



# INFO 5100 Final Group Project:

## (Facility Booking System)

thatsMyPlace



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# The Idea

Facility owners who  
want customers all day  
everyday

Users who want to plan  
their day and save time  
from long lines



# Facility Owners

- Need a mechanism to track customer behaviour
- Need evenly distributed load in their facilities
- Want to make maximum profits for their business - time of use billing (Peak time based billing)



# Student Teams

- Want to play with each other as much as possible
- Do not want to wait in long lines for using a facility
- Ready to plan and book in advance



# The Solution



We built platform that allows students to book a facility and also allows facility owners to manage internal tasks.

Some of the **key features** of our app are:

- Students can book a facility at an available time slot
- Students can give feedback to Customer Support team on their experience
- Facility enterprise has Customer Support for managing all student feedbacks and requests
- Customer Support coordinates with Maintenance team in case a user gives feedback on poor maintenance of facility

# Approach

Start -> Design the network and Object model.

We fixed our Enterprises -

(1) University (lead provider)

(2) Facility (product & service provider).

Next, we decided the organizations that had to be in each enterprise,









Further, we designed the object model with each organization's key role in mind.

University Enterprise

- Student Organization
- University Admin Organization

Facility

- Customer Support Organization
- Maintenance Organization
- Facility Admin Organization

- ▼  JTree
  - ▼  Networks
    - ▼  Network 1
      - ▼  Facility Enterprise
        -  Facility Admin Organization
        -  Customer Support Organization
        -  Maintenance Organization
      - ▼  University Enterprise
        -  Student Organization
        -  University Admin Organizartion

# Use Case 1: Make Booking

- Student interested to book the facility
- Student gets user account set up from university admin
- Student logs in, checks court availability and books slot!



Username: student1

Password: \*\*\*\*\*

×

Login

Logout

### Basketball Court Availabilities

CourtId	Date	BeginTime (24hr format)	EndTime (24hr format)	Availability Status
4	2019-12-08	16	17	Available
4	2019-12-09	16	17	Available
4	2019-12-10	16	17	Available
4	2019-12-11	16	17	Available
4	2019-12-12	16	17	Available
4	2019-12-13	16	17	Available
4	2019-12-14	16	17	Available
4	2019-12-15	16	17	Available
4	2019-12-16	16	17	Available
4	2019-12-17	16	17	Available

Court No: 4

Start Time: 16

End Time:

Book Now!

Search

Back

# Use Case 2: Bad Experience

- Student went to facility at the time of booking
- Student did not like tilted basketball ring at the facility
- Student logs in and gives feedback of “Closed” booking
- Customer support reads the feedback given by the student and notifies maintenance team
- Maintenance team sees the request and changes the tilted ring so that no customer in future reports the same issue

## Student give feedback

The screenshot shows a web interface for a student to provide feedback. At the top, there is a blue header bar with login fields for 'Username: stud' and 'Password: \*\*\*\*', and 'Login' and 'Logout' buttons. Below the header, the 'Booking Details' section contains 'Court No: 1' and 'Date: 2019-12-08'. The 'Feedback' section has an 'Overall Rating: 3 Normal' dropdown and a text area for '\*Comment:' containing 'change ur nets!'. A 'Submit' button is at the bottom right, and a 'Back' button is at the bottom left. A modal message box is overlaid on the right, displaying an information icon, the text 'Feedback submitted successfully! Thank you!!', and an 'OK' button.

Username: stud Password: \*\*\*\*

Login Logout

**Booking Details**

Court No: 1

Date: 2019-12-08

**Feedback**

Overall Rating: 3 Normal

\*Comment: change ur nets!

Submit

Back

Message

Feedback submitted successfully! Thank you!!

OK



## Customer Support Sends Maintenance request

Username: customersupport

Password: \*\*\*\*\*

X

Login

Logout

### Customer Feedback List

RequestId	User Name	Feedback Type	Feedback Rating	Status	Message
1	kk	Feedback Response	2 Bad	Unsolved	change ur nets
2	stud	Feedback To Mainta...	3 Normal	Pending	change ur nets!

Send to Maintenance Team

Mark Read & Send Thank You

Back

## Maintenance Manages request

Username: maintenance

Password: \*\*\*\*\*

X

Login

Logout

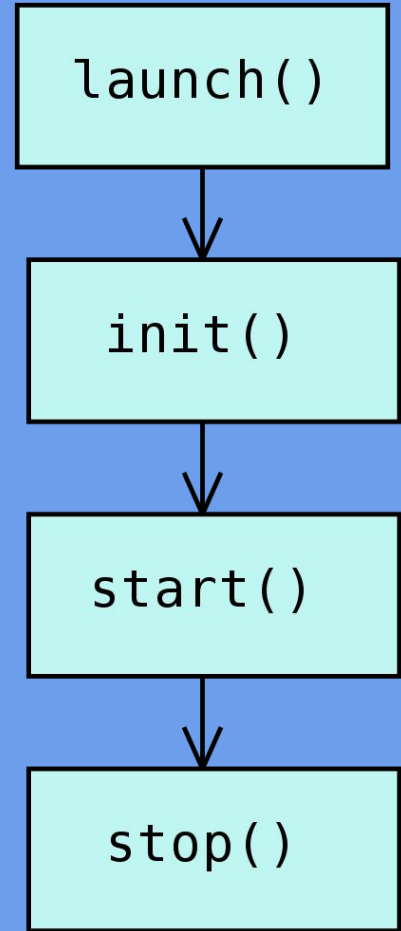
### Request List

ID	Sender	Request Date	Status	Customer Notes
2	stud1	Dec 7, 2019	Pending	change ur nets!

Manage

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# ENTERPRISE & ORGANIZATION OVERVIEW:



# UNIVERSITY ADMIN

## DASHBOARD

Username: universityadmin

Password:

X

Login

Logout

MY DASHBOARD

TOTAL NO OF STUDENT BOOKINGS NEXT 2 WEEKS

2

MANAGE STUDENT

## CRUD STUDENT

Username: universityadmin

Password:

X

Login

Logout

STUDENT LIST

Student ID	Student Name	No of Closed	No Of Canceled	No Of NoShow	No of Confirmed
1	student name 1	1	0	0	0
2	student name2	0	0	0	0
3	student name3	0	0	0	0
4	student name4	0	0	0	0
5	student name5	0	0	0	0
6	student name6	0	0	0	0
7	student name7	0	0	0	0
8	student name8	0	0	0	0
9	student name9	0	0	0	0
10	student name10	0	0	0	0

ID

Name

SEARCH

DELETE

UPDATE STUDENT

ADD STUDENT

Back

# STUDENT

## SUBMIT BOOKING

Username: student1

Password: \*\*\*\*\*

X

LoginLogout

### Confirm booking info

CourtId

5

Date

2019-12-10

StartTime

16

EndTime

17

Submit

Back

## GIVE FEEDBACK/CANCEL BOOKING

Username: student1

Password: \*\*\*\*\*

X

LoginLogout

Court No	Date	Begin Time	End Time	Status	Feedback
5	2019-12-08	16	17	Closed	Given
5	2019-12-10	16	17	Closed	Not Given

Cancel BookingGive Feedback

Back

# FACILITY ADMIN

## DASHBOARD

Username:

Password:

X

Login

Logout

### Facility Admin

From:

To:

TOTAL NUMBER OF BOOKINGS:

TOTAL NUMBER OF EMPTY SLOTS:

Manage Customer Support

Manage Facility

## MANAGE FACILITY

Username:

Password:

X

Login

Logout

Facility Name

Edit Operating Hours

Date

From

To

New Start Time

New End Time

Save

Back

# CUSTOMER SUPPORT

MANAGE BOOKING, MAINTENANCE  
EMPLOYEE & FEEDBACK

Username: customersupport

Password: \*\*\*\*\*

X

Login

Logout

### Booking List

Name	Booking Date	Start Time	End Time	Status
student name1	2019-12-08	16	17	Closed
student name1	2019-12-10	16	17	Confirmed

Manage Booking

Manage Maintenance Employee

Manage Feedback

## MANAGE BOOKING

Username: customersupport

Password: \*\*\*\*\*

X

Login

Logout

### Booking Details

Booking ID:

3

User Id:

1

User Name:

student name1

Booking Date:

2019-12-10

Start Time:

16

End Time:

17

Court No:

5

Status:

Closed

Back

Update

Save

# MAINTENANCE

## VIEW REQUESTS

Username: maintenance

Password: \*\*\*\*\*



Login

Logout

### Request List

ID	Sender	Request Date	Status	Customer Notes
1	student name1	Dec 7, 2019	Pending	normal
2	student name1	Dec 7, 2019	Pending	pretty good
3	student name1	Dec 7, 2019	Pending	Bad!!!!!!!!!!!!

Manage

## UPDATE REQUEST

Username: maintenance

Password: \*\*\*\*\*



Login

Logout

### Request Details

Request ID:

1

Sender:

student name1

Customer Notes

normal

Request Date:

Dec 7, 2019

Status:

Solved



Update

Save

Back

# Ideas to Expand..

The booking system can be used as an aggregator for bringing users and business owners on one platform.

- It can be used by retailers to avoid long lines outside the store (for example during Thanksgiving)
  - Users who book can get priority entrance
  - Business owners will be able to see traction of customers and strategize sales
- Facility owners can add/remove facilities based on customer booking data
- And can be used wherever we see long waiting lines (see image for line outside Nike store - Merrimack outlet, during Black Friday





**So who wants to book a court at Marino?**





**Thank You!**

