

# IMLeagues at IUB Redesign

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**About**

Welcome to the Indiana University - Bloomington IM Leagues Homepage

For live weather updates, please view the rainoutline.com information below:

**Rainout Line** (812) 296-4100

- Woodburn Tennis Courts
- Woodburn Fields
- CDC - Located on the east side

**SPORT RULES & HANDBOOK**   **HOW TO REGISTER**   **Questions? Email Us! IMSPORT@INDIANA.EDU**

**Bracket Challenge**

**Active Sports** View • Post Sports

**Spring 2021**

Sport	Registration	Season
<b>Badminton (Singles Only)</b>		
043 SRSC: MS1 – Friday 4/2	Closed Mar 25 12:01AM – Apr 2 9:00PM Apr 02 – Apr Join Teams Until: 04/02/21 Midnight 02	
053 SRSC: MS1 – Saturday 4/3	Closed Mar 25 12:01AM – Apr 3 8:00PM Apr 03 – Apr Join Teams Until: 04/03/21 Midnight 03	
10.) Fieldhouse: Gym 163 – Friday 4/2	Closed Mar 25 12:01AM – Apr 2 9:00PM Apr 02 – Apr Join Teams Until: 04/02/21 Midnight 02	
01.) SRSC: MS1 – Monday 4/5	Open Apr 1 12:01AM – Apr 5 2:00PM Apr 05 – Apr Join Teams Until: 04/05/21 Midnight 05	
02.) SRSC: MS1 – Tuesday 4/6	Open Apr 1 12:01AM – Apr 6 2:00PM Apr 06 – Apr Join Teams Until: 04/06/21 Midnight 06	
03.) SRSC: MS1 – Thursday 4/8	Open Apr 1 12:01AM – Apr 8 2:00PM Apr 08 – Apr Join Teams Until: 04/08/21 Midnight 08	
04.) SRSC: MS1 – Friday 4/9	Open Apr 1 12:01AM – Apr 9 9:00PM Apr 09 – Apr Join Teams Until: 04/09/21 Midnight 09	
05.) SRSC: MS1 – Saturday 4/10	Open Apr 1 12:01AM – Apr 10 8:00PM Apr 10 – Apr 10 Join Teams Until: 04/10/21 Midnight	
06.) Fieldhouse: Gym 163 – Monday 4/5	Open Apr 1 12:01AM – Apr 5 9:00PM Apr 05 – Apr Join Teams Until: 04/05/21 Midnight 05	
07.) Fieldhouse: Gym 163 – Tuesday 4/6	Open Apr 1 12:01AM – Apr 6 9:00PM Apr 06 – Apr Join Teams Until: 04/06/21 Midnight 06	
08.) Fieldhouse: Gym 163 – Wednesday 4/7	Open Apr 1 12:01AM – Apr 7 9:00PM Apr 07 – Apr Join Teams Until: 04/07/21 Midnight 07	
09.) Fieldhouse: Gym 163 – Thursday 4/8	Open Apr 1 12:01AM – Apr 8 9:00PM Apr 08 – Apr Join Teams Until: 04/08/21 Midnight 08	
10.) Fieldhouse: Gym 163 –	Open Apr 1 12:01AM – Apr 9 9:00PM Apr 09 – Apr	

Homepage

## Spring 2021



### Badminton (Singles Only)

	Registration	Season
04.) SRSC: MS1 – Friday 4/2	Closed Mar 25 12:01AM – Apr 2 9:00PM Apr 02 – Apr Join Teams Until: 04/02/21 Midnight 02	
05.) SRSC: MS1 – Saturday 4/3	Closed Mar 25 12:01AM – Apr 3 8:00PM Apr 03 – Apr Join Teams Until: 04/03/21 Midnight 03	
10.) Fieldhouse: Gym 163 – Friday 4/2	Closed Mar 25 12:01AM – Apr 2 9:00PM Apr 02 – Apr Join Teams Until: 04/02/21 Midnight 02	
01.) SRSC: MS1 – Monday 4/5	Open Apr 1 12:01AM – Apr 5 2:00PM Apr 05 – Apr Join Teams Until: 04/05/21 Midnight 05	
02.) SRSC: MS1 – Tuesday 4/6	Open Apr 1 12:01AM – Apr 6 2:00PM Apr 06 – Apr Join Teams Until: 04/06/21 Midnight 06	
03.) SRSC: MS1 – Thursday 4/8	Open Apr 1 12:01AM – Apr 8 2:00PM Apr 08 – Apr Join Teams Until: 04/08/21 Midnight 08	
04.) SRSC: MS1 – Friday 4/9	Open Apr 1 12:01AM – Apr 9 9:00PM Apr 09 – Apr Join Teams Until: 04/09/21 Midnight 09	
05.) SRSC: MS1 – Saturday 4/10	Open Apr 1 12:01AM – Apr 10 8:00PM Apr 10 – Apr 10 Join Teams Until: 04/10/21 Midnight	
06.) Fieldhouse: Gym 163 – Monday 4/5	Open Apr 1 12:01AM – Apr 5 9:00PM Apr 05 – Apr Join Teams Until: 04/05/21 Midnight 05	
07.) Fieldhouse: Gym 163 – Tuesday 4/6	Open Apr 1 12:01AM – Apr 6 9:00PM Apr 06 – Apr Join Teams Until: 04/06/21 Midnight 06	
08.) Fieldhouse: Gym 163 – Wednesday 4/7	Open Apr 1 12:01AM – Apr 7 9:00PM Apr 07 – Apr Join Teams Until: 04/07/21 Midnight 07	
09.) Fieldhouse: Gym 163 – Thursday 4/8	Open Apr 1 12:01AM – Apr 8 9:00PM Apr 08 – Apr Join Teams Until: 04/08/21 Midnight 08	
10.) Fieldhouse: Gym 163 –	Open Apr 1 12:01AM – Apr 9 9:00PM Apr 09 – Apr	

Homepage - sports section

**Indiana University - Bloomington**

05.) SRSC: MS1 - Saturday 4/10  
Intramurals / Badminton (Singles Only) - / 05.) SRSC: MS1 - Saturday 4/10

Home | Indiana University - Bloomington | Search for Anything | Ying | Signup

**League Info**

- Regular Season: Apr 10<sup>th</sup> 21 - Apr 10<sup>th</sup> 21
- Team Registration: Starts Apr 10<sup>th</sup> 21 at 12:01AM  
Ends Apr 10<sup>th</sup> 21 at 8:03PM
- Join Teams: Until Apr 10<sup>th</sup> 21 at 11:59PM
- Players: Max: Max: 1

**01) 4:00pm Ct. 1**

TEAM	W-L-T	F/D	PTS	AVG	SR
No Teams					

[Full Standings >](#)

**02) 4:00pm Ct. 3**

TEAM	W-L-T	F/D	PTS	AVG	SR
Zitai Wang	0-0-0	0/0	0	0	

[Full Standings >](#)

**03) 5:00pm Ct. 1**

TEAM	W-L-T	F/D	PTS	AVG	SR
No Teams					

[Full Standings >](#)

**04) 5:00pm Ct. 3**

TEAM	W-L-T	F/D	PTS	AVG	SR
GPC	0-0-0	0/0	0	0	

I got my shot. You?

[Full Standings >](#)

**05) 6:00pm Ct. 1**

TEAM	W-L-T	F/D	PTS	AVG	SR
No Teams					

[Full Standings >](#)

**06) 6:00pm Ct. 3**

TEAM	W-L-T	F/D	PTS	AVG	SR
No Teams					

[Full Standings >](#)

**07) 7:00pm Ct. 1**

TEAM	W-L-T	F/D	PTS	AVG	SR
No Teams					

[Full Standings >](#)

**Announcements**

Nothing posted yet...

**01) 4:00pm Ct. 1** 0 of 2 Teams (Unlocked)

+ Signup | Join As Free Agent

No Teams Yet.

**02) 4:00pm Ct. 3** 2 of 2 Teams (Locked)

+ Signup | Join As Free Agent

Roster	Status	Free Agents Wanted
Zitai Wang Zitai Wang	1 1M - 0F	Approved No
Gloria Gloria Guo	1 0M - 1F	Approved No

**03) 5:00pm Ct. 1** 0 of 2 Teams (Unlocked)

+ Signup | Join As Free Agent

No Teams Yet.

**04) 5:00pm Ct. 3** 2 of 2 Teams (Locked)

+ Signup | Join As Free Agent

Roster	Status	Free Agents Wanted
Zitai Wang Zitai Wang	1 1M - 0F	Approved No
Gloria Gloria Guo	1 0M - 1F	Approved No

**05) 6:00pm Ct. 1** 0 of 2 Teams (Unlocked)

+ Signup | Join As Free Agent

No Teams Yet.

**01) 4:00pm Ct. 1** 0 of 2 Teams (Unlocked)

+ Signup | Join As Free Agent

No Teams Yet.

**02) 4:00pm Ct. 3** 2 of 2 Teams (Locked)

+ Signup | Join As Free Agent

Roster	Status	Free Agents Wanted
Zitai Wang Zitai Wang	1 1M - 0F	Approved No
Gloria Gloria Guo	1 0M - 1F	Approved No

**03) 5:00pm Ct. 1** 0 of 2 Teams (Unlocked)

+ Signup | Join As Free Agent

No Teams Yet.

Slot page

Slot page - slot section

# Project Summary

Option 1 - Evaluate and iterate the **registration process** of Indiana University Bloomington's intramural league website (IUB IM Leagues).

Purposes of IUB IM Leagues:

- Students at Indiana University can use this site to **reserve spaces** available in various buildings around the IU campus to play various sports: including basketball, badminton, and table tennis.
- **Other online activities** are also available for registration, such as video game tournaments.
- Additionally, users can **access schedules and handbooks** that contain rules for every organized support the website offers for signup.

Motivations:

- IU affiliated
- Only way to reserve court space
- Personal bad experience

# Heuristic Evaluation

Before testing the site with users, we decided to do a heuristic evaluation to compare various aspects of the website with tried and tested principles.

What we observe about the site's visibility of system status, user control, consistency, flexibility, aesthetic, and more gave us an idea of the tasks we wanted to assign to our interviewees.

Our key takeaways were:

## Home Page:

- Home page is not very concise, very cluttered with open space on the sides
- Users may have to do more scrolling than is necessary to view the options

## Registration Process:

- You are able to sign up for times that have already passed
- Cancelling a registration is strangely difficult, option is somewhat hidden

## Overall Aesthetic:

- Some icons used are not relevant (ie: do not match the sport)
- Buttons do not fit the color scheme of the website

# 3 Participants

We evaluated our design with students at Indiana University, as the website's purpose is to allow students to reserve court spaces across campus.

Specifically, we planned to evaluate our design with **students of IU who are unfamiliar with the registration process** on the website.

## Participant 1

Female

IU student

Never used the website before

## Participant 2

Male

IU student

Used the website once

## Participant 3

Male

IU student

Never used the website before

# User Interviews/Observations

We asked our 3 participants to complete a series of tasks on the website that might represent what a typical user would hope to accomplish when attempting to register for an event.

Our main tasks included:

- **Make a reservation for any sport/event of their preference**
- **Close the webpage, navigate back to the site to check the reservation they just made**
- **Cancel the reservation**

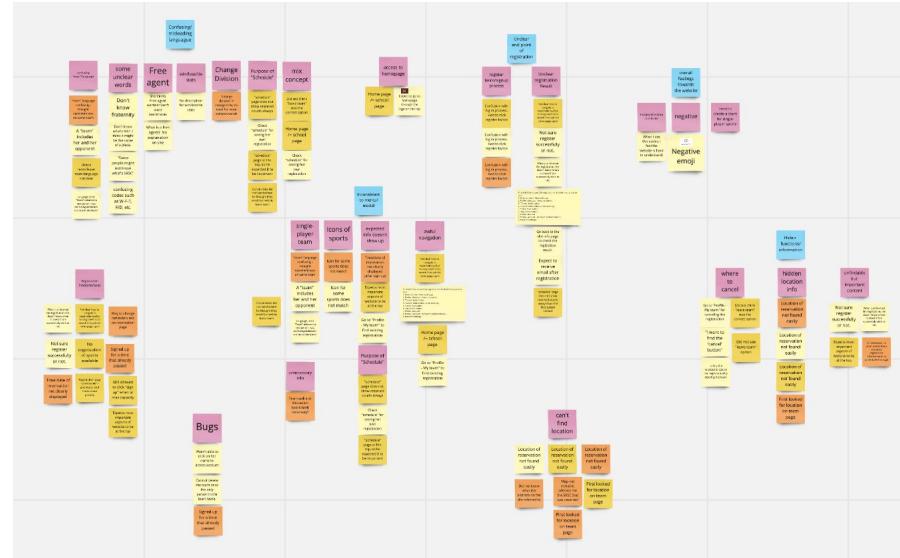
Additionally, we asked testers to find information about their reservation, including:

- Finding the address of the building/court you reserved
- Find information about your opponent/person you are scheduled to play with

During this process, we encouraged our testers to **think aloud** and talk through the decisions they made, as well as voice their opinions as they walked through the site

# Analyzing the data

- We created an **affinity diagram** with sticky notes of different colors to represent problems/comments our participants had.
- We grouped our notes to find hidden connections of users' comments, and established a few themes that can lead us to what we want to emphasize in our redesign.
  - These include confusing language, inconsistencies with their mental model, unclear end point of registration, and struggles with hidden information.



# Themes:

## **Confusing language**

There are lots of words or phrases that often confused or misled users, such as Free Agent and “Change Division.”

## **Inconsistencies with their mental model**

This includes logos/pictures that are inconsistent to the text, or buttons leading users to unexpected pages, etc.

## **Unclear Registration Status**

When finished with the registration, users did not see a result page that clearly imply the ending of the process. Additionally, there were problems with starting the process as well.

## **Struggle with hidden information**

Users took time to find the place of canceling registrations and find the locations of the activities.

# Theme 1: Confusing Language

Some language used on the site was confusing to our testers, particularly the use of the word “team” when referring to individual players as well as various abbreviations.

- Captain
- ⚙ Team Settings
- ✉ Invite Members
- 👤 Available Free Agents (0)
- ➡ Change Division

Various functions on the website are needlessly named in ways that do not convey their purpose. It is not obvious what “change division” is when it actually is just the option to change the date/time of your reservation

## SRSC: MS1 - Saturday 4/3

There is no explanation for what “MS1” stands for. Users unfamiliar with the SRSC building don’t have any idea what this means

Free  
Agents  
Wanted

Yes

Yes

*“What does free agent mean?” (Tester)*

There is no explanation for what a “free agent” entails on the website. This causes confusion for users when prompted if they want to set an option for others to see if they do want a free agent

# Recommendation 1 - Clear Language

## **Less abbreviations**

Information regarding locations should be displayed in its entirety without abbreviations. This way, athletes will be able to easily find the building and room they signed up for. Ideally, this information will be easily able to find on the registration page.

## **Language on buttons should clearly explain its purpose**

“Change Division” is needlessly confusing and doesn’t explain to the user what it’s purpose it. This and other buttons like it should be replaced with language that conveys the function’s purpose.

## **Add explanations when necessary**

Adding a simple information icon that gives more context when hovered over is an easy way to provide more information to users about the contents of the website without being intrusive

# Theme 2: Inconsistencies with Users' Mental Model

In our testings, some contents, elements and interactions didn't meet users' expectations. They were led to an unwanted page, couldn't find a button in the place where it should be, or saw something they didn't expect.

The screenshot shows a user interface for managing a team. At the top, there's a dark header bar with the text "01) 5:00pm Ct. 1 2 of 2 Teams Locked". Below this, there are two buttons: "+ Signup" and "Join As Free Agent". The main area displays a table with two rows, each representing a player. The columns are labeled "Roster", "Status", and "Free Agents Wanted". The first row is for "Alpha" (Sanket Panditwar), who is listed as "Approved" with 1M - 0F. The second row is for "Friyay" (Manuja Bandal), also listed as "Approved" with 1M - 0F. Each row has a "Join Team" button.

Roster	Status	Free Agents Wanted
Alpha Sanket Panditwar	1M - 0F Approved	No
Friyay Manuja Bandal	1M - 0F Approved	No

## Create a team for individual sport

When signing up for individual sports, referring to each individual player as a “team” throws people off. During Covid, the flaw of ignoring single-player sports/games in the system are more obvious than normal times.

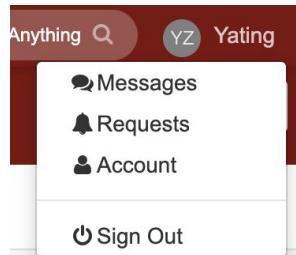
*“I thought [opponent] was on my team at first.” (Tester)*



## Didn't go home by pressing HOME button

Testers clicked the “home” button expecting to go to the page that “Indiana University— Bloomington” takes you to.

# Theme 2: Inconsistencies with User's Mental Model



## No MY REGISTRATION in profile

Testers went to their profile, expecting to see their registrations. But on the current website, they can only achieve it by clicking the HOME button, or go to their ACCOUNT page and then press MY TEAM, which is inconsistent to their expectations.



## Table Tennis (Singles Only)

06.) SRSC: RB Courts – Frida

4/2

07.) SRSC: RB Courts –

## Unmatched images

Testers expected to see images corresponding to each of the sports. But some images do not match the sport they're next to.

# Recommendation 2 - Meet User Expectations

## **Remove “team” language**

Remove “team” language and replace it with words that signify individual people when referring to certain sports (badminton and table tennis singles).

## **Show expected content**

Show REGISTRATION information in profile, show options of sports in a more obvious spot of homepage, and show registration results in an obvious way.

## **Jump to expected page**

When users click HOME or logo, they go back to the homepage, instead of their account page

# Theme 3: Unclear Registration Status

Our testers had problems with various points of the registration process, particularly confirming and finding their reservation after making one. The process for logging in proved to be confusing for them as well.

Logging in during the registration process requires you to **start over** from the beginning:

*“I thought I had clicked to sign up for a team, but it appears that I didn’t, but I did log in.”* (Tester)

The screenshot shows a registration interface. On the left, there's a sidebar with 'Regular Season Dates' (Apr 6th '21 - Apr 6th '21), 'Join Teams' (Until: Apr 6th '21 at Midnight), and a 'Roster' section indicating 'Required: 1 Total: 1'. Below this is a section for '01) 11:00am Ct.1' with a table for 'TEAM' (z), 'W-L-T' (0-0-0), 'F/D' (0/0), 'PTS AVG' (0), and 'SR' (0). A 'Full Standings >' link is at the bottom. The main content area has a header 'About z' with a note 'Nothing posted yet...' and an 'Edit' button. Below it is a 'Overall 02.) SRSC: MS1 - Tuesday 4/6 Rankings' section with tables for 'POINTS PER GAME' (0), 'POINTS AGAINST' (0), 'STREAK' (---), and 'TOP PLAYER' (No MVP). There are tabs for 'Overall' under each category. At the bottom, there are sections for 'Roster: 1M/OF (1 Players Max)' with an 'Invite' button, 'T-Shirts' with a 'Custom Team T-shirts' link, and a discount offer for 'Use discount code "10mleagues2020" at checkout for a \$10 discount'.

This is the existing registration information page. Our testers could not tell if they had finished making a reservation as this page doesn't show relevant content

Once registered, it can be confusing to find and/or confirm your reservation:

*Multiple testers could not find the page listing their reservation, and had to take unnecessary steps to confirm they had registered*

# Recommendation 3 - Clear Registration Status

## **Have Students sign in right away**

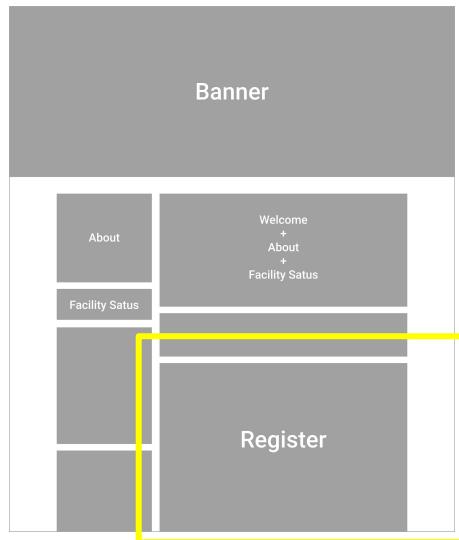
When prompted to sign in to their IU account after picking a specific reservation time, the site takes them to their account page instead of continuing the registration process where it was left off, so students have to repeat that process. Creating a landing page where students can sign in as the first thing they do when they reach the site can solve this problem.

## **Confirmation info should be more obvious**

The current page a user sees after they register for a time slot does not clearly indicate to the user that they have successfully registered. A small message appears on the top right corner with dialogue confirming the reservation, but the page itself does not clearly show all the relevant information that a user might want to see.

# Theme 4: Struggles with Hidden Information

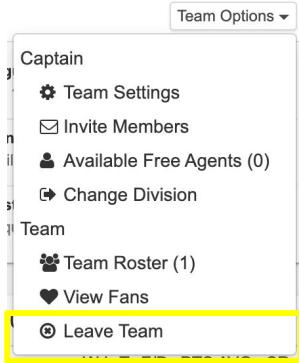
Some important functions and information are too hidden to be found by testers. They took time to realize where they were, and some couldn't find them at all.



Information Structure of Homepage

**Important Section Hidden**  
REGISTER, as a relatively important section of this website, is placed far down the page. Some testers were distracted by upper contents and didn't expect an important section down there.

# Theme 4: Struggles with Hidden Information



## Hidden Cancel Button

The button for users to cancel their registration (Leave Team) is shown after clicking 'Team Options' button. But the 'Team Options' button is also unnoticeable since it's a small colorless button being placed on a content saturated page.



## Hidden Address Info

People need to scroll down to the bottom of the page to find address info, and even then that address is not clear as to what it refers to.

# Recommendation 4 - Explicit Functions and Info

## Prioritize Important Content

Adjust the layout of the homepage to make sure users can easily see the important REGISTER section at first glance.

## Findable Address Info

Make the address info stand out more by adjust the positions of location info, and adding “location” tags besides them. If users want to know more, they can click to see the detailed address info in an overlayer.

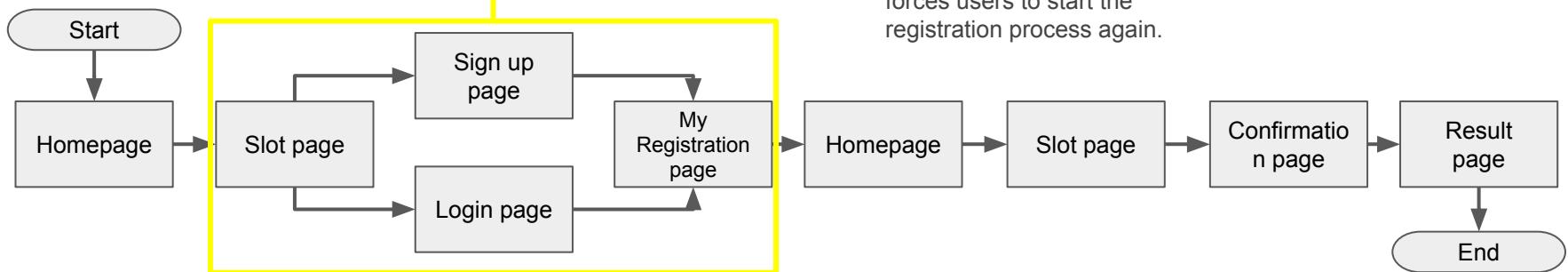
## Explicit Cancel Button

The cancel function should be very easy to find, which means, a CANCEL button can be placed on the top right of the registration information page.

# Design Iteration

# User Flow

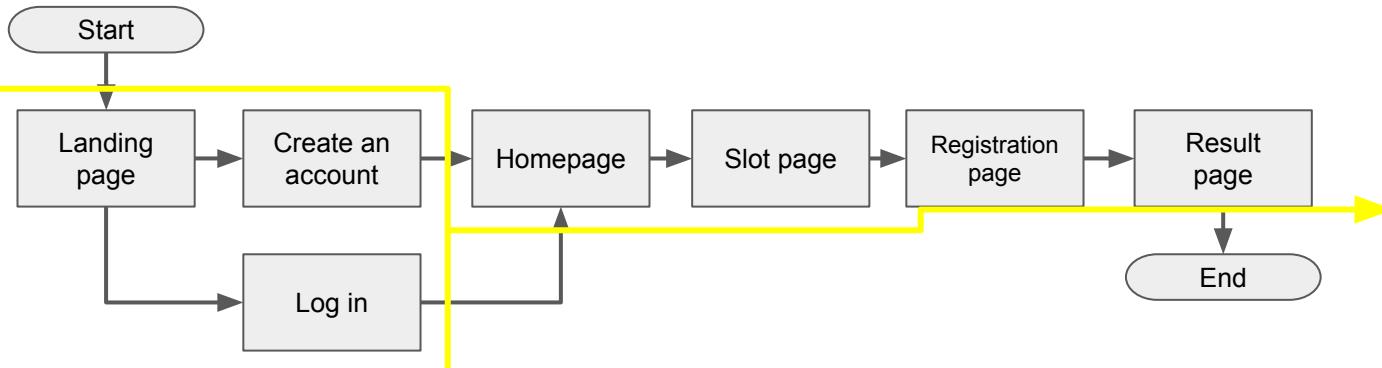
Old:



## Redundant Tasks

If users select a time slot to register for when they are not signed in, they are prompted to. However, after signing in, the website breaks the process and forces users to start the registration process again.

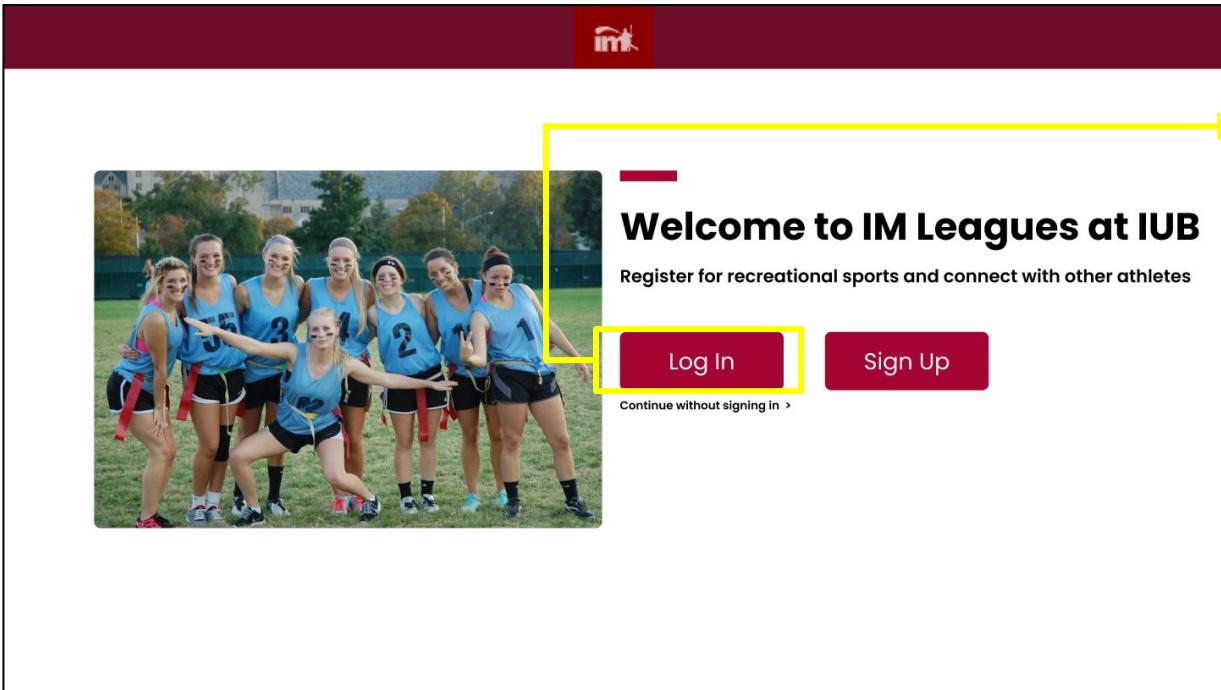
New:



## Creating a landing page

We create a landing page to encourage users to sign up or login at the beginning. So the ones who've already signed up or login won't be confused by the complex page navigation.

# Landing Page



**Welcome to IM Leagues at IUB**

Register for recreational sports and connect with other athletes

[Log In](#) [Sign Up](#)

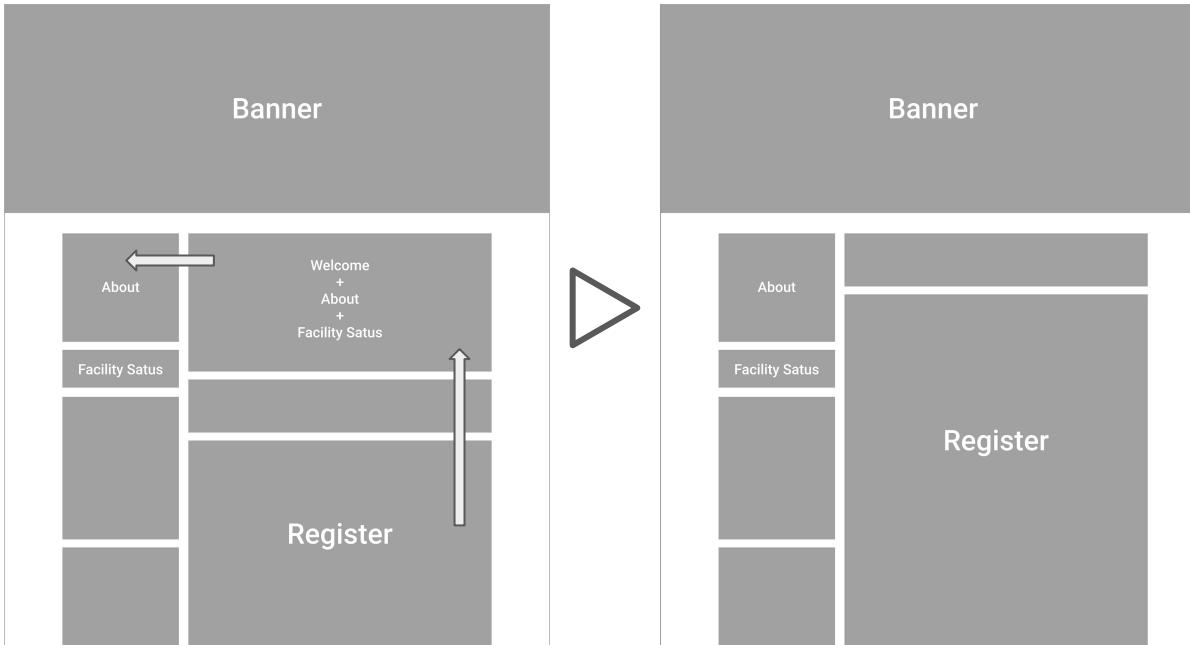
Continue without signing in >

## Logging in First

This is a basic potential landing page for our iteration done in a similar style to Indiana University's homepage. Students can log in here, as opposed to logging in during the registration process and encountering the problems mentioned before.

The “Log In” and “Sign up” options are taken from the existing design, and if users feel pressured to log in when they don’t want to, there is an option to access the site without doing so.

# Homepage



## Prioritize REGISTER Section

Below the BANNER, the most important and attention-getting space is occupied by some redundant contents that are repeating the contents in ABOUT, which is also occupying an important space. Therefore, we combine the two sections right below the BANNER, place it on the left, and then move REGISTER closer to the top.

# Homepage

Sports				
	Badminton (Singles Only)			
	Date ▾	Location ▾ 	Open for registration	Season
Closed	Friday 4/2	Fieldhouse: Gym293	Mar 25 12:01AM - Apr 2 9:00PM	Apr 02 - Apr 02
Closed	Friday 4/2	Fieldhouse: Gym293	Mar 25 12:01AM - Apr 2 9:00PM	Apr 02 - Apr 02
Open	Friday 4/2	SRSC: MS1	Mar 25 12:01AM - Apr 2 9:00PM	Apr 02 - Apr 02
Open	Friday 4/2	SRSC: MS1	Mar 25 12:01AM - Apr 2 9:00PM	Apr 02 - Apr 02
Open	Friday 4/3	Fieldhouse: Gym293	Mar 25 12:01AM - Apr 2 9:00PM	Apr 02 - Apr 02
Open	Friday 4/3	Fieldhouse: Gym293	Mar 25 12:01AM - Apr 2 9:00PM	Apr 02 - Apr 02
<hr/>				
	Sport logo for Self Directed Basketball Shoot Around			
	Date ▾	Location ▾ 	Open for registration	Season
Closed	Friday 4/2	Fieldhouse: Gym293	Mar 25 12:01AM - Apr 2 9:00PM	Apr 02 - Apr 02
Closed	Friday 4/2	Fieldhouse: Gym293	Mar 25 12:01AM - Apr 2 9:00PM	Apr 02 - Apr 02
Open	Friday 4/2	SRSC: MS1	Mar 25 12:01AM - Apr 2 9:00PM	Apr 02 - Apr 02

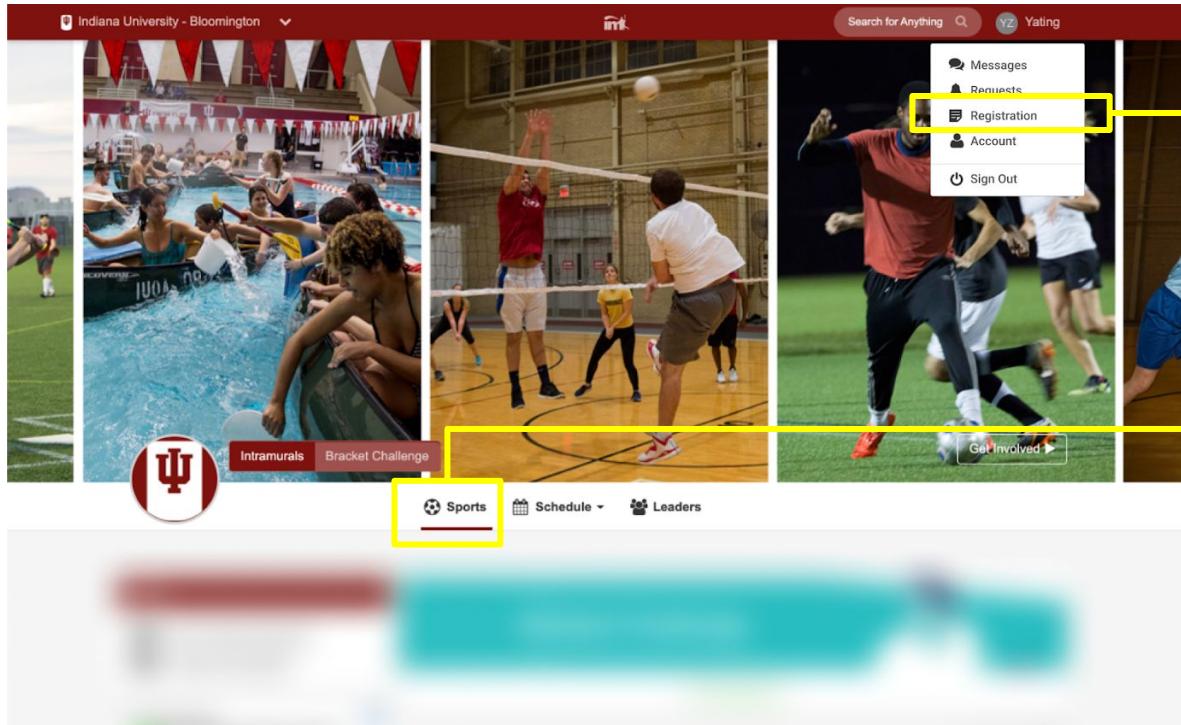
## Search bar

Although users didn't complain about lacking a search engine, adding one may help users quickly locate the sport or game they want to play, so as to speed up the registration process.

## Location column

Creating a LOCATION column helps users understand abbreviated locations, like SRSC or MS1. For those who want to know more, we also offer detailed info for each location after they hover over the information icon.

# Homepage



## Meet User Expectations

Users see their own registrations by hovering over the name.

## Clear Navigation

A horizontal line under SPORT helps users locate themselves.

# Slot-Selecting Page

The screenshot shows a web page for a basketball league. At the top, there's a header with the Indiana University - Bloomington logo, a search bar, and a Yating link. Below the header, the location is listed as "SRSC MS1" and the date as "Saturday 4/10". A yellow box highlights the location information. To the right, a yellow arrow points to the "Clear location" section. The main content area has tabs for "Slots" (which is selected), "Schedule", "Standings", and "League". On the left, there's a sidebar with "League Info" showing a regular season from 04/10/2021 to 04/10/2021. The main area shows a list of slots:

Time	Court	Sign up
4:00pm	Court 1	2/2
Kadin Vetrov Rayna George		Sign up
4:00pm	Court 2	0/2
No people yet		Sign up
4:00pm	Court 3	2/2
Lindsey Workman Allison Levin		Sign up
5:00pm	Court 1	1/2
Andy Wang		Sign up

## Clear location

Make the location info more clear by separating it to the Date and giving it a tag.

## Add filters

Adding filters helps users rapidly locate the slot they want to sign up for, so as to speed up the registration process.

## Remove team concept for individual games

Users don't need to create a team for only one person. Therefore, we removed the original TEAM concept to focus on individuals. Since multiple-player games are all removed during COVID, we designed some INDIVIDUAL registration pages.

# Registration Confirmation Page

The screenshot shows a registration confirmation page for a user named Zain Rajwany. At the top, there's a navigation bar with a profile icon, the name 'Zain Rajwany', and a 'Home' link. Below this is a sidebar with links for 'Regular Season Dates' (Apr 6<sup>th</sup> '21 - Apr 6<sup>th</sup> '21), 'Register' (Until: Apr 6<sup>th</sup> '21 at Midnight), and 'Roster' (Required: 1 Total: 1). The main content area starts with a section for '01) 11:00am Ct.1' showing a team record of 0-0-0 and 0 points. It then moves to 'About Zain Rajwany' which says 'Nothing posted yet...', followed by 'Registration Info' which details the location as 'Student Recreational Sports Center, Multi Sport 1 1601 E Law Ln Court 1 Sunday, April 4th, 11am'. Below this is a 'Players Stats' table:

Player	GP	MVP
Zain Rajwany	0	0
TOTAL	0	0

At the top right of the main content area, there's a 'Options ↓' button with a yellow arrow pointing to it. Below it are two buttons: 'Change Date/Time' and 'Cancel Registration'. A large yellow bracket on the right side of the page groups these three buttons together.

## Remove team language

“Team Options” shortened to just “Options”. “About team” changed to about [user]. Sections such as “Team Wall,” “Poll,” “Roster,” and “Discussion Board” were removed.

## Visible Important Functions

Created buttons for users to be able to delete their reservation or change the date/time. These options were hidden under the “team options” button previously, and were needlessly hard to find. “Change Date/Time” replaced “Change Division” as previously mentioned.

## Displaying Confirmation Information

This section is completely new to the page, and it lists the full name and room of the building in which the reservation is for, with no abbreviations. It also contains the address of the building, and a clearly visible date and time.

# Blockers

- As a relatively complex system for managing registrations instead of a common website only showing informations, a small twist of the existing design can influence lots of sections of the system. The challenge is to always consider the whole picture when making adjustments.
- Some recommendations didn't come from user research. We listed them because they fit our general goals of this project. Showing out-of-nowhere designs hesitate us. Is it ok to design based on our own thoughts instead of only from the data we get?
- How different should the redesign look from the original design? Completely changing the layout might be to broad of a scope for what we can handle, and yet we don't want it to look like as if we did not change too much.

# User Research on Iterated Design

# Methods

We asked 5 participants to complete the same tasks as before in our new designs to be consistent with our first round of testing. We also asked our participants to compare our iteration with the existing design, to gain an understanding of what potential users prefer.

The main goals of this were:

1. Verify whether the new designs achieve our design goals:
  - o Clear Language
  - o Meet User Expectations
  - o Clear registration status
  - o Explicit functions and info
2. Explore improvement space for our new designs
3. Explore more improvement space for the original designs

During this process, we still asked testers to think aloud, but also encouraged them to **elaborate more** on their **expectations** for each page.

# 5 Participants

(3 of them also tested the existing design)

## Participant 1

Female  
IU student  
Never used the website before

## Participant 2

Male  
IU student  
Used the website once

## Participant 3

Male  
IU student  
Never used the website before

## Participant 4

Male  
IU student  
Never used the website before

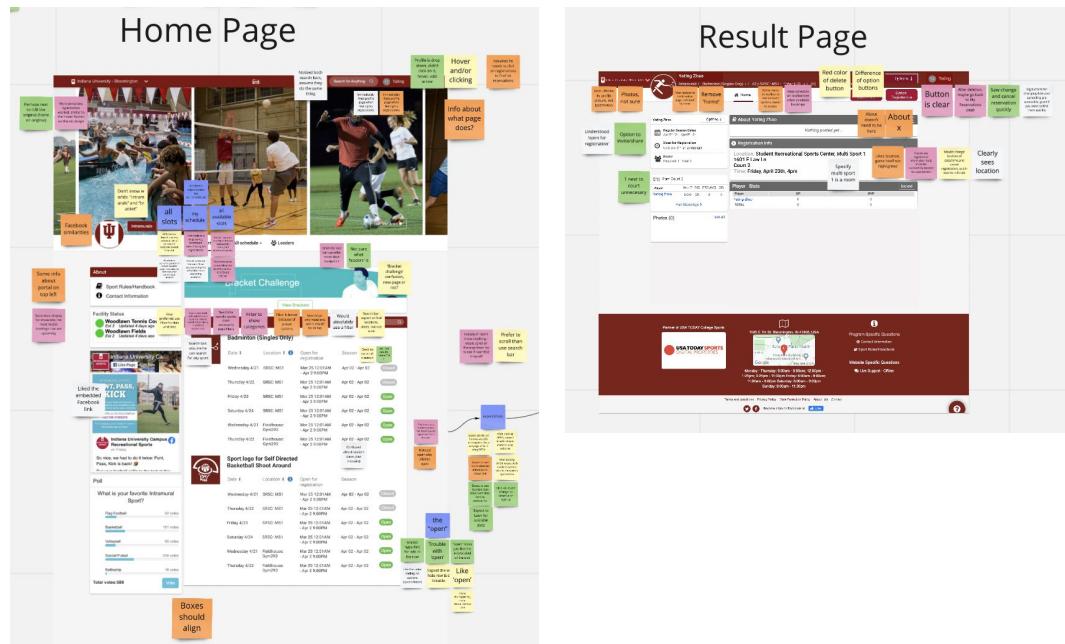
## Participant 5

Male  
IU student  
Never used the website before

# Affinity Diagram

Based on the feedback received from those who tested our first iteration, we created a second affinity diagram with similar color coded notes.

With this method, we can identify the aspects of the page that received the most comments from our testers. This clearly shows us the parts of the website that can be improved in the second iteration.



# Themes (Stage 2):

## Iteration Verification

- Clear information and buttons
- End Point Confirmation
- Expectations were met

## Improvement Space of our Iteration

- “Tag or button” confusion
- Confusing “All Schedule” button
- Mixed feedback about Landing Page
- Confused Result page with Profile page

## Confusing Website Scope

There were instances where our testers were confused about what the website was actually for, as there was no description of the functions of the site.

## Continue to Improve upon the Existing Design

- Expect to cancel or change time in ‘My Registrations’
- Repetitive and unnecessary buttons
- Expect to jump to ‘My Registrations’ page after canceling

# Theme 1: Iteration Verification

While testing our iteration, we wanted to know if the registration process had been made clearer and easier to do, with minimal resistance

## **Clear language**

While testing our first iteration, new users seldom mentioned that they were confused by certain content on the website.

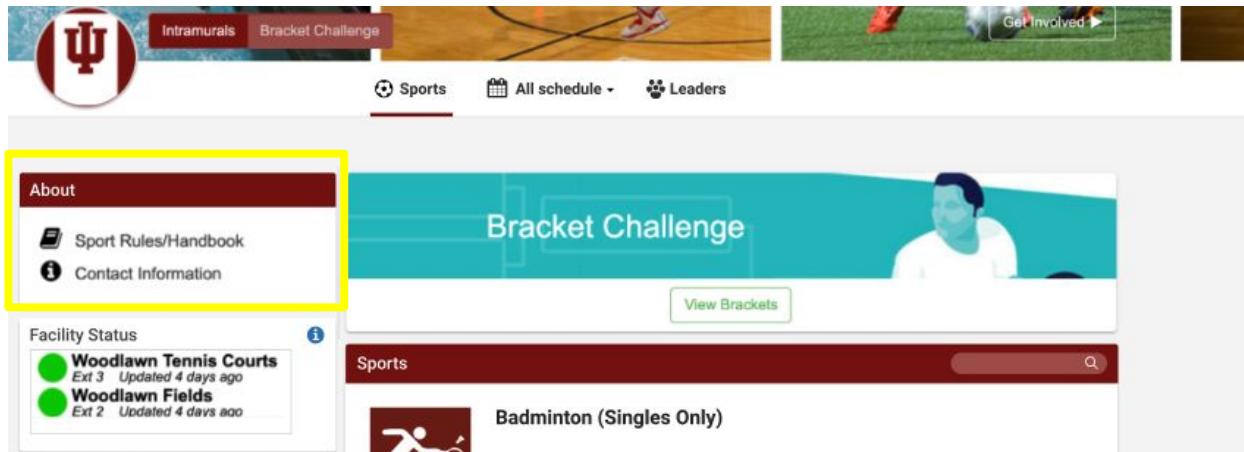
## **End Point Confirmation**

Multiple testers felt confident that they had successfully registered for court space through our iteration, due to the process they had gone through as well as the clear message the confirmation page sent them.

## **Expectations were met**

- Registration info - When clicking on a date/location to register on the home page, users correctly expected to be taken to a more detailed page where they could choose a specific court and time slot to continue their registration process.
- Cancel and change - The option to cancel or change the registration time was expected to be found on the confirmation page, and users felt that it was easy to see and access.

# Theme 2: Confusing Website Scope



*Image taken from the Home Page of our iteration*

We removed the “about” section at the top of the existing design and condensed it into the left side of the page.

However, in doing this we removed some information about what a user can actually achieve on this page.

*“Is there information on what this page does?”*

*“There could be more information about this page on the top left.”*

# Recommendation 2 - Emphasize Website Scope

## **Include a Clear ‘About’ Header**

Include a section on the homepage people can refer to if they need help understanding what they need to do to make a reservation on the site.

## **Possibly Adjust Size/Location of this Header**

We can move this new header to the top left of the website, clearing up space in the middle to users can see open slots easier.

# Theme 3: Improvement Space of Our Iteration

During testing, there were various issues our participants had while trying to complete tasks in our first iteration. Listed below are some of the most common ones.

## “Tag or button” confusion

*“I think the “Open” is just a status, not a button.”*

Friday 4/23

SRSC: MS1

3/25 12:01AM  
- 4/23 9:00PM

4/23 - 4/23

Open

*“There’s no indication that I can click on the whole row.”*

## Confused the Registration Confirmation page with a Profile page

When reaching the page that confirms a reservation that was just made, some users confused this page with a profile page that would list all reservations one has made.

*“Is this my profile page?”*

## Confusing “All Schedule” button

Users did not know what to expect if they pressed this button. One user even thought this was the way to register for court space, as it is on the top of the page above the list of open slots.



Sports



All schedule



Leaders

# Theme 3: Improvement Space of Our Iteration (Cont'd)

## Mixed feedback about Landing Page

The screenshot shows the landing page for IM Leagues at Indiana University. At the top is a dark red header with the 'im' logo. Below it is a white main area. On the left side of the main area is a photograph of a group of female flag football players in blue jerseys with numbers 3, 4, 2, and 1, standing on a grassy field. To the right of the photo, the text 'Welcome to IM Leagues at IUB' is displayed in large, bold, black font. Below that, in smaller text, is 'Register for recreational sports and connect with other athletes'. Underneath this text are two prominent red rectangular buttons: 'Log In' on the left and 'Sign Up' on the right. At the bottom left of the main area, there is a small link: 'Continue without signing in >'. The overall design is clean and modern.

We received mixed feedback about our decision to create a landing page for this site.

“The home page should be the first thing you see.”

“I want to know what the website is first.”

“I don’t see many websites with landing pages these days.”

# Recommendation 3 - Removing Resistances

## Hovering Indications

Keep the tag and make the whole row clickable. Add some indication that shows that a registration slot is open to be clicked on.

## Clear up Confusion about the Confirmation Page

Make the information about the reservation clear to understand, so that users know the confirmation page refers to the reservation they just made.

## Change Location of 'All Schedule'

By changing the location of this button, users won't think it's the way to register for court space. It can also clear up confusion on its purpose.

## Discard Landing Page

While originally designed to fix the login problem, the landing page creates some new problems. It's much easier to simply fix the login problem directly instead of creating a whole new page for it.

# Theme 4: Continue to Improve on Existing Design

Some of the issues our participants had while testing dealt with design choices from the existing design that we did not touch in our first iteration.

## Expect to cancel or change time in ‘My Registrations’ Page



Badminton (Singles Only)  
Time: Friday, April 23rd, 4pm  
Location: SRSC MS1 Court 2  
Joined Date  
Apr 15 2021

No Games Yet! Your next game will show here

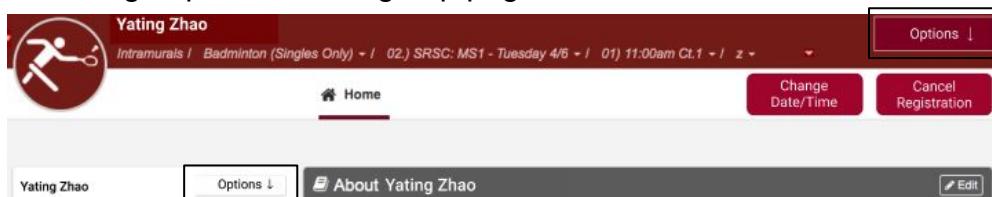
*“The option to cancel or change your registration on this page would be nice.”*

## Expect to jump to ‘My Registrations’ page after canceling

*“I’d expect to be redirected to my account page or an empty registrations page after I cancel.”*

## Repetitive and unnecessary buttons

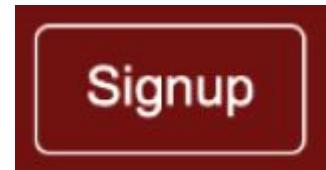
- Two “options” button on one page
- Sign up button on sign up page



Yating Zhao  
Intramurals / Badminton (Singles Only) - / 02.) SRSC: MS1 - Tuesday 4/6 - / 01) 11:00am Ct.1 - / z -  
Options ↓

Home Change Date/Time Cancel Registration Options ↓

Yating Zhao Options ↓ About Yating Zhao Edit



This button is on the page where you select your time slot, making it unnecessary

# Recommendation 4 - Continuing to Improve the Design

## **Adding More Options**

Give the user more ways to cancel or change their registration time - don't just limit it to one page where you can do those things.

## **Adjust Experience to Expectations**

Have users easily be able to tell what page they are on after they complete an action, specifically when they cancel their registration. They should be able to navigate to a page they are familiar with.

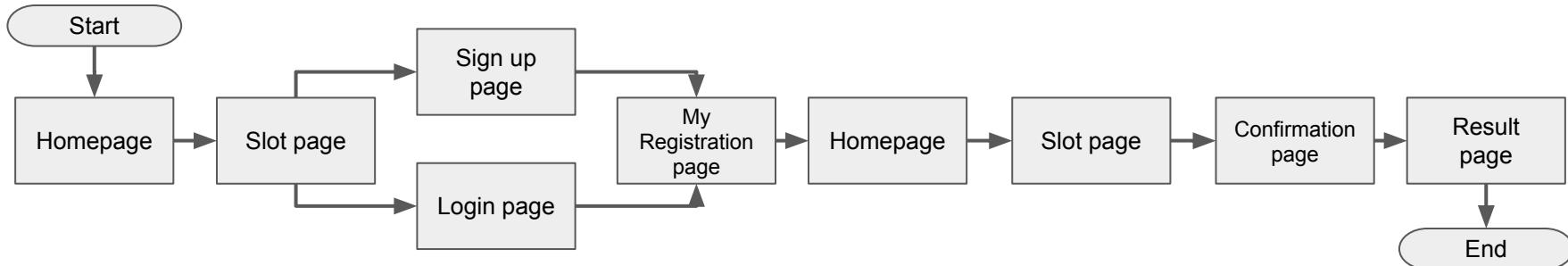
## **Remove Repetitive Content**

There doesn't need to be two buttons that do the same thing on one page (the 'options' button). Additionally, if the user is already on the signup page, there is no need to have a signup button on that page.

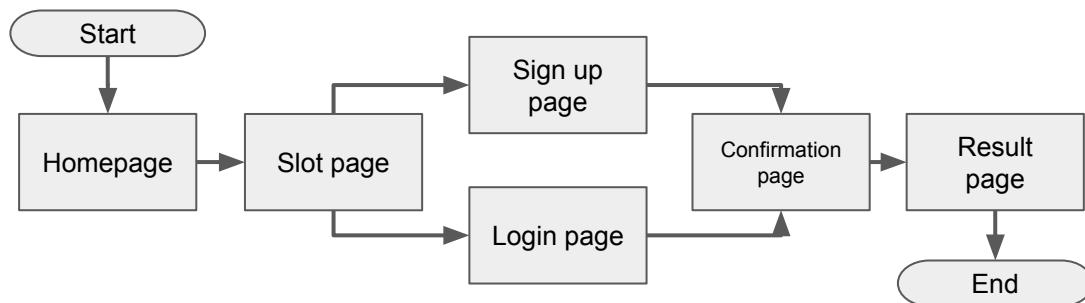
# Design Iteration

# User Flow

Old:



New:



# Structural Information 1

We divided the location information and add tags to different types of information to make it more clear.

**Location:** Student Recreational Sports Center, Multi Sport 1  
1601 E Law Ln  
Court 2  
**Time:** Friday, April 23th, 4pm



**i Registration Info**  
**Building:** Student Recreational Sports Center  
**Address:** 1601 E Law Ln  
**Room:** Multi Sport 1, Court 2  
**Time:** Friday, April 23th, 4pm

*Iteration 1*

*Iteration 2*

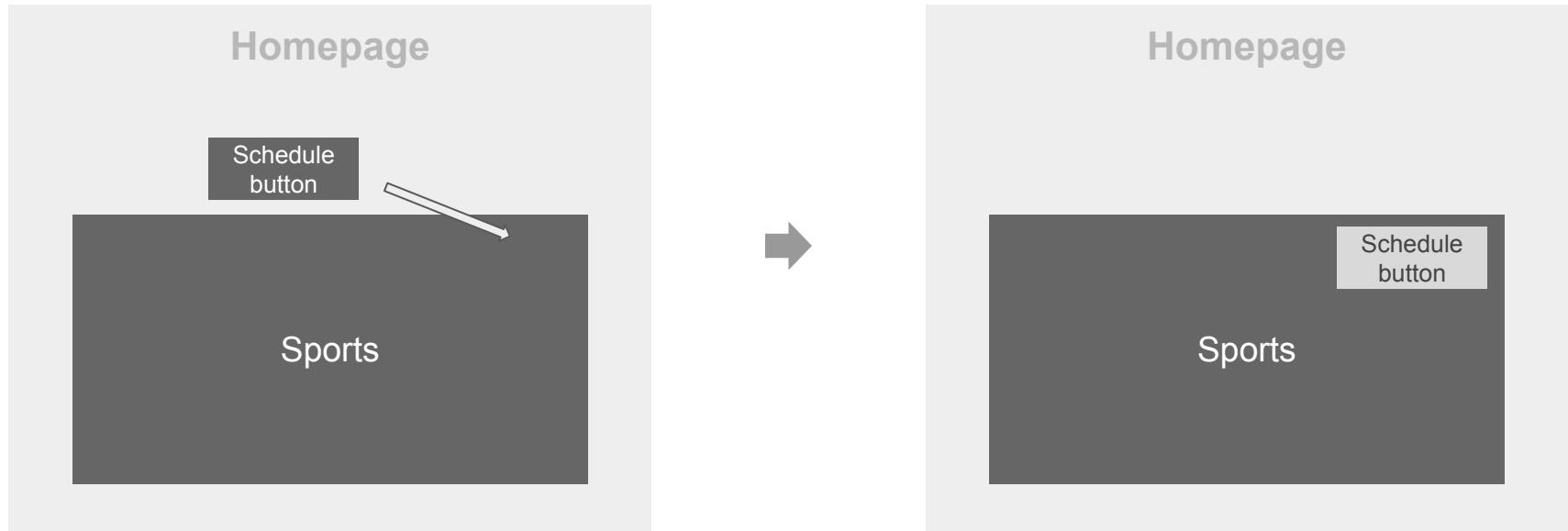
# Structural Information 2

We use “time” as the first element to divide all the slots, and then list courts under each time. This structure can make the whole slot section more clear and understandable.



# Move “schedule” to a proper place

We moved the schedule button to the top right of the sports section, so that it won’t distract people from the main flow of registration. It will also be more clear that it lists all current registrations, not the user’s own schedule.



# Clickable row

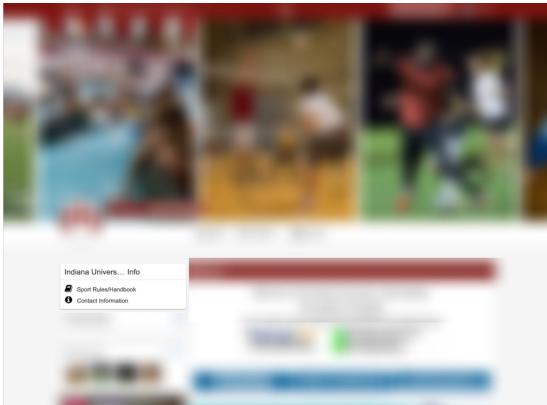
When users move in the cursor, the entire row will turn grey, which implies this whole row is clickable.

Badminton (Singles Only)				
Date	Location	Open for registration	Season	Status
Wednesday 4/21	SRSC: MS1	3/25 12:01AM - 4/21 9:00PM	4/21 - 4/21	Closed
Thursday 4/22	SRSC: MS1	3/25 12:01AM - 4/22 9:00PM	4/22 - 4/22	Closed
Friday 4/23	SRSC: MS1	3/25 12:01AM - 4/23 9:00PM	4/23 - 4/23	Open
Wednesday 4/21	Fieldhouse: Gym293	3/25 12:01AM - 4/21 9:00PM	4/21 - 4/21	Open
Thursday 4/22	Fieldhouse: Gym293	3/25 12:01AM - 4/22 9:00PM	4/22 - 4/22	Open
Friday 4/23	Fieldhouse: Gym293	3/25 12:01AM - 4/23 9:00PM	4/23 - 4/23	Open

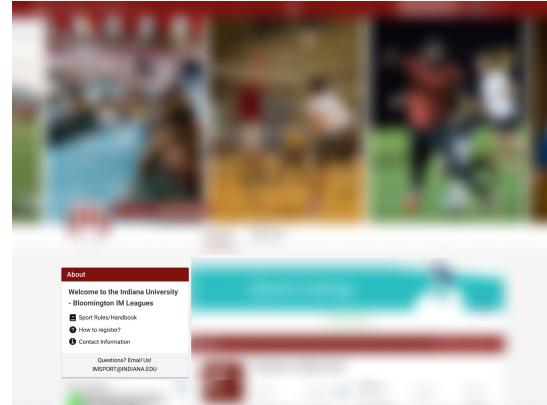
# Emphasize Website Scope

We added a welcome sentence to the About section on the top left of the homepage and made the title red. This way, the scope of website can become more clear.

old



new



## About

Welcome to the Indiana University

- Bloomington IM Leagues

■ Sport Rules/Handbook

? How to register?

i Contact Information

Questions? Email Us!

IMSPORT@INDIANA.EDU

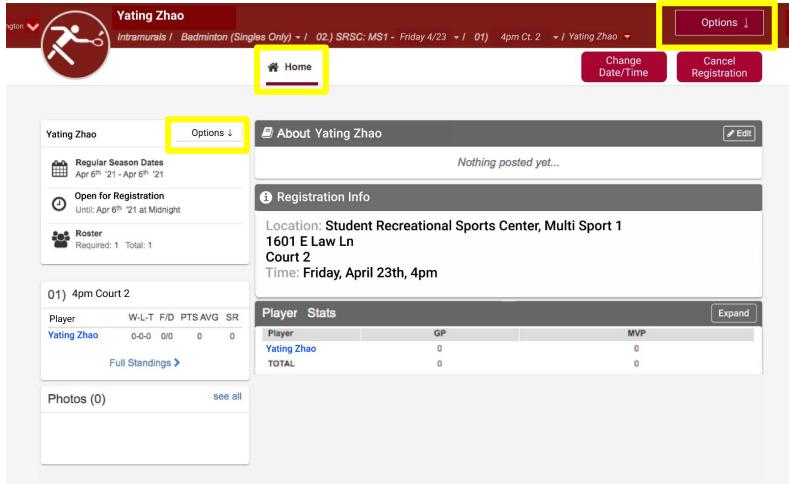
# Result page, not a profile page

We remove elements that made our testers think the result page was a profile page. These elements includes the About Me section on the top and the user's name on the top left.

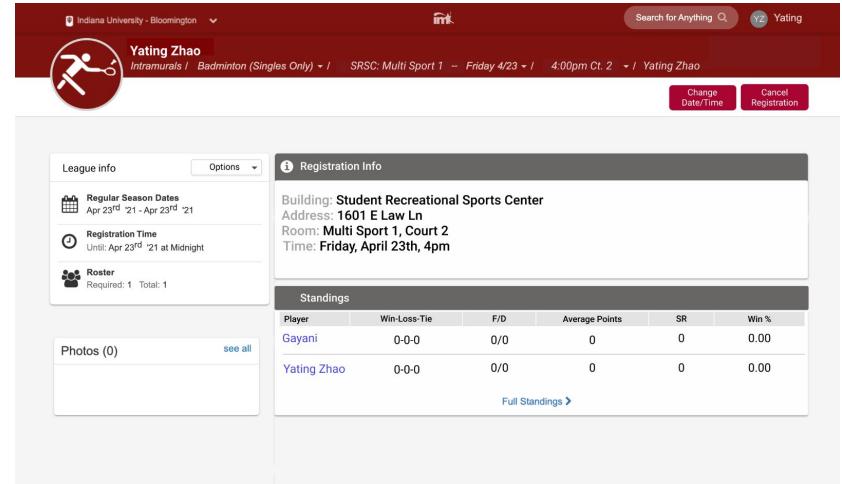
The image displays two versions of a web application interface side-by-side. Both versions have a header bar with the Indiana University - Bloomington logo, a search bar, and a user profile for 'Yating Zhao'. The left version features a 'My name' section in the top-left corner containing player details such as regular season dates (Apr 6<sup>th</sup> '21 - Apr 6<sup>th</sup> '21), open for registration until April 6<sup>th</sup> at midnight, and a roster of one player. Below this is an 'About me' section with registration info (Building: Student Recreational Sports Center, Address: 1601 E Law Ln, Room: Multi Sport 1, Court 2, Time: Friday, April 23rd, 4pm). The right version is identical except it lacks the 'My name' section, leaving only the 'About me' section at the top left. A large yellow arrow points from the 'My name' section in the left screenshot to the 'About me' section in the right screenshot, with the word 'Keep' written above it. Another yellow arrow points from the 'About me' section in the left screenshot to the same section in the right screenshot, with the word 'Remove' written below it. A small gray box at the bottom right of the right screenshot contains the text 'My name' above 'About me'.

# Remove repetitive or unnecessary buttons

We removed repetitive buttons, like the “option” button on this page. We also remove the unnecessary Home button here.



This screenshot shows the original page layout. At the top, there's a navigation bar with a user icon, the name "Yating Zhao", and various links. Below the navigation is a main content area. In the top right of this area, there are three buttons: "Options ↓", "Change Date/Time", and "Cancel Registration". A yellow box highlights the "Home" button in the top left of the content area. The content area itself contains sections for "About Yating Zhao" (with a note "Nothing posted yet..."), "Registration Info" (specifying location, time, and court), and "Player Stats" (showing a table for Yating Zhao). At the bottom, there are links for "Full Standings" and "Photos (0)".



This screenshot shows the simplified page layout. The top navigation bar and content area are identical to the original. However, the main content area now lacks the "Home" button that was present in the first screenshot. The rest of the content, including the "About Yating Zhao", "Registration Info", and "Player Stats" sections, remains the same.

# Overview of our final designs - Homepage

old

The old homepage features a top navigation bar with links for Home, Indiana University - Bloomington, Search for Anything, and Voting. Below this is a grid of three images: a swimmer, a volleyball player, and a soccer player. A large Indiana University logo is centered below the images. The main content area has a red header "Indiana University ... Info" with a "About" link. It includes sections for Sport Rules/Handbook, Contact Information, Facility Status, Photos (18), and a "Bracket Challenge" section with a "View Brackets" button. Below this is a "How to Register" section with a "Sport Rules & Handbook" link and an "IM Leagues Homepage" link. Further down are sections for Active Sports (Spring 2011) and Polls (What is your favorite Intramural Sport?). The footer contains links for Indiana University Campus Recreational Sports and Indiana University Bloomington.

Confusing, Clustered

new

The new homepage follows a similar structure but with a cleaner design. It features a top navigation bar with links for Home, Indiana University - Bloomington, Search for Anything, and Voting. Below this is a grid of three images: a swimmer, a volleyball player, and a soccer player. A large Indiana University logo is centered below the images. The main content area has a red header "About" with a "Welcome to the Indiana University - Bloomington IM Leagues" message. It includes sections for Sport Rules/Handbook, How to register, Contact Information, and a "Bracket Challenge" section with a "View Brackets" button. Below this is a "Sports" section with a "Badminton (Singles Only)" heading and a table of events. The table lists dates, locations, and times for various badminton matches. To the right is a "Basketball Shoot Around" section with a table of events for basketball shoot-around sessions. The footer contains links for Indiana University Campus Recreational Sports and Indiana University Bloomington.

Clear, Simple

# Overview of our final designs - Slot page

old

The old slot page displays five individual game slots (01, 02, 03, 04, 05) for different courts and times. Each slot includes a 'Sign Up' button and a 'Join As Free Agent' button. A 'League Info' sidebar on the left provides details about the regular season, team registration, and player statistics.

**01.) 4:00pm Cl. 1**  
TEAM W-L-T F/D PTS AVG SR  
No Teams  
[Full Standings >](#)

**02.) 4:00pm Cl. 3**  
TEAM W-L-T F/D PTS AVG SR  
Gloria 0-0-0 0-0 0-0  
Zitai Wang 0-0-0 0-0 0-0  
[Full Standings >](#)

**03.) 5:00pm Cl. 1**  
TEAM W-L-T F/D PTS AVG SR  
No Teams  
[Full Standings >](#)

**04.) 5:00pm Cl. 3**  
TEAM W-L-T F/D PTS AVG SR  
GPC 0-0-0 0-0 0-0  
I got my shot, You? 0-0-0 0-0 0-0  
[Full Standings >](#)

**05.) 6:00pm Cl. 1**  
TEAM W-L-T F/D PTS AVG SR  
No Teams  
[Full Standings >](#)

Create teams for individual games

new

The new slot page displays the same five individual game slots as the old version. The key difference is that each slot now includes a 'Sign up (0/2)' button, indicating the number of players registered for that slot. The 'League Info' sidebar has been removed from this specific view.

**01.) 4:00PM**  
Court 1  
Kadın Vetrov Rayna George  
[Sign up \(0/2\)](#)

**Court 2**  
No people yet  
[Sign up \(0/2\)](#)

**Court 3**  
No people yet  
[Sign up \(0/2\)](#)

**5:00PM**  
Court 1  
Kadın Vetrov Rayna George  
[Sign up \(0/2\)](#)

**Court 2**  
No people yet  
[Sign up \(0/2\)](#)

**Court 3**  
No people yet  
[Sign up \(0/2\)](#)

**6:00PM**  
Court 1  
Kadın Vetrov Rayna George  
[Sign up \(0/2\)](#)

**Court 2**  
No people yet  
[Sign up \(0/2\)](#)

**Court 3**  
No people yet  
[Sign up \(0/2\)](#)

Individual registration for individual games

# Overview of our final designs - Result page

old

The old result page has a dark header bar with navigation links like Home, Roster, Captain, and Team Options. Below the header is a sidebar with sections for Regular Season Dates (Apr 6th '21 - Apr 6th '21), Join Teams (until Apr 6th '21 at Midnight), and Roster (Required: 1 Total: 1). The main content area shows a "About z" section with "Nothing posted yet..." and an "Overall 02.) SRSC: MS1 - Tuesday 4/6 Rankings" table. The table has columns for POINTS PER GAME, POINTS AGAINST, STREAK, and TOP PLAYER. The top row shows "No MVP". The table also includes Overall, Overall, Overall, and Overall rows. Below the table are sections for "Roster: 1M/0F (1 Players Max)" showing "Zain Rajwany" and "T-Shirts" with a "Get Custom T-Shirts!" button. There are also sections for "Announcements" (Nothing posted yet...) and "Players Stats" showing GP, MVP, and a "Player" column with "Zain Rajwany" and "TOTAL". A "Discussion Board" section follows with "Nothing posted yet...". At the bottom, there's a "Team Wall" with a text input field and a "Submit" button.

Unclear end point of registration

new

The new result page has a dark header bar with Indiana University - Bloomington logo, search bar, and user info (Yating Zhao). Below the header is a sidebar with "League info" sections for Regular Season Dates (Apr 23rd '21 - Apr 23rd '21), Registration Time (Until Apr 23rd '21 at Midnight), and Roster (Required: 1 Total: 1). The main content area shows a "Registration Info" section with details for Building: Student Recreational Sports Center, Address: 1601 E Law Ln, Room: Multi Sport 1, Court 2, and Time: Friday, April 23th, 4pm. Below this is a "Standings" table:

Player	Win-Loss-Tie	F/D	Average Points	SR	Win %
Gayani	0-0-0	0/0	0	0	0.00
Yating Zhao	0-0-0	0/0	0	0	0.00

A "Full Standings" link is at the bottom of the table. The rest of the page follows a similar structure to the old version, with sections for Announcements, T-Shirts, and Discussion Board.

Clear end point of registration

# Blockers

- After trying the new designs, participants who did the test before forgot the original designs, so they could hardly make a comparison. To solve this, we briefly showed them the original designs.
- Participants tended to give good comments to the new design and give negative comments to the existing design. To solve this problem, we asked testers to try to talk about at least 3 good parts of the original design.

# Future Work

- Friends invitation: More than one testers mentioned they would like to invite their friends to play with them. So we may add a separate function to help people achieve this.
- More Adaptable: Some students use a phone browser to make a registration. This experience is also important because people don't always use a laptop when they want to register for a sport. We may want to factor the possibility of mobile use for our redesign.