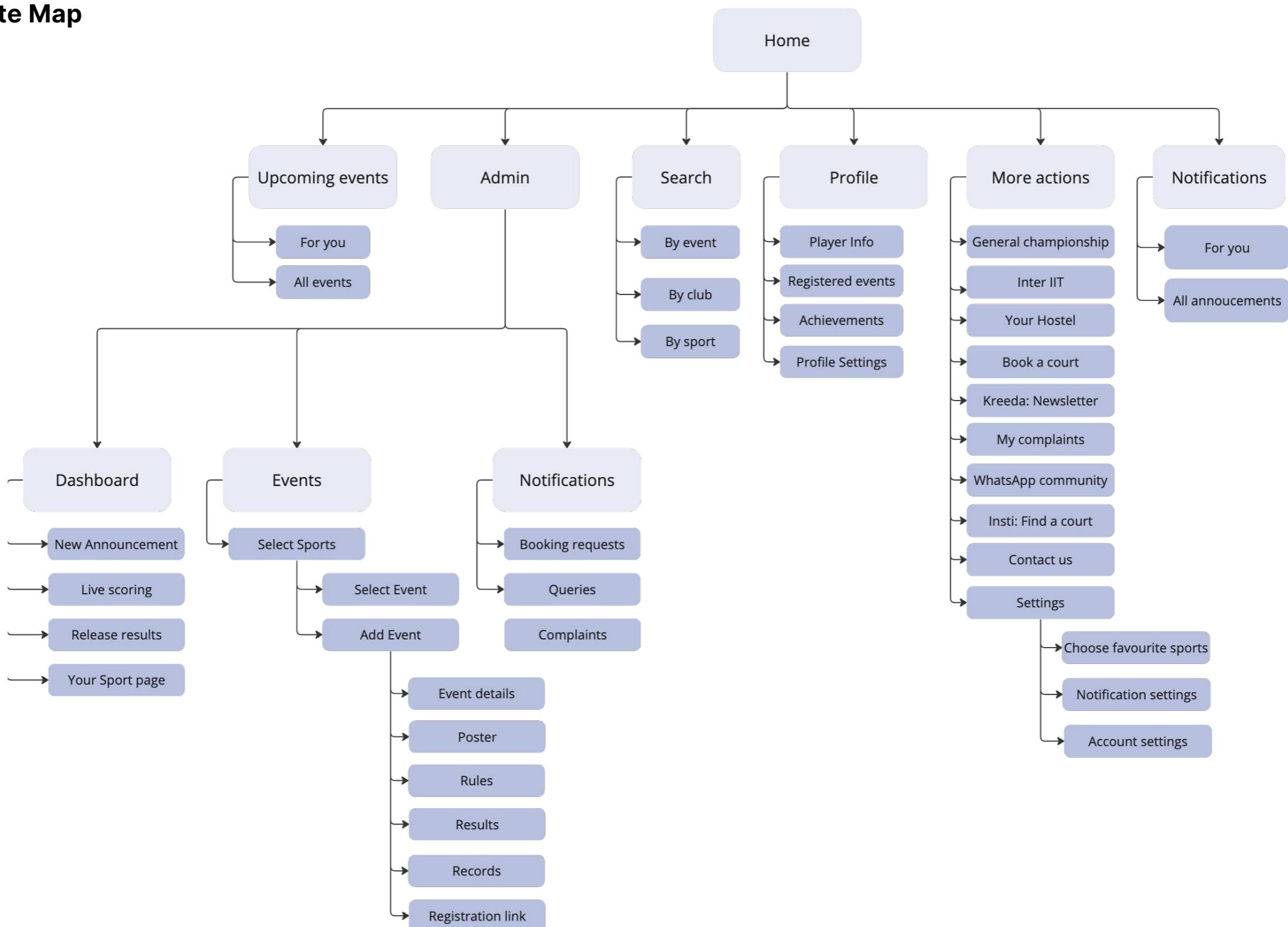


Figure 83: Site map of final design for User 2

Key Screens

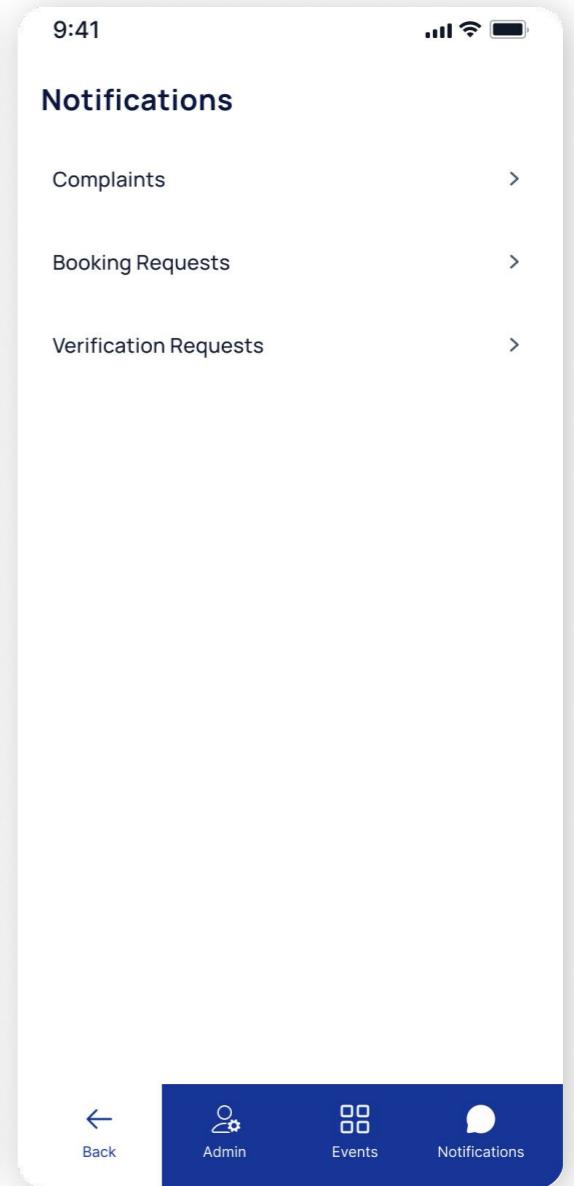
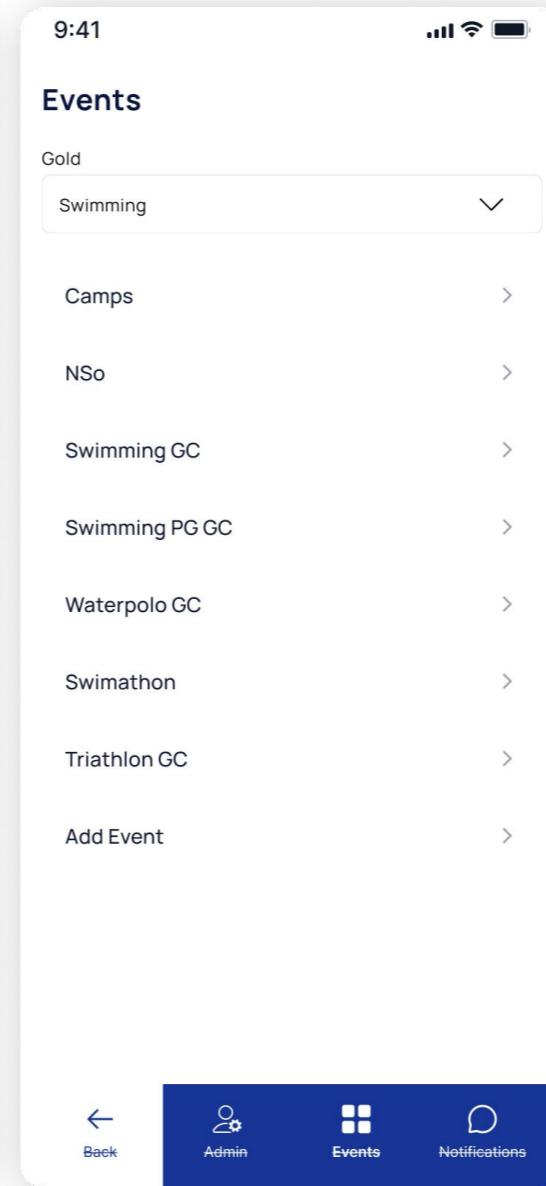
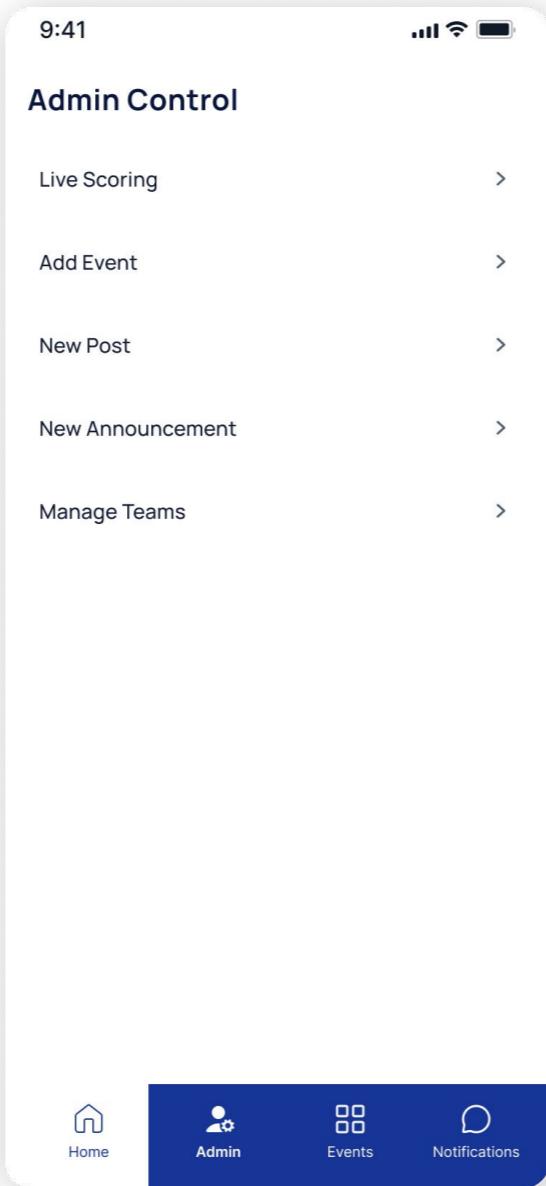
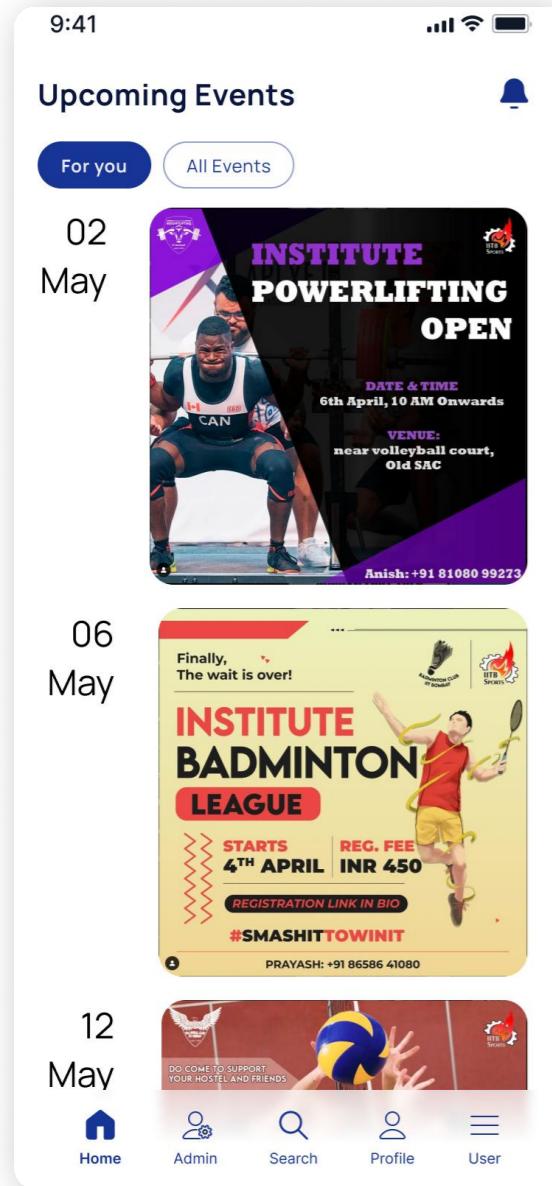


Figure 84: Home page for User 2 with a changed navigation bar

Figure 85: Admin control page with quick links

Figure 86: Events page leading to maintaining different events page corresponding to the sport selected

Figure 87: Notification page for User 2

Flow 1: Adding an event

9:41

← Add new

Competition Name*

Event Name

Sport* Date*

Choose DD/M/YY

Description

Add Event Description here

Photo

+Add Poster

Add Rules

Add Results

Add Records

Add Registration Link

9:41

← Add Event

Name*

Swimming GC

Sport* Date*

Swimming 04/11/2023

Description (0/200)

Every year we have an Inter hostel swimming competition - The Swimming General Championship, with assorted supporters crying themselves hoarse in support of their hostel mates, irrespective of the level of swimming. It's an ideal platform to flaunt your swimming skills and make your hostel proud!

Sport

Rules

Add Results

Records

Add Event

9:41

← Swimming GC

 IIT-BOMBAY Aquatics



INTER-HOSTEL GENERAL CHAMPIONSHIP

SWIMMING GC

NEW SWIMMING POOL

4TH NOVEMBER | 8:30 AM TO 10:30 AM

Atharv: +91 87880 84566

Every year we have an Inter hostel swimming competition - The Swimming General Championship, with assorted supporters crying themselves hoarse in support of their hostel mates, irrespective of the level of swimming. It's an ideal platform to flaunt your swimming skills and make your hostel proud!

Event lists

Swimming GC Rules

Records

Following

Figure 88: Add new event page accessed from fig. 84

Figure 89: Add new event page with filled text fields

Figure 90: Event page once created

Flow 2: Going live

9:41

Live Score

Sport*

Choose

Event*

Choose

Stage*

Choose

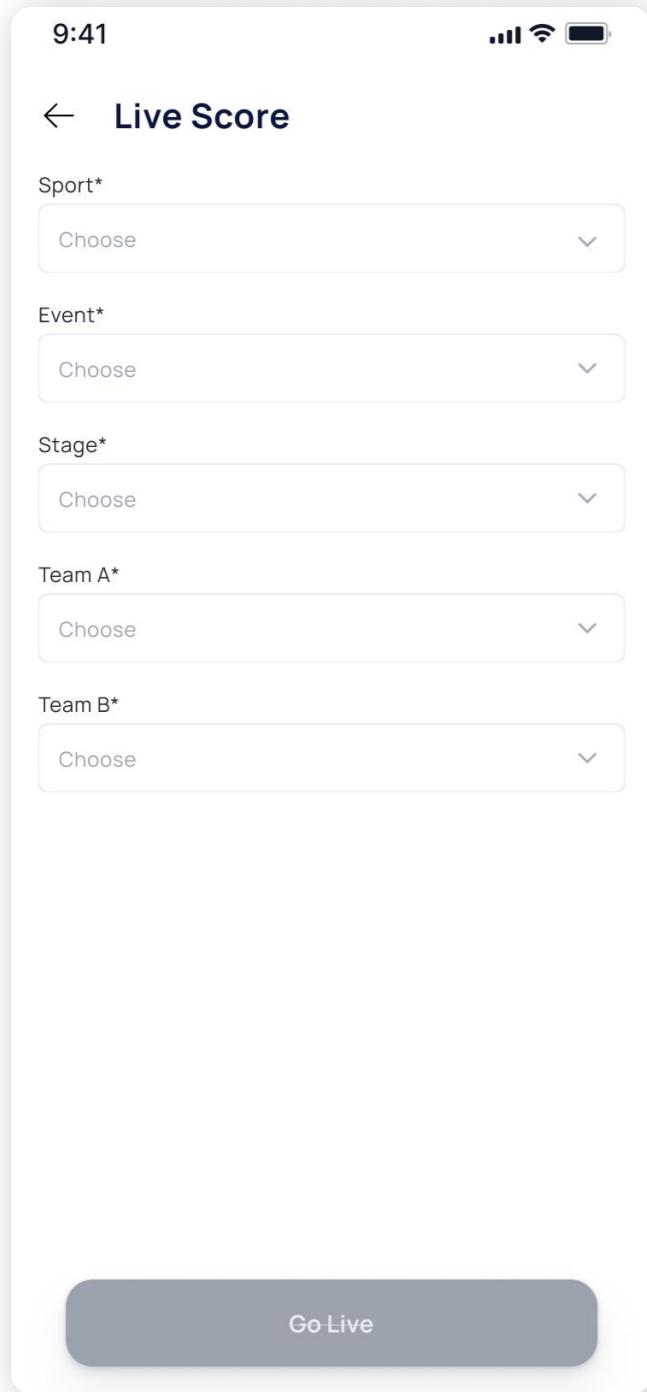
Team A*

Choose

Team B*

Choose

Go-Live



9:41

Live Score

Live

Hostel 2

0

Add Information

1

Hostel 5

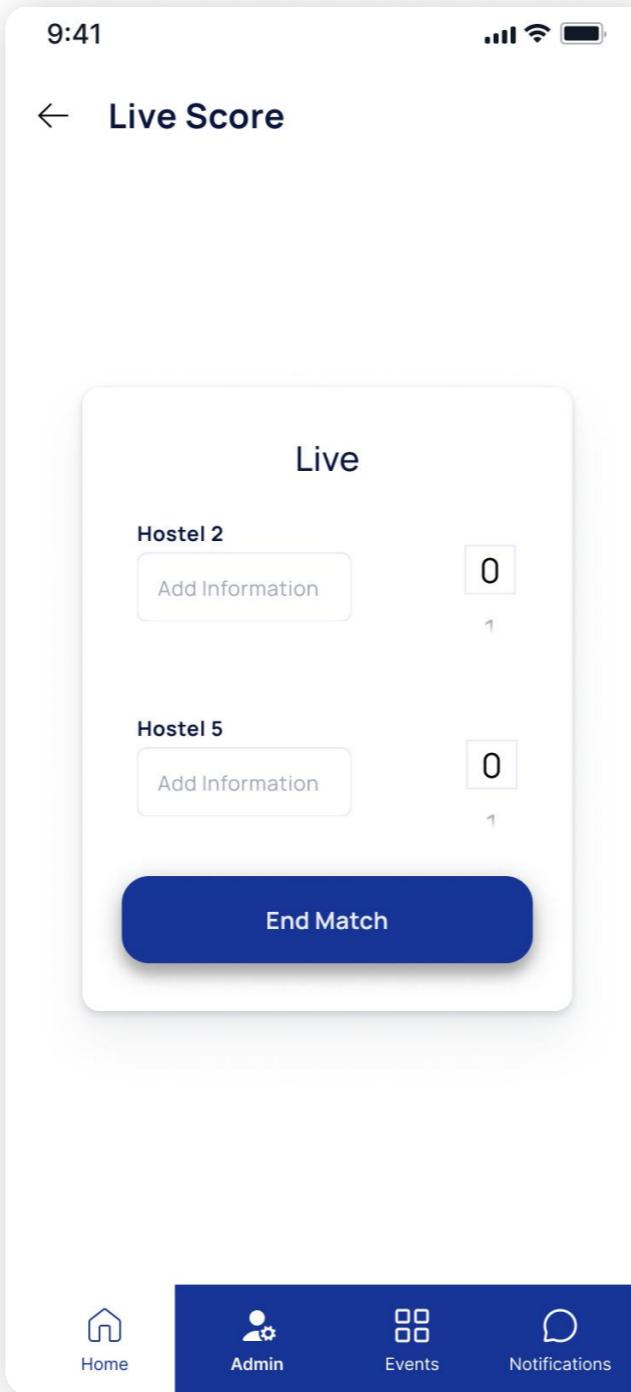
0

Add Information

1

End Match

Home Admin Events Notifications



9:41

Live Score

Sport*

Swimming

Event*

Swimming GC

Stage*

Day 3

Team A*

Hostel 2

Final Score*

14

Team A*

Hostel 2

Final Score*

11

Submit Score

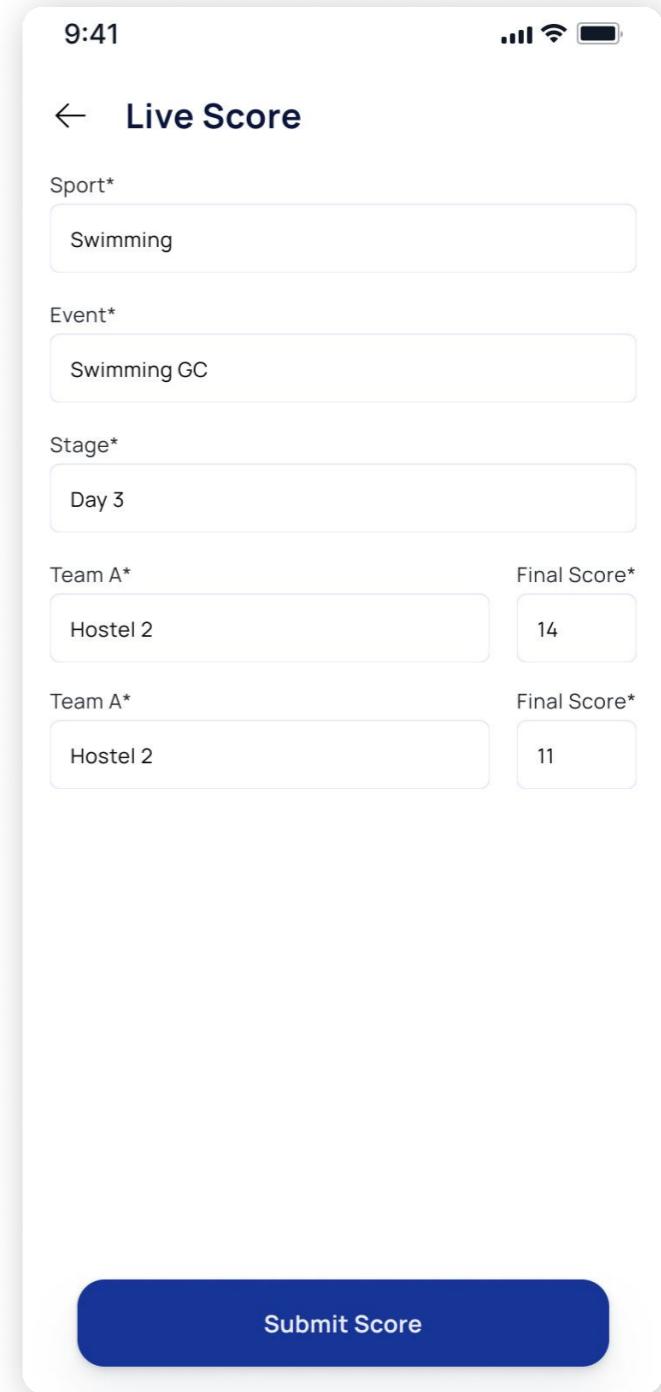


Figure 91: Live Score page accessed from the admin control page as shown in fig. 83

Figure 92: Live scoring page for an ongoing event

Figure 93: Submitting scores for end of day results at the end of a live session

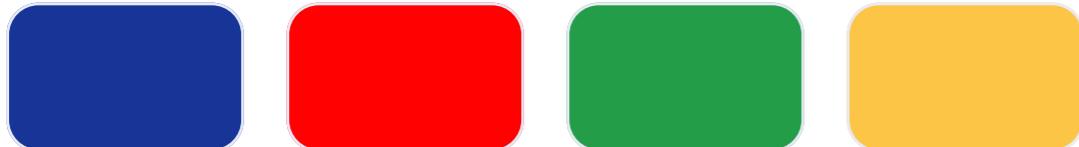
The Design System (WIP)

As the project is being handed over to the Institute Sports Council's tech team, an atomic design system was created. This also allows them to design other new pages in the future as per their requirement. The icons used in this design are from the Phosphor icon pack as it contains a large variety of icons.

Components from the Orbit Design system were used due to their simplicity and high customisation. Changes were then made to the system to create and fit the overall unique aesthetic of the sports App.

We only use a single colour strictly as the primary colour as the platform contains large amount of live imagery

Colours



Primary

#173497
rgb(23, 52, 151)

Alert

#ff0101
rgb(255, 1, 1)

Success

#239d48
rgb(35, 157, 72)

Warning

#fcc546
rgb(252, 197, 70)



blue-50

#e8ebf5
rgb(232, 235, 245)

blue-80

#dce1ef
rgb(220, 225, 239)

blue-100

#b7c0df
rgb(183, 192, 223)

blue-200

#94a2cf
rgb(148, 162, 207)

blue-300

#6477b9
rgb(100, 119, 185)

blue-400

#455dac
rgb(69, 93, 172)

blue-500

#173497
rgb(23, 52, 151)

blue-600

#152f89
rgb(21, 47, 137)

blue-700

#10256b
rgb(16, 37, 107)

blue-800

#0d1d53
rgb(13, 29, 83)

blue-900

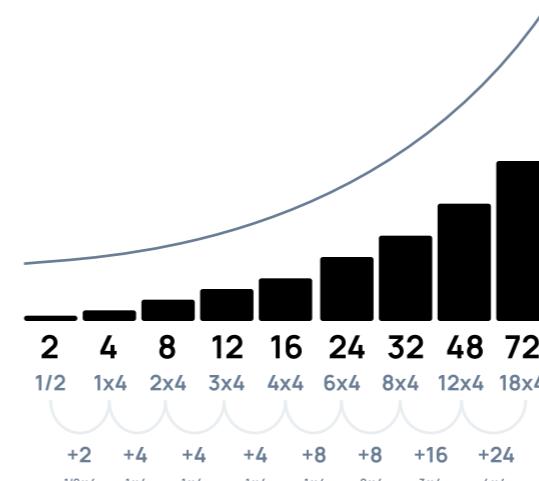
#0a163f
rgb(10, 22, 63)

Typography

Manrope

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm
Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz
1234567890!@#\$%^&*()

Spacings



Evaluation Plan

In the interest of time, I shall be attempting to evaluate the project by conducting cognitive walk throughs and task based testing. This shall be conducted using a figma prototype. I am also sharing the project with two IDC alumni for an expert review.

Limitations

Due to the project time constraints, a decision was made to focus on the primary user and an admin user for the functionality of the app as the app would not function without the admin user. With the design system created, the app can be further developed for other users such as hostel council members, Alumni as well as a guest login. We intended to develop the app for each of these user, but being immersed in the iterative design process of developing the app for primary user, we scope the project down to designing for the Primary and Admin user only.

At present, the Institute sports council has small team of 3 students who are responsible for developing the app. This limits the functions that the app can provide, one of which being equipment management. Similarly, developing a WebApp was discourage as it would require developing responsive pages for different screen sizes.

This project was limited to the development of the platform. However to truly enhance the experience of players, several physical interventions are required. Such interventions were discouraged due to the monetary limits.

Reflections & Learnings

This project has been a significant learning experience, allowing me to apply the knowledge and skills acquired over the past two years in a practical setting. Transitioning from primarily research-oriented projects to designing an application was challenging, particularly in translating features into functional screens. This shift required me to familiarise myself with various resources, plugins, and UX design terminologies.

Throughout the project, I eagerly delved into new concepts, which sometimes led to over-researching. The novelty of this project made decision-making regarding app navigation and user flow particularly difficult. Understanding and applying different UX principles was a continual challenge.

The personal attachment towards the IIT Bombay sports community, sometimes hindered progress, as I aimed to address every conceivable issue within the community. This inclination made it difficult to scope the project effectively, as I continually sought to enhance and refine various aspects.

To gain a deeper understanding of the user experience, I actively visited sports courts and participated in unfamiliar sports. This hands-on approach provided valuable insights into the challenges faced by new players and enriched my overall understanding of the project's context.

In conclusion, this project greatly enhanced my technical and design skills, providing me with practical experience in translating user needs into functional app features. It underscored the importance of adaptability and continuous learning, allowing me to explore new aspects of UX design. The experience was both challenging and rewarding, equipping me with valuable insights and skills for future endeavours.

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