

GROUP-26

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IIITD SPORTS



Problem Statement

IIITD Students and faculty often find it difficult to utilise sports facilities as the court or ground is already occupied. It is also challenging for the management to keep track of equipment.

Solution Statement

IIITD Sports is an application that can track live occupancy of sports facilities, display equipment repository and provide platform to lend equipments, and provides news updates about everything related to IIITD Sports.

PERSONAS

Anubhav Tyagi, 19



“I want to excel in both sports and academics”

About:

First year UG at IIITD. Got finished with his JEE recently and wishes to get involved in sports in his college.

Goals:

- Work for an MNC
- Get fit
- Play for his college team in badminton

Frustrations:

- Long waiting times to play in court
- Not able to play because of occupied court

Expectations:

- Remotely get to know occupancy of courts
- Information about when the court will be inaccessible due to maintenance.

John Bryan, 51



“I want to get relieved from work stress and spend time with my family.”

About:

He is a professor in the Computer Science Department at IIITD. He is also a regular marathon runner.

Goals:

- To run at least two marathons a year
- Wishes to delve deeper into personal finance
- Wants to stay fit

Frustrations:

- Inability to relieve stress from work by playing sports due to occupied courts/gyms.

Expectations:

- To know availability of courts
- To find a safe place to play with grandkids.

SCENARIO AND SCENARIO MAP

SCENARIO

- 1) After studying rigorously for his End-term examinations, Abhinav is finally free.
- 2) He could step out and play badminton or binge watch his favourite TV series.
- 3) He'd prefer the former, but he'd have to go to the sports complex in order to know if the court is occupied or not.
- 4) Going to the sports complex is tiresome. It would be convenient to simply check live occupancy through an app. To do so, he checks the IIITD sports app.
- 5) Upon noticing that the badminton court is currently unoccupied he hurries to the court.
- 6) Halfway to the court, he realizes that he isn't carrying his kit, so he decides to borrow the rackets from the sports room.

7) Then he visits the court, updates occupancy of the court and invites some guys for a match. He then hurries to the sports room to borrow a racquet while updating the equipment record on the app.

8) After being exhausted, he wishes to leave, he updates occupancy of the court and returns equipment to the sports room simultaneously via the app. Finally, he heads to his room to rest.

Scenario Map

Steps

Questions?

Comments and elaboration of the step

Some of the key ideas and suggestion for features.

Abhinav opens the application

User wants to utilize time by playing.

- * Check Live Occupancy
- * Play Now
- * Register Here
- * Live Events
- * Current Info

Different tabs available on the front of the screen

On left top menu bar is also their.

He selects Check live occupancy option tab

Clicks on "Check live occupancy" tab on front

Is filter change option available for tabs?

Is there exit option via tab?

Type the first two letters it will auto fill the sports name..

Gives the live occupancy of the typed sport - i.e. tells number of people currently in the court.

Abhinav searches for badminton.

The count of the people in badminton court is displayed on the front.

If he finds not much rush he now rushes to play badminton.

Suggestion is also given below the displayed number whether he may go to play or not with reference to the count of people in live occupancy.

Exit option available from the current tab to the main screen on right top of it.

Abhinav selects exit option

He rushes to play but forgets to bring his racquet.

Returns again to main window

Does exit option asks for confirmation of exit?

After clicking on exit button it will ask whether you are sure about it or not

Abhinav now clicks on Play Now .

Screen appears to scan the QR which is pasted outside the badminton court.

He scans the QR code and makes himself added to live occupancy.

Will QR code scanning ask for permission to the camera?

Abhinav clicks now to register here .

After clicking "register here", screen will prompt to first write name and Roll no. and scan the QR code outside the sports room for equipment.

Is a particular borrowed equipment recorded or not?

ID of the specific equipment he borrowed must be filled in the next screen in ID filling option .

He plays as much as he can to relax himself

He now goes to return the equipment and leave the court.

Abhinav opens the app and tap on current Info

In this it prompts the current status of the borrowed equipment and his status of occupancy.

Two tabs are present here.
1) Return tab in borrowed equipment option
2) Neutral yourself button in live occupancy

He clicks on Return Button

He again need to scan the QR code of sports room and need to return that borrowed equipment.

With this he gets redirected to the current status screen only

At last he click on Neutral button and exits the app

He finally needs to scan the QR code pasted outside the court to make his occupancy neutral.

Clicking once on the home screen button or twice on the rear button performs this operation.

AFFINITY DIAGRAM

OCCUPANCY INDICATOR

How to find whether there are students or professors or staff currently in the sports area.

Does it tell the name of the person in the court.

DOUBT RESOLUTION

How an individual's query will be addressed ?

How one can contact the appropriate authorities?

Equipment indicator

How to find whether equipment in the sports room is damaged or not ?

How can authority keep a check on the usage of equipments ?

How to mark presence ?

Is it necessary to bring a mobile phone ?

There needs to be an alternative to mark presence for those who don't bring their phones to the ground.

Guest

Should there be a provision to include a guest player to use the app facilities.

What all will the guest have access to if he/she is allowed to use the app?

What if people want to remain anonymous? (i.e. not want their name to be displayed publicly)

What will be the primary mode of communication between an individual and the authority?

Does it provide details regarding equipment, like brand, series, etc.?

One simple solution is to utilize fingerprint recognition technique.

Shall keeping live physical records about guests be preferred over access to app?

A solution to this is to display category-wise number of players in the facility.

Can someone access the doubts asked by others?

Can we complain in the given section in app if the equipments, are not in usable condition?

We can utilize the existing college's fingerprint database and replicate the process used while scanning the QR code.

Do a guest even need the app?

To avoid any misuse by the guest, it'd be better if the guest marked presence physically at the reception, rather than using the app.

The categories are:
1. Students
2. Staff
3. Faculty

A solution to this is making a FAQ page on the college website and providing it's link to the user when he signs up for the service, while also displaying the name of the person to go to, if the issue was not in the FAQ section.

The categories are:
1. Available
2. Occupied
3. To be replaced/repaired

We should not mark the presence if we just want to roam around the court and see how others are playing.

Will guests be allowed to use the equipment from the college?

Grievance addressal and damage checks have to be done manually or via e-mail. Equipment details will be displayed in the app.

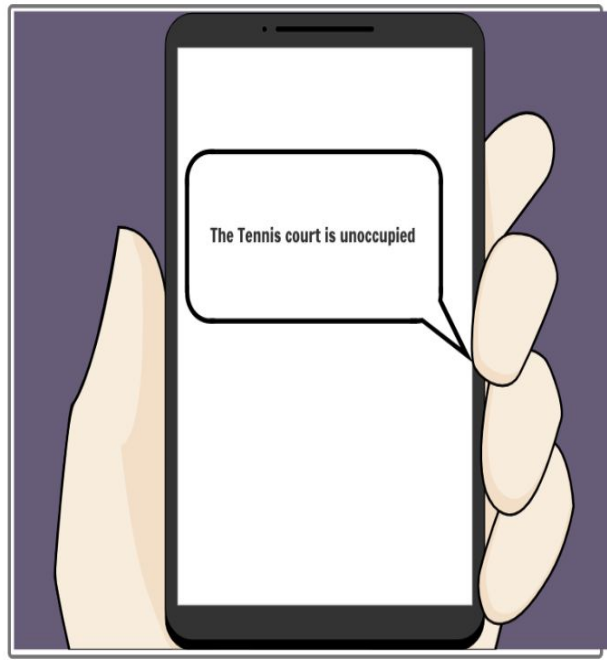
STORYBOARDS



Abhinav is done with his end sems



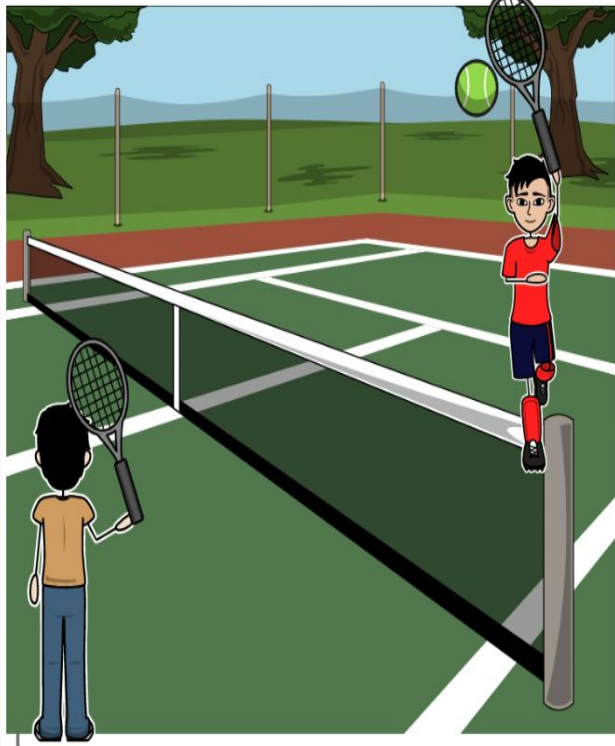
He now has to make a decision to go to play or watch Netflix



He checks the app in the phone to know if the court is occupied or not?



He scans the code to update the live occupancy system



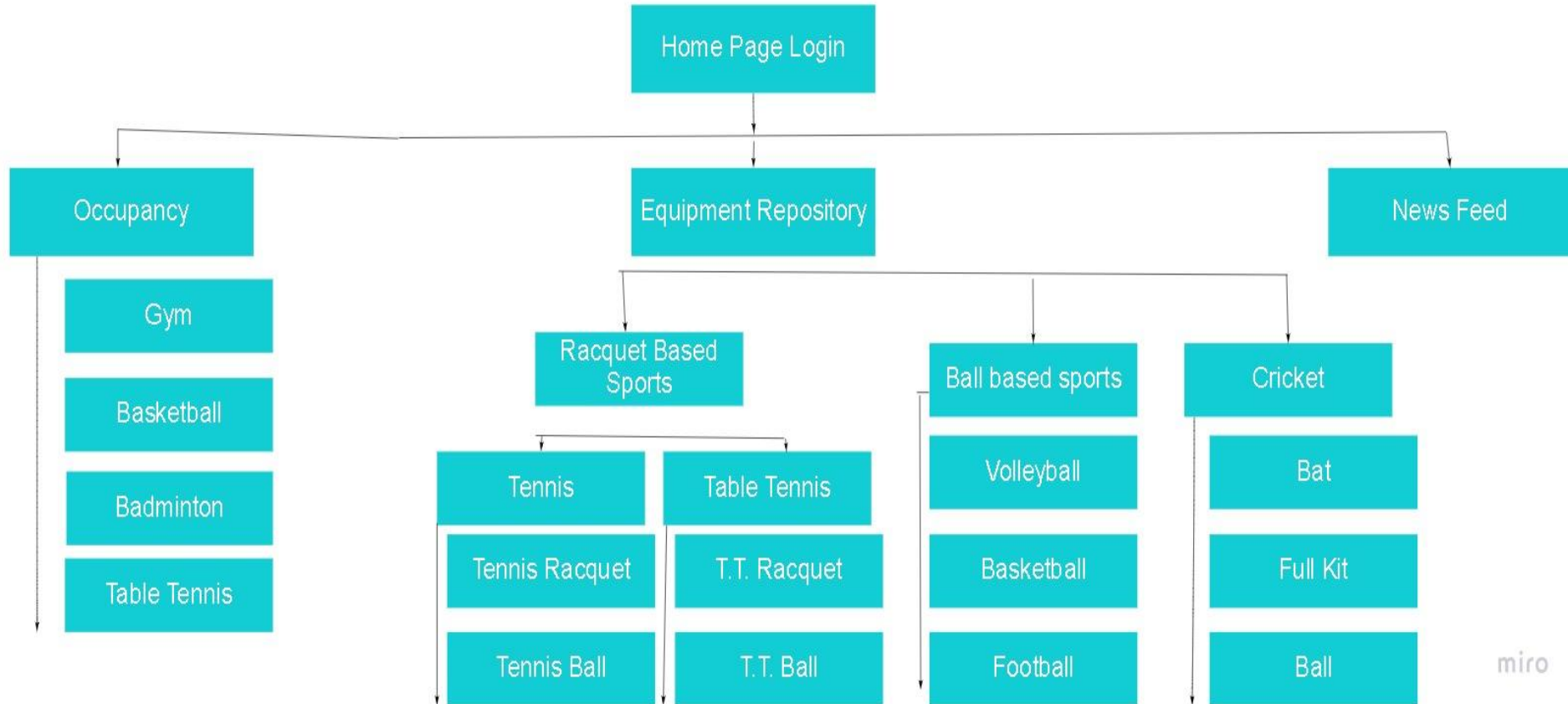
He enjoys with his friends



He scans code again to update the occupancy system, and goes back to his room, Happy!

INFORMATION ARCHITECTURE

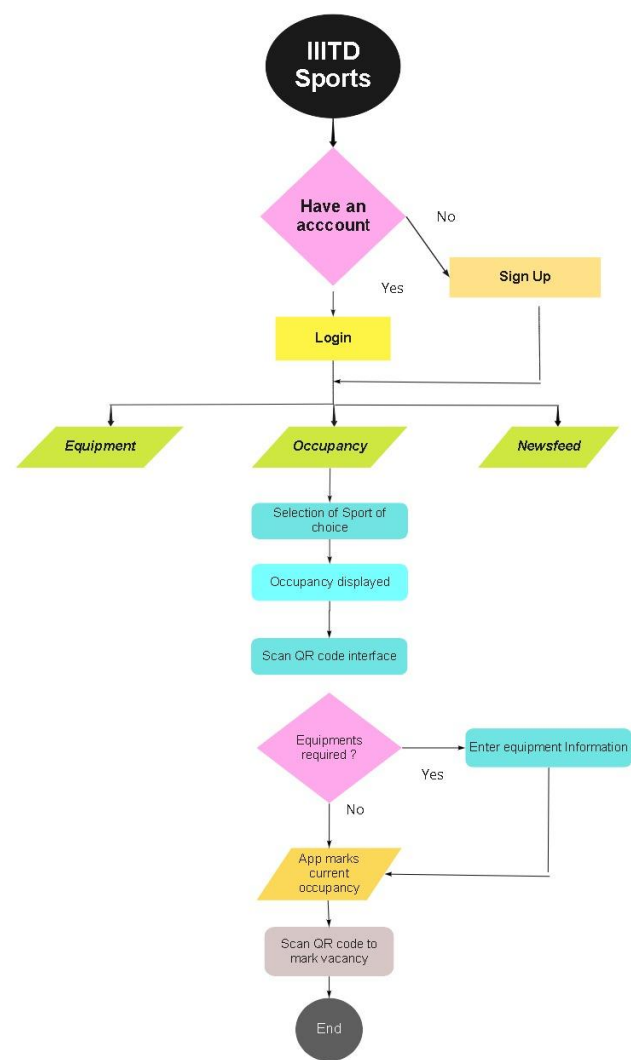
BROAD AND SHALLOW



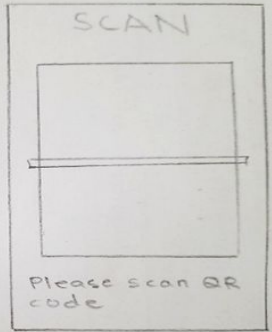
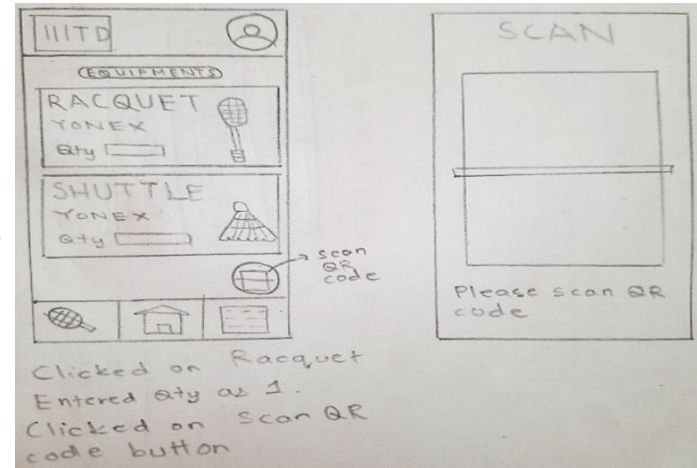
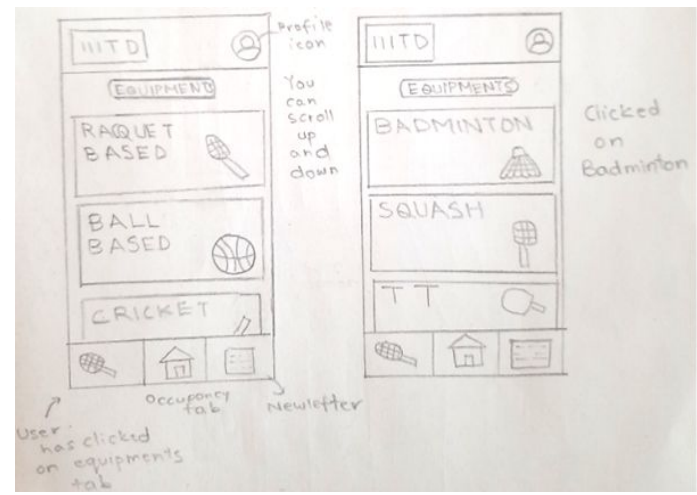
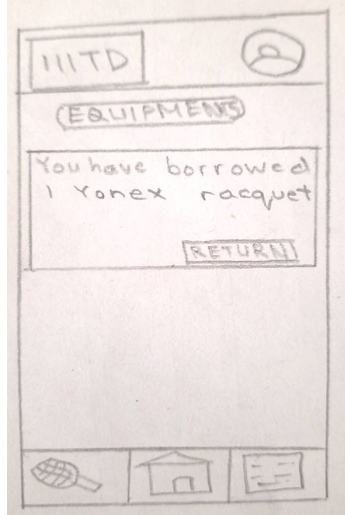
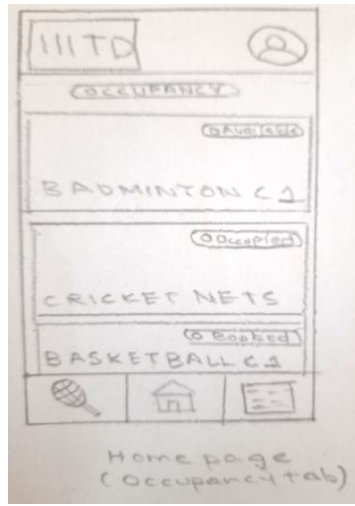
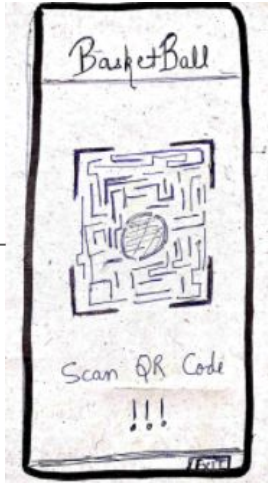
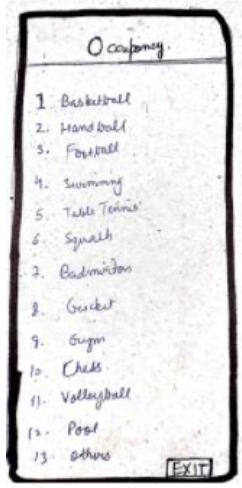
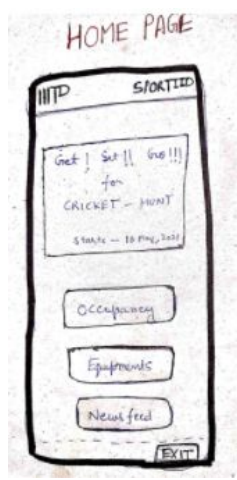
NARROW AND DEEP

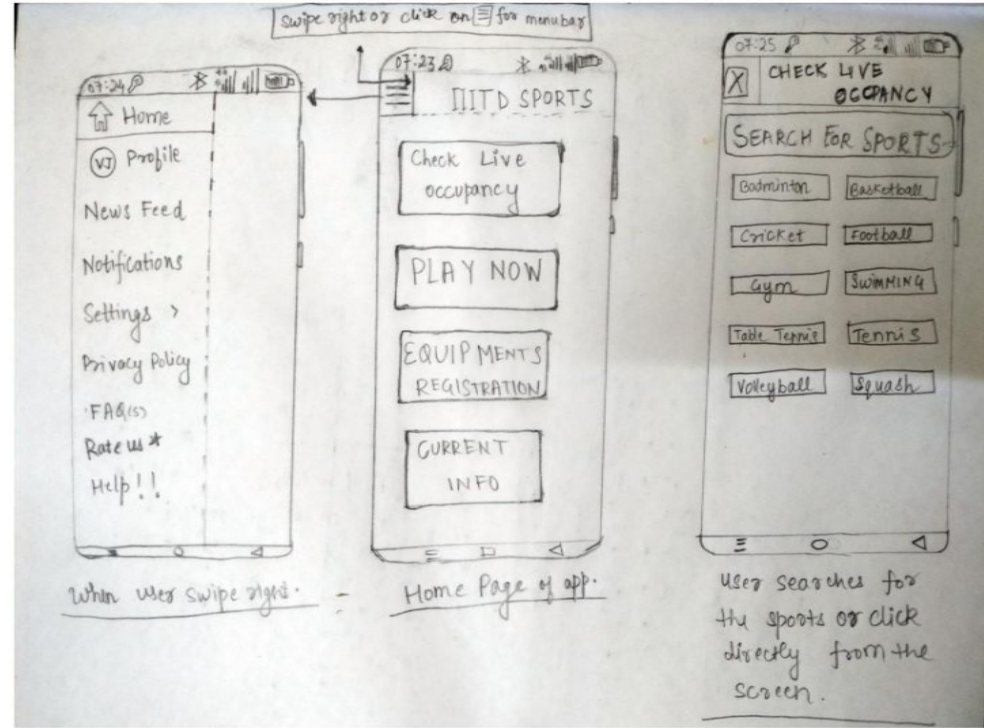
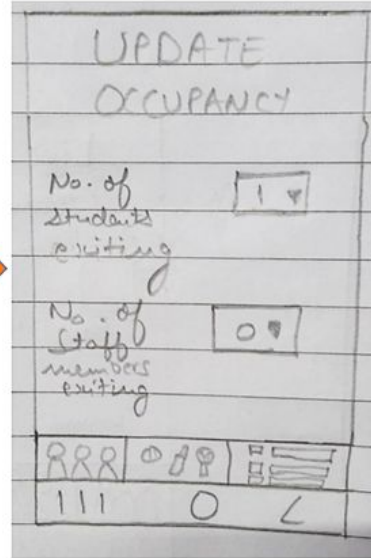
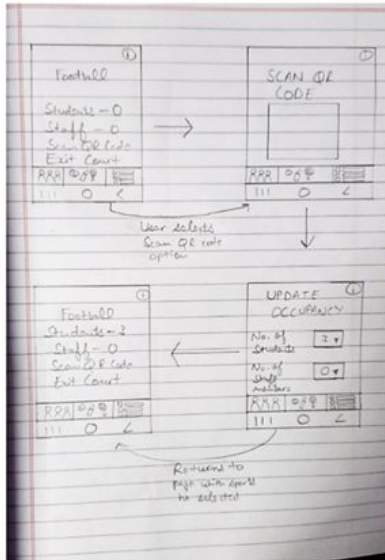
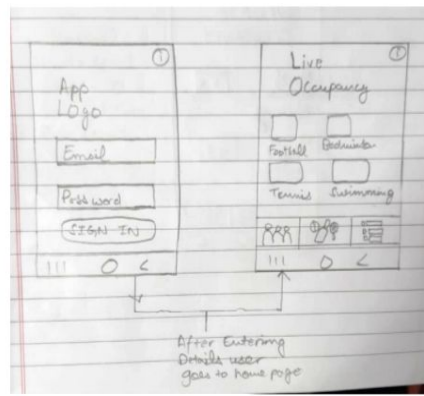
Occupancy task flow is discussed

1. The user after opening the app glances at the number of people in the court.
2. He registers his occupancy after scanning the QR code.
3. Depending on if the user wants to exit, the app updates the occupancy.



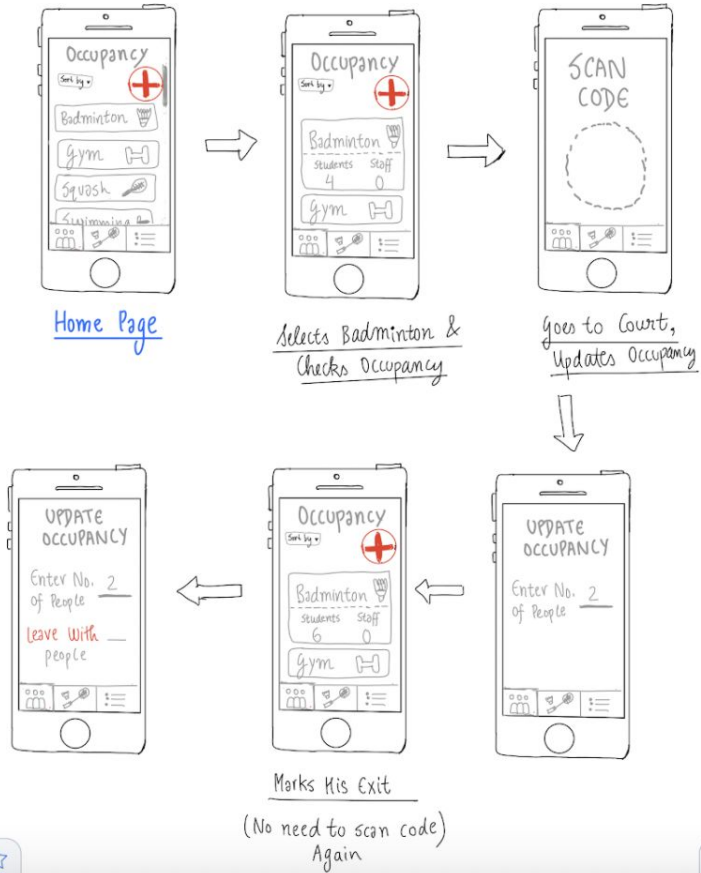
LOW FIDELITY PROTOTYPE





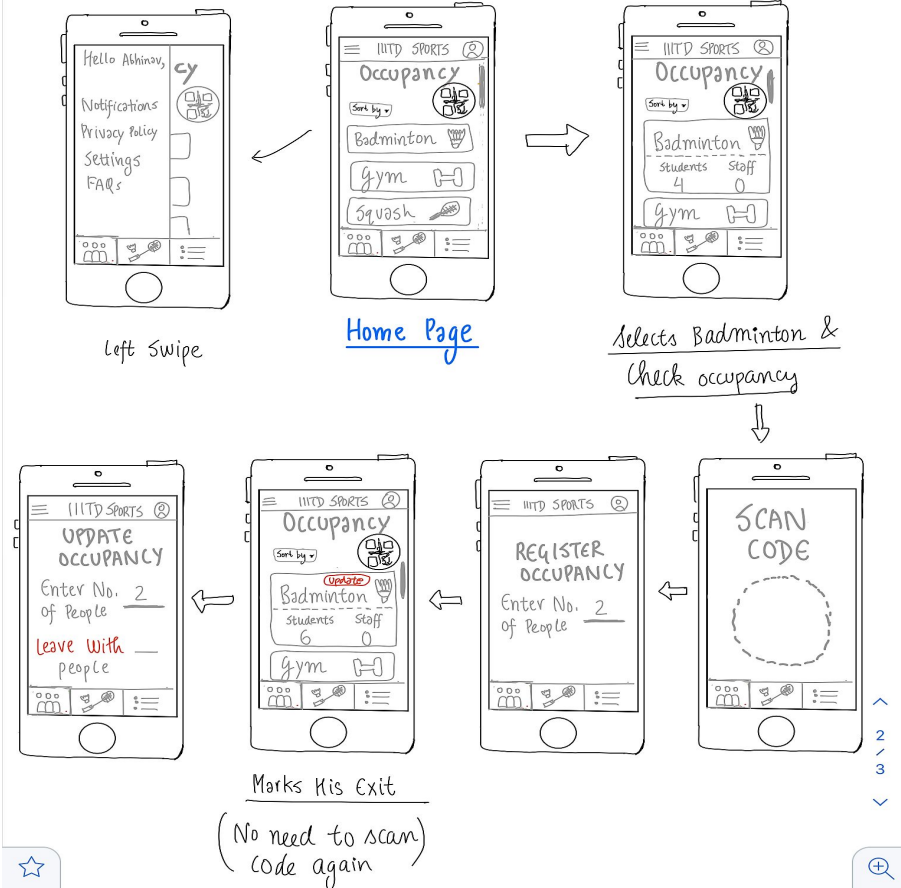
Best Prototype decided by our group

CHECKING BADMINTON OCCUPANCY



Final Low Fidelity Prototype

CHECKING BADMINTON OCCUPANCY



MEDIUM FIDELITY PROTOTYPE

Medium Fidelity Prototype



Home Screen



User Clicks on badminton



Scan Code

Medium Fidelity Prototype



User enters no. of people

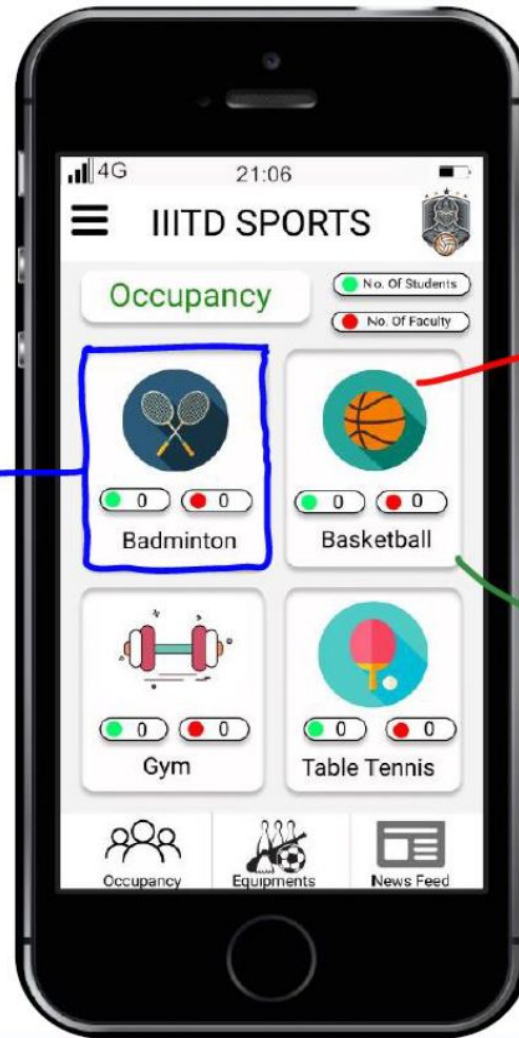


Leave with people

HIGH FIDELITY PROTOTYPE

PROTOTYPE EVALUATION

OCCUPANCY

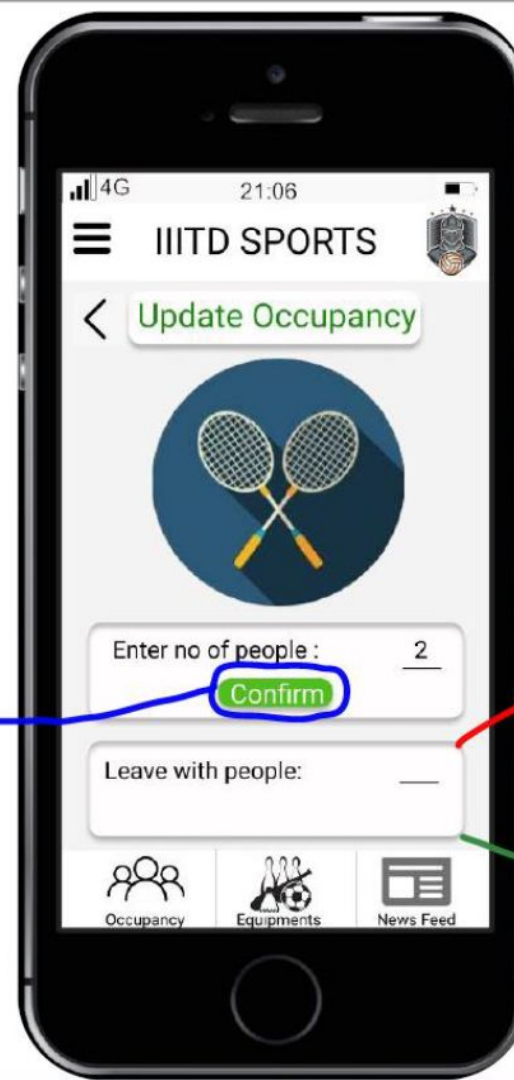


Press Badminton to update Occupancy for badminton

There seems to be three separate buttons in each sports tab.
(One for icon, one for students occupancy and one for faculty occupancy)

We can highlight the entire button when clicked to let users know that the whole is a single button

Press confirm to update
Occupancy



Even though not required, the
Leave with people button seems
clickable

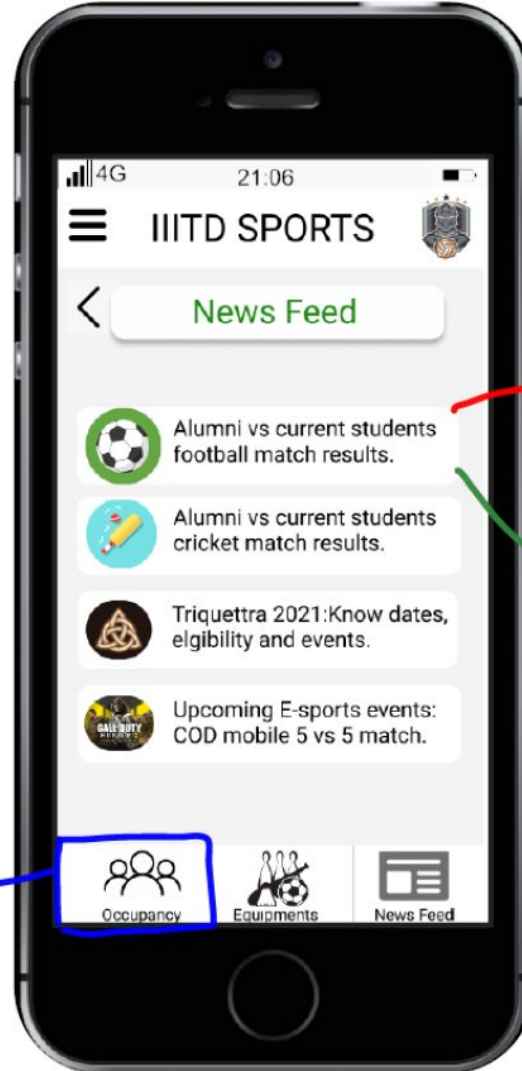
The button can be greyed out
whenever not needed

Select the equipment you wish to borrow



The buttons do not indicate any borrowed status

When borrowed, a bright button to return will allow the user to easily see the equipments he borrowed and return them



No information is given about the dates when these were posted

We can post the dates alongside articles and sort them latest to oldest

Press occupancy to return to Home Screen

Thank You !