Check-Book-Play

Group Project Milestone 4

Final Report

Group Number: 09

Group Members

NAME	NETID
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Executive Summary

Due to increase in the number of student population at UT Dallas (UTD, hereafter), we have received numerous complaints from students that the Student Union resources like table tennis table, snooker pool table, and other resources are always under use and many students never get the opportunity to use it. Students have deeply expressed dissatisfaction and are requesting for this problem to be addressed. To address this issue, we wish to develop Check-Book-Play (C-B-P, hereafter): a web-based resource reservation application.

C-B-P will meet the need of both end-user's and admin's demands. For users, C-B-P enables to reserve any available resource in a particular time frame. For admins, C-B-P enables to monitor the current usage of resources via the application and keep the resources in its maximum utilization. We expect every student to have an equal opportunity to utilize the Student Union resources and at the same time maximize its daily average utilization of Student Union resources. Furthermore, C-B-P will provide the booking information to Student Union officials to analyze the daily usage of its resources, reallocate employees accordingly, and make informed decisions based on the data.

As the university continues to expand, we are expecting more and more students every semester. In order to maintain a balanced student life campus environment for students to study and spend their leisure time, this application will serve as an important, efficient, time-conflict free tool for all students. As the reservation system continues to improve and function properly, it can apply and extend its application to other sectors which may face similar issues: basketball court, parking space and library room reservation.

Systems proposal and Problem Statement

To: Administrative Office, Student Union, The University of Texas at Dallas

From: Group 09 Members

Date: 01/29/2018

Subject: Effective utilization of Student Union resources

Due to increase in the number of incoming students this semester and previous semester, we have received numerous complaints from students that the Student Union resources like Table Tennis table, Pool table are always under use and many students never get the opportunity to use it. Students have expressed dissatisfaction and are requesting for this problem to be addressed. To solve this issue, we wish to develop a resource reservation application.

This application will give all students equal opportunity to utilize the Student Union resources. We want to discourage the reservation of a resource one specific group for an entire day. This application will help students plan their visits to the Student Union. The application will also improve the daily average utilization of the union resources. Students would be able to reserve their slot, and this will encourage the students to take advantage of non-peak hours of the day. The application will help Student Union authorities to analyze the bookings and allocate employees accordingly. Apart from all these advantages, the resource booking data would be of immense help for the IT team to analyze and make informed decisions based on the data.

The application will be a web application which the students would be able to access online. Every student will be able to reserve any available resource in a particular time frame. A student would be allowed to have only one active booking at a time and each booking would be restricted to a maximum time of 2 hours. The opening and closing times of time blocks would be as per union opening and closing times. Students who delay the return of union resource would be levied a penalty per 10 minutes of extension. The application will be developed in two phases. Phase I of the project will output a low-level design of the project with the constraints and union specific rules clearly discussed and agreed upon. Phase II of the project will output the final application with end user manual and administrative manual. Based on the estimation of efforts as per the defined scope of the project, we would need three developers and two quality assurance engineers. We would require four months to complete this project. We would also be requiring a member from the student union administrative team partially working with us for around ten hours every week. This person would act as a subject matter expert for our project and would be a point of contact from the student union team.

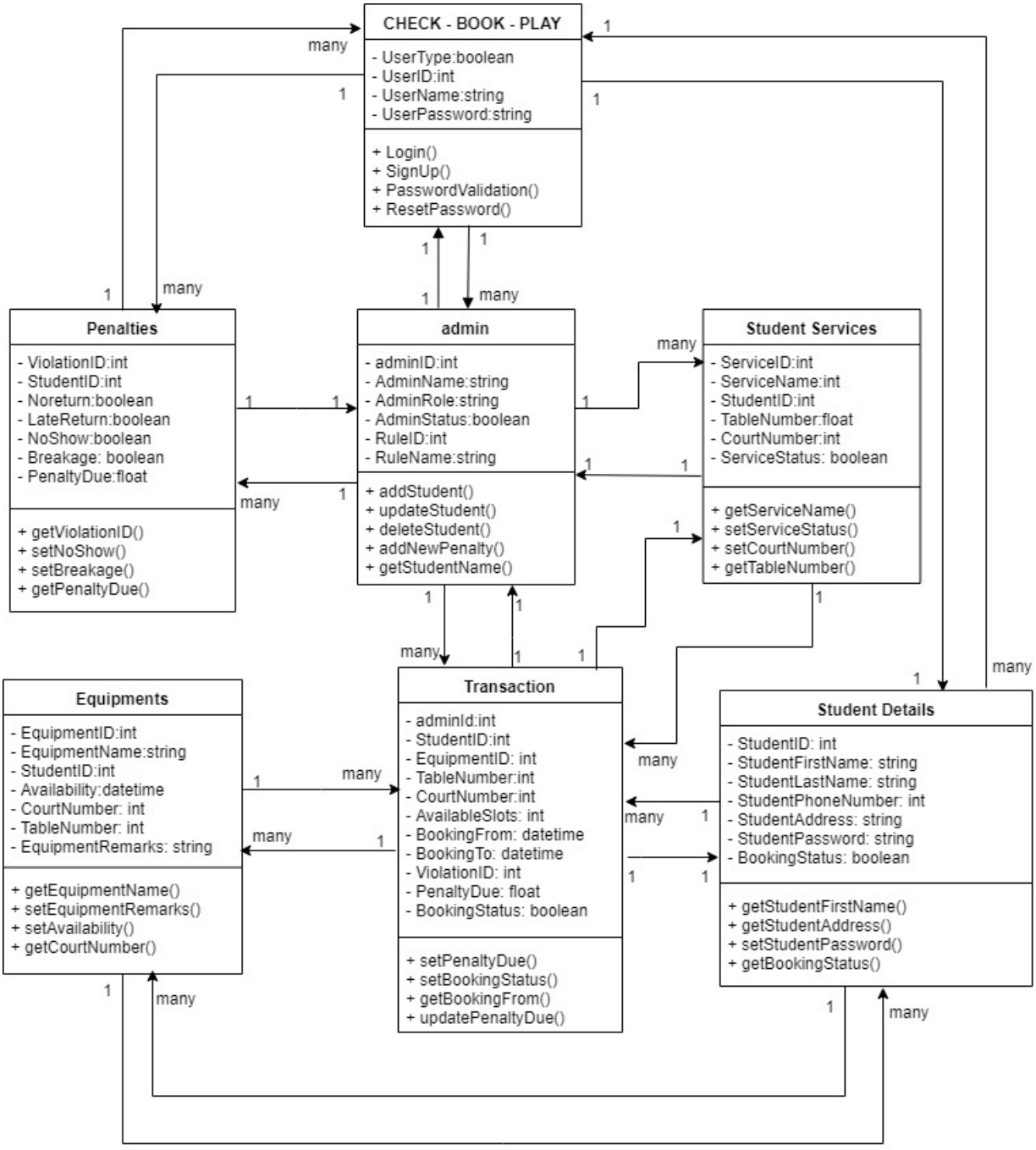
As the university continues to expand, we are expecting more and more students every semester. This application will serve as an important tool for all current and future students. If you agree with the idea, we request you to kindly disburse the required resources so that we start working on the project. Please feel free to start a conversation with any member of our team for clarification on any aspect of our project. Thank you.

Requirements Definition

No.	Functional Requirements
1	The system shall mandate the password complexity as per below requirements. a) Must contain at least one(1) Uppercase letter, b) Be a minimum of eight(8) characters in length, c) Must contain at least one number, d) Must contain at least one special character (!”#$%&'()*+,-./:;<=>?@[\]^_`{
2	The system shall only accept NetID as valid user ID.
3	The system shall impose a penalty of $0.01 per minute in case of late return.
4	The system shall cancel the booking if the resource is not physically acquired within the first 10 minutes of time slot.
5	The system shall accept bookings 24 hours before the desired time slot.
6	The system shall allow 2 hour booking at a time, maximum of three bookings per day.
7	The system shall accept the earliest booking at 8AM and the latest booking at 8PM.
8	The system shall display available time slots as green and unavailable time slots as red.

No.	Non-Functional Requirements	Category
1	This application platform is accessible through all devices (PC, mobile, PDA).	Reliability
2	Booking records shall be stored on a daily-basis after office hour.	Maintainability
3	Processing time for each transaction, Booking/Cancelling/Retrieving, shall not take more than 3 seconds.	Performance
4	Survey request is delivered to user on a random basis.	Operational
5	Personal information is protected in compliance with UT Dallas Policy.	Security
6	The system shall be able to integrate with existing UTD security system.	Operational
7	User ID is locked after 5 attempts of incorrect password.	Reliability
8	The app sends notification; 10 minutes prior to the booking and 5 minutes after the return of resource.	Usability

Structural Models

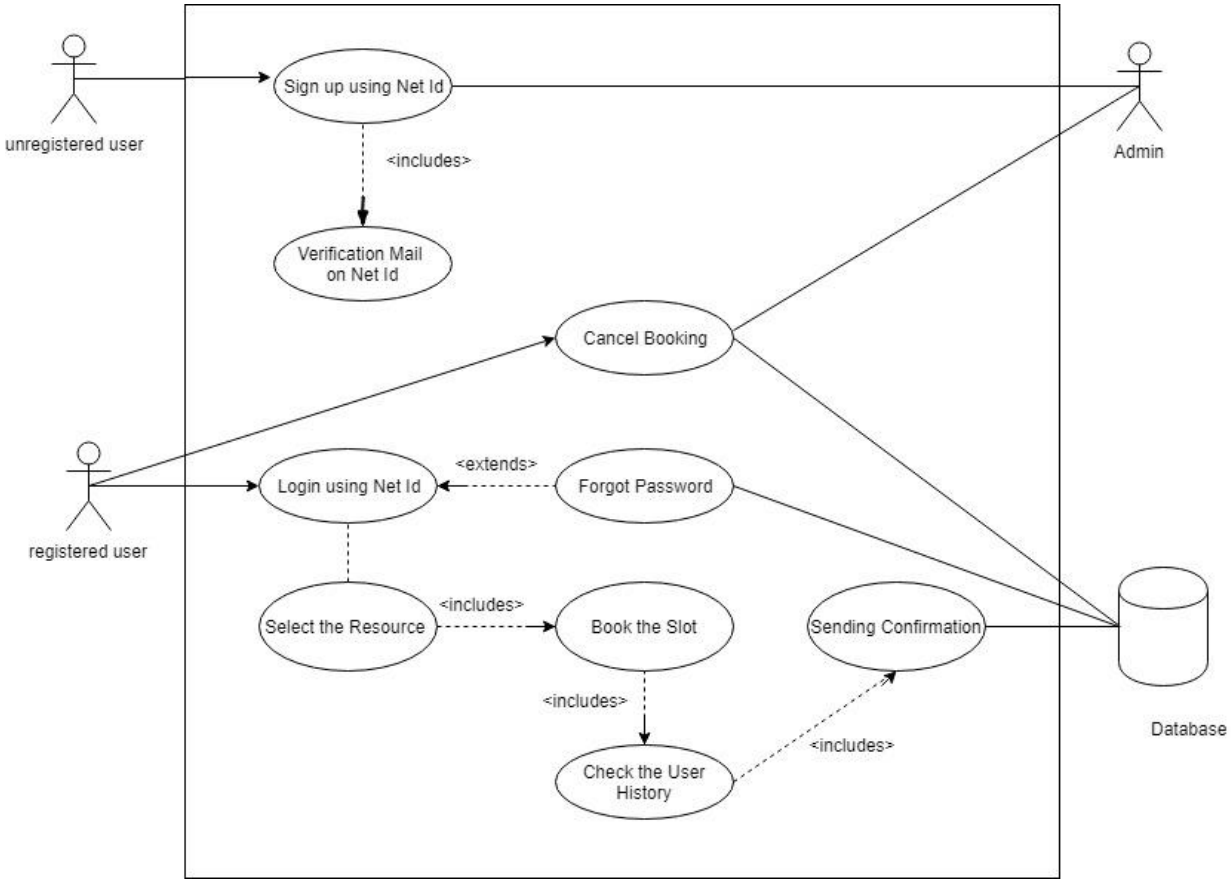


Behavioral Models

Description for Login and Signup Use case

- Sign up using Net ID: All user will only be able to register using the Net Id provided by The University of Texas at Dallas
- Verification Mail on Net Id: After signing up on the web application, a verification mail will be sent on the user's Net Id
- Login Using Net Id: The registered and returning users will be able to login directly using their NetId
- Forgot Password: The user will be able to reset the password using this option
- Select the Resource: After login, all user will be able to select from the available resources
- Book the slot: The user needs to fill the time slot
- Check the user history: Once the user books a desired time slot, user history of the will be checked.
- Sending Confirmation: The system will send the confirmation e-mail to the user regarding the booking made
- Cancel Booking: Using this option, the user will be able to cancel the booking

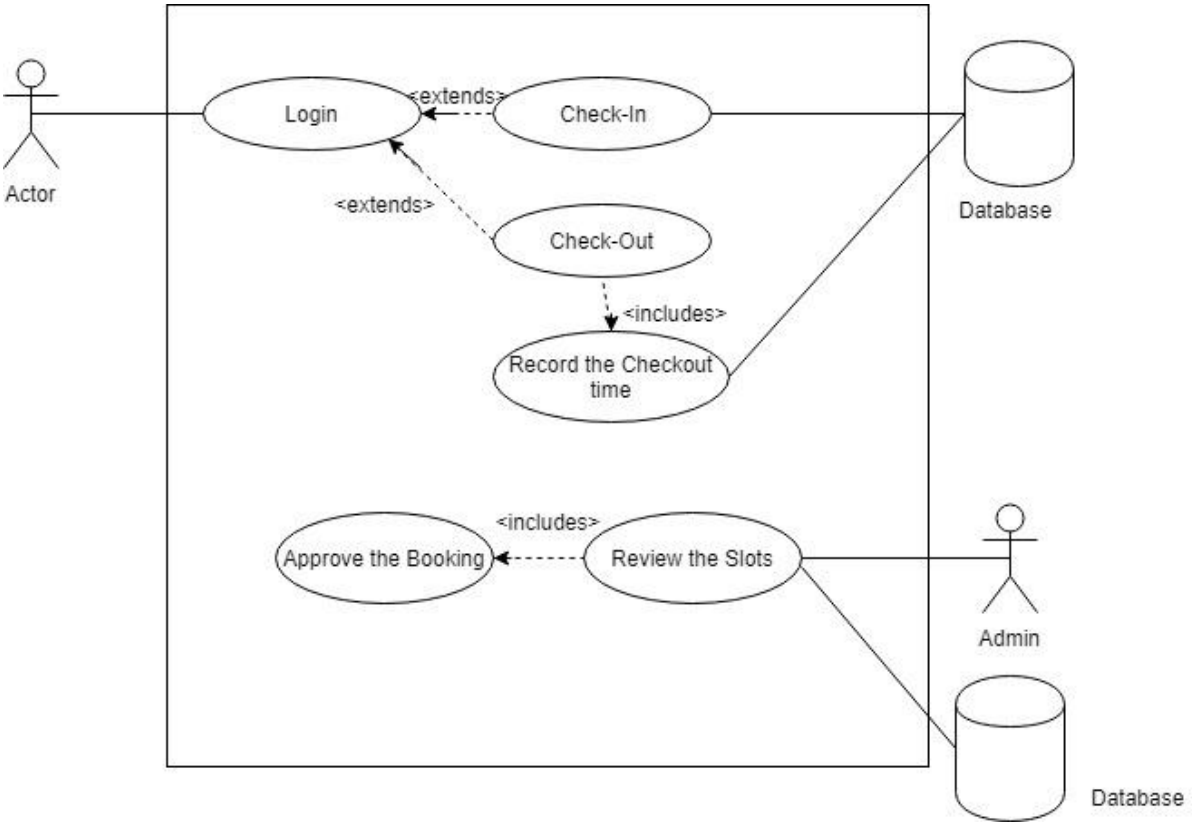
Diagram



Description for Check-in/Check-out Use case

- Login: User will be able to login using the NetId
- Check-In: This enables the users to Ceck-In online using the web application
- Check-out: This enables the users to Ceck-out online using the web application
- Record the check-out time: The system will record the check-out time, which will be saved as user history
- Review the slot: The admin can review the slots to keep track of all resources
- Booking Approval: Admin will approve the booking after reviewing the availability of resource

Diagram

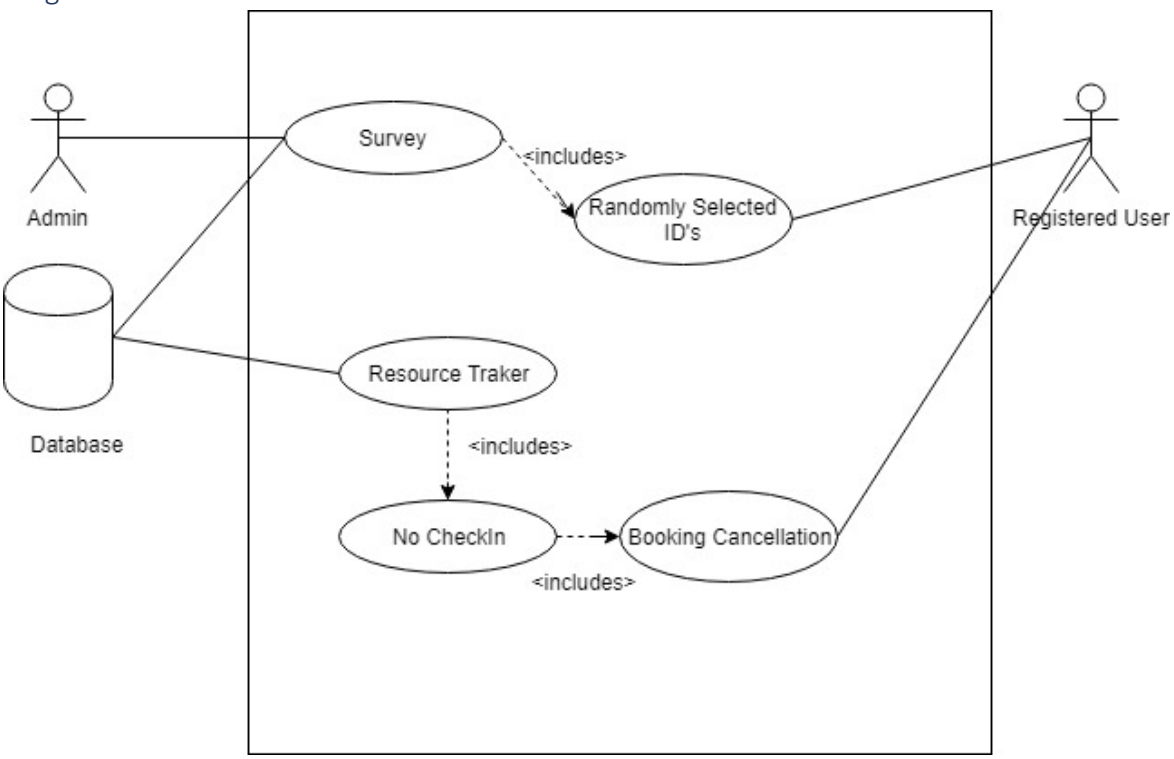


Description for Survey use case:

- Survey: Admin will have access to the survey conducted
- Randomly selected Id's: The system will randomly select the Id's and send them survey request
- Resource Tracker: The System can track the resources to look at the availability of the resources
- No Check-in: If the resource is booked but no one claims the booking, system will keep an eye on that specific booking reservation

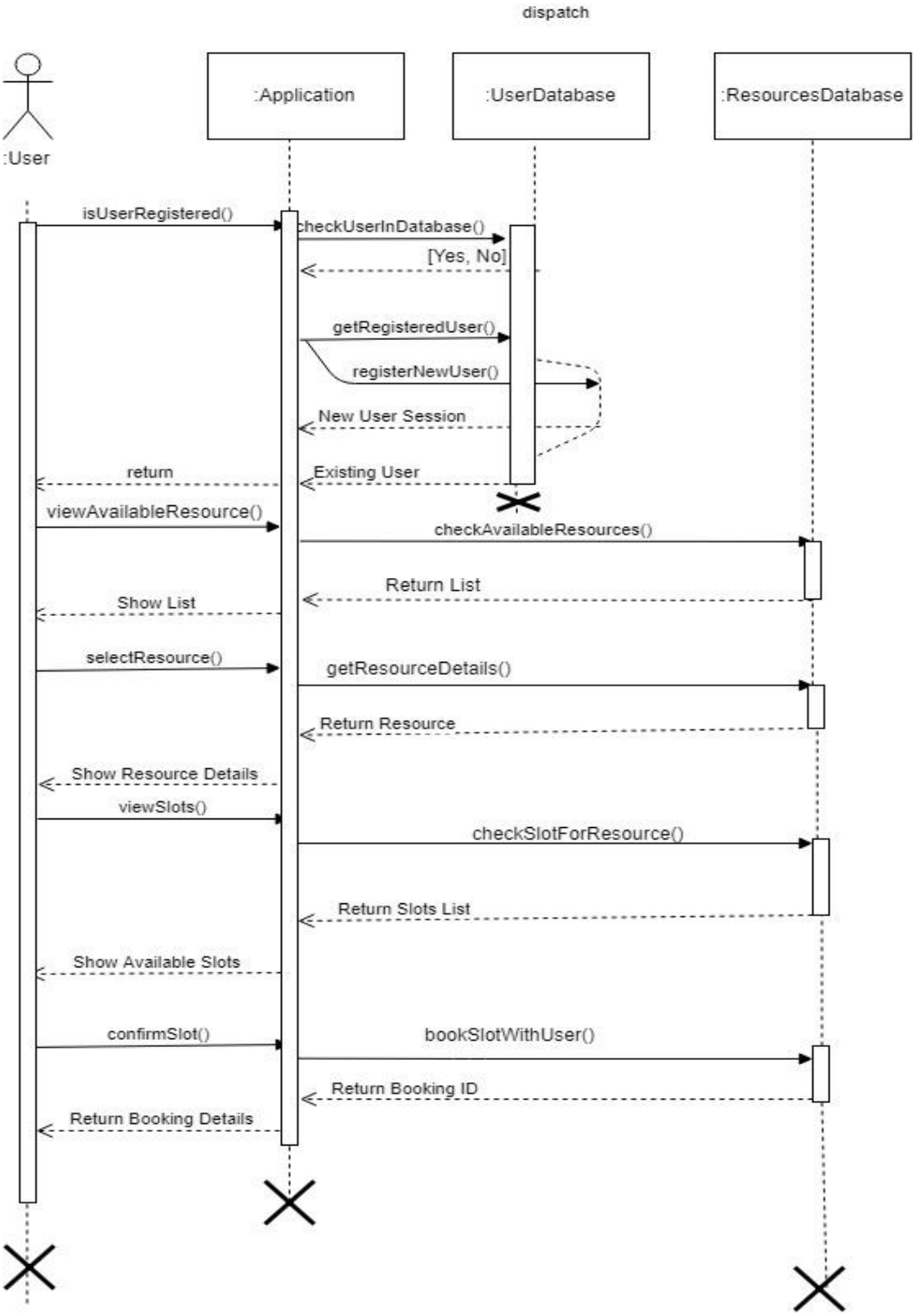
- Booking Cancellation: If the resource is booked and no one checks in after certain amount of time, the system will cancel the booking

Diagram

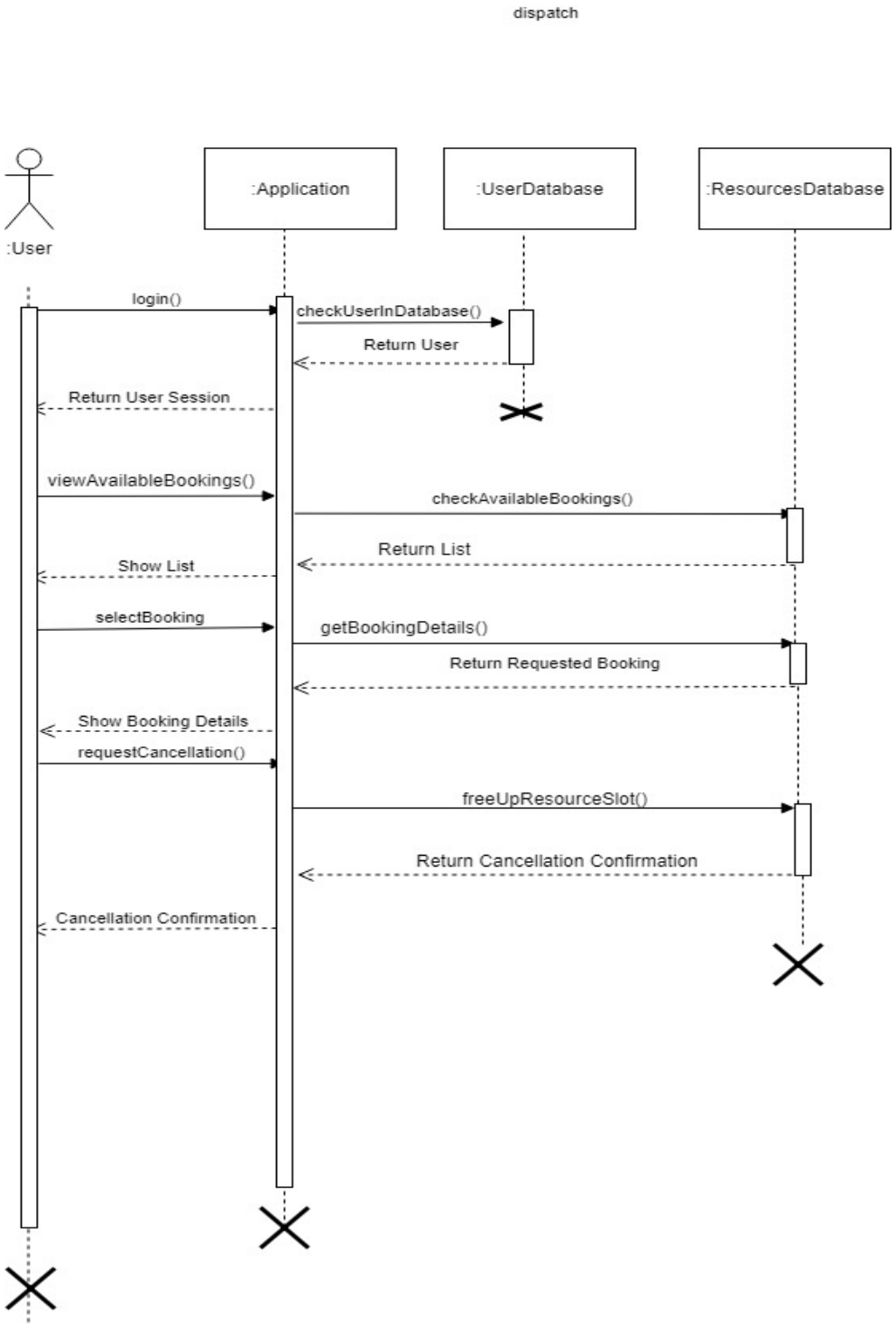


Dynamic Models

Sequence Diagram 1



Sequence Diagram 2



Design Documents

Software Designs

Design 1

Method Name: Login	**Class Name: Check – Book – Play**
Description of responsibilities: Implement the necessary behavior to provide an access for existing users to login to the booking system.	
Arguments Received: UserID UserPassword	**Data Type:** Integer String
Return Value: LoginResult	**Data Type:** Boolean
Message and Example: Login(UserID, UserPassword) : Boolean LoginResult = Login(sxp123123, 123456)	

Algorithm Specification:
-- check for valid login id and password
If UserID is not null or spaces and password is not null or spaces then
Retrieve UserID and UserPassword from database
--Check for valid UserID
If valid UserID
--check for UserPassword
If valid UserPassword
Return true
Else return false
Else
Return false
End if	

Else
Return false
End if

Design 2

Method Name: getViolationID()	**Class Name:** Penalties
Description of responsibilities: Implement the necessary behavior to enable system to generate an unique ID for a specific student's violation in the User database.	
Arguments Received: StudentID NoReturn LateReturn Noshow Breakage PenaltyDue	**Data Type:** Integer Boolean Boolean Boolean Boolean Date
Return Value: ViolationID	**Data Type:** Integer
Message and Example: getViolationID(StudentID, NoReturn, LateReturn, Noshow, Breakage, PenaltyDue) : Boolean ViolationID = getViolationID (123123, True, False, False, False, 5/2/2019)	

Algorithm Specification:

-- Check for valid student ID
If StudentID matches with database record, then
Retrieve StudentID from database
--Set up student violation information
If the student did not return/late return/no showed up/damaged property
Return NoReturn/LateReturn/Noshow/Breakage = True,
Else
Return NoReturn/LateReturn/Noshow/Breakage = False
End if
Return ViolationID

Design 3

Method Name: addNewPenalty	**Class Name:** Admin
Description of responsibilities: Implement the necessary behavior to enable system administrator to create a new penalty record based on the student ID and violation ID in the User database.	
Arguments Received: AdminID StudentID ViolationID	**Data Type:** Integer Integer Integer
Return Value: PenaltyResult	**Data Type:** Boolean
Message and Example: addNewPenalty (AdminID, StudentID, ViolationID) : Boolean PenaltyResult = addNewPenalty (123123, 456456, 789789)	
Algorithm Specification:	

If Student ID and Violation ID is not null, then
Insert the penalty record to the User database
Return Ture
Else
Return False

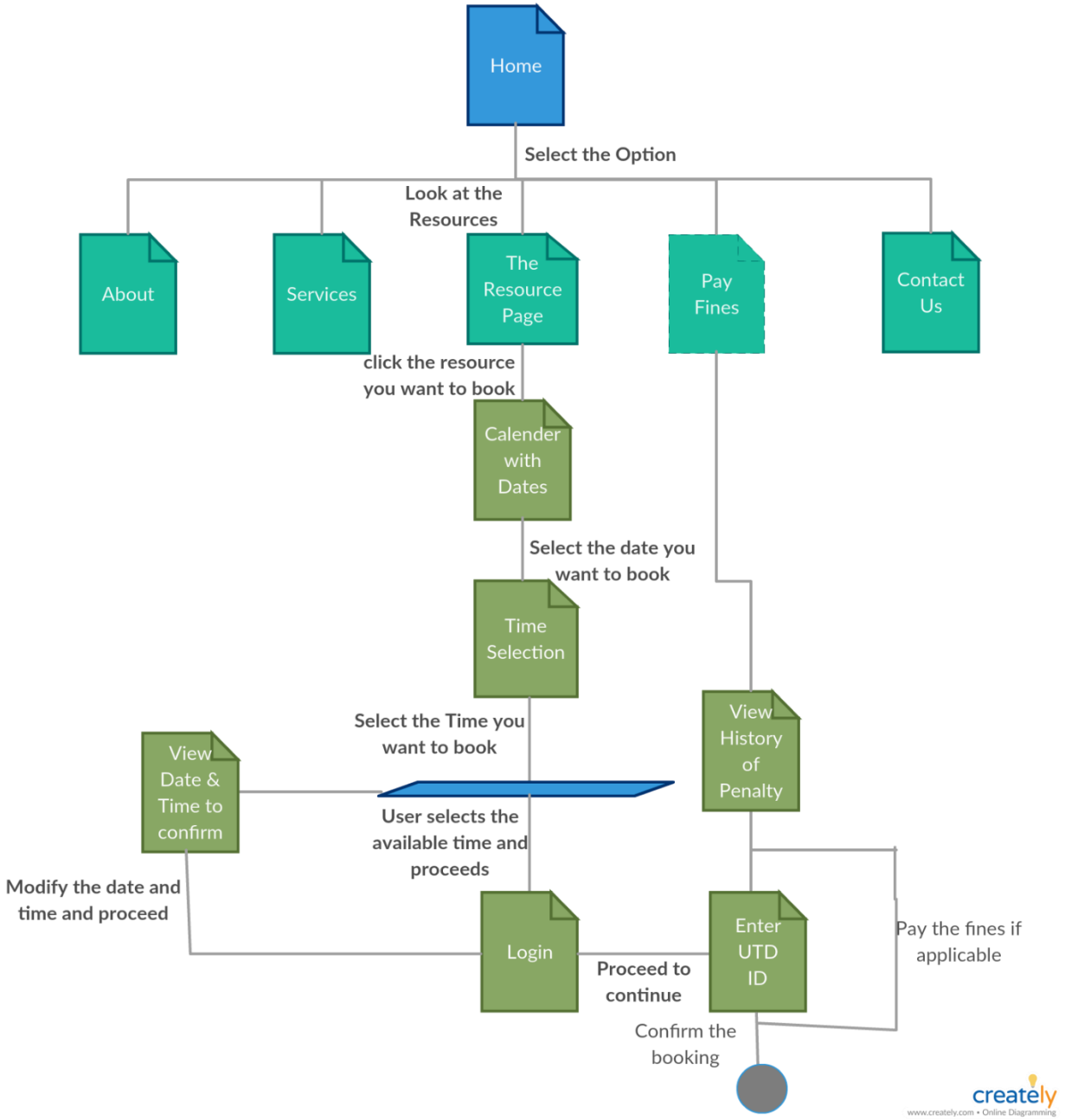
Design 4

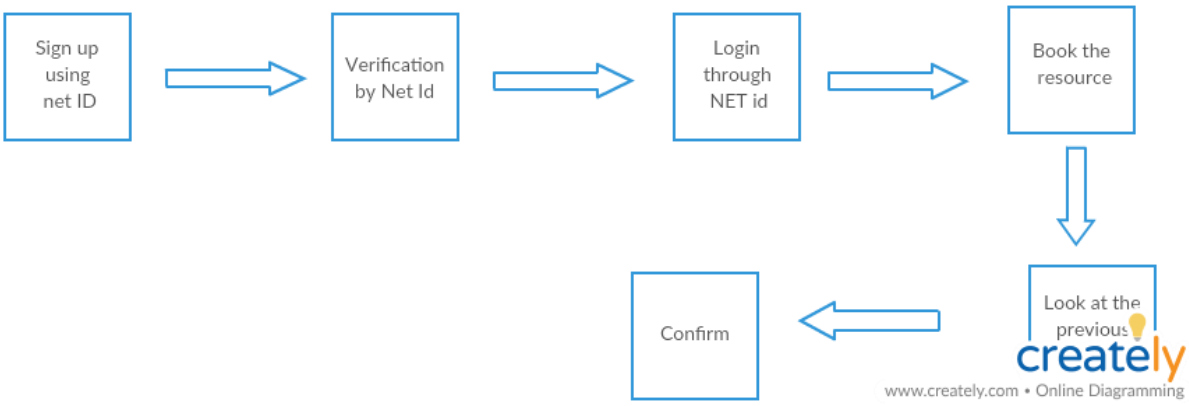
Method Name: getBookingDetails	**Class Name:** Transaction
Description of responsibilities: Implement the necessary behavior to enable users to review his/her current booking information.	
Arguments Received: StudentID BookingStatus	**Data Type:** Integer Boolean
Return Value: BookingDetails	**Data Type:** String
Message and Example: getBookingDetails (StudentID, BookingStatus) : String BookingDetails = getBookingDetails (123123, True)	

Algorithm Specification:
If Student ID matches the database record and BookingStatus is True, then
Return BookingDetails(EquipmentID, TableNumber, CourNumber, BookingFrom, BookingTo, BookingStauts)
Else
Return Booking Information not available	

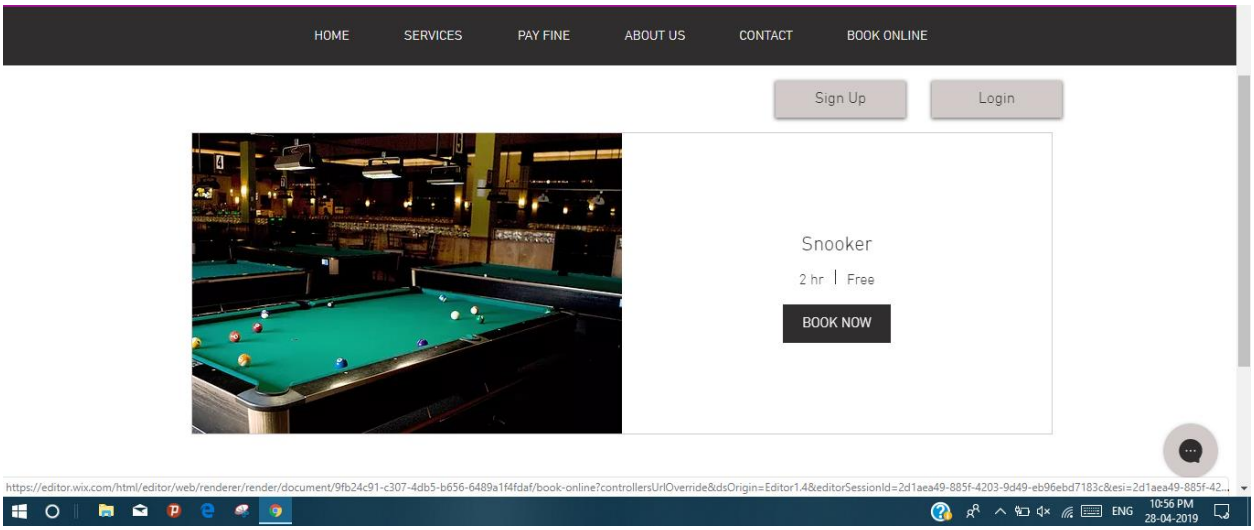
User Interface Design

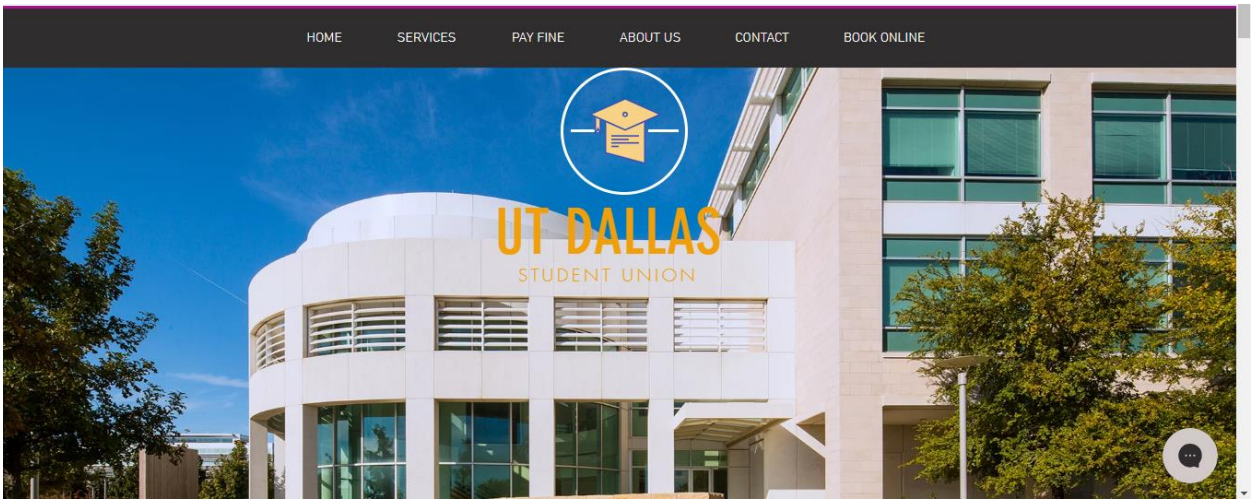
Network Diagrams




Sign up using net ID
Verification by Net Id
Login through NET id
Book the resource
Look at the previous
Confirm
creately
www.creately.com • Online Diagramming

Prototypes


HOME
SERVICES
PAY FINE
ABOUT US
CONTACT
BOOK ONLINE
Sign Up
Login
Snooker
2 hr | Free
BOOK NOW
ENG
10:56 PM
28-04-2019



Testing

Test Strategy

In the test strategy, we will determine the projects approach to testing. We will look at the characteristics of the system to be developed, the timeline of the project, project budget and the breadth and depth of efforts required to test the system.

The primary objectives of test strategy are as follows:

- Determine the significance, or critical nature, of the application system to the business.
- Determine the types of tests required by each testing task.
- Determine the need for a systems integration test by identifying key system interfaces.
- Identify performance assurance requirements.

We will perform the following tasks as part of application testing:

- module functionality test (to test each module of the developed application)
- module integration test (to test integration of our application with UT Dallas applications)
- acceptance test (to allow end-users and stakeholders to determine whether the product meets the required needs)
- security test (to ensure user data is protected)

Two project team members will be dedicated to perform test activities. Any issue will be tracked in the Bug tracking system and addressed on the basis of priority and severity of the issue. Any request for feature change by stakeholders will be taken up as change requests. Testing will not be delayed till the end of product development. As and when modules will be developed, they will be tested using Stubs and Drivers as supporting programs. Test Runs will be tagged along with Test Cases in the Test Management system to regulate tracking of issues to test cases and test cases to requirements.

Module Functionality Testing:

This testing should be performed to ensure that the developed application meets the requirement specifications. This will ensure that the all the functions of the product i.e resource booking, resource blocking, login functionality, logout functionality, booking cancellation functionality are working fine.

Module Integration Testing:

We are developing a web application which will be hosted on the UT Dallas website. We want to integrate our web application with the rest of the website. Integration testing is essential because we want to ensure that users are able to navigate to our web application from the UT Dallas website and that our web application redirects the user to the UTD website once the intended task is accomplished.

Acceptance Test:

Acceptance tests are important because the final delivery of payment will be dependent on whether the stakeholders and end users are satisfied with the system. Here the focus is mapping the functionality of the product with the user needs instead of system requirements. Even if the product is matching the system requirements but fails to satisfy user needs, it will be deemed as a faulty product and will lead to cost and time repercussions. In acceptance tests, end-users will try to use the system and see if the system is self-explanatory to an extent and if they are able to manage the resource booking through the web application.

Security Test:

Security tests are essential for any application which is integrated with UTDallas central web application. Because of integration with UTD website, there is going to flow of student personal information like net id, student name, status of student in the university and the amount of money in the students comet account. To ensure that this data is transferred securely from one application to other, we need to perform security tests. We will perform vulnerability assessment and penetration testing to ensure that the developed product is protected from any security attacks.

Test Cases:

Test Case ID:	1
Title:	User Login
Description:	Test whether existing users can login to the resource booking system
Type:	Functionality
Preconditions:	1. User is using supported browser and operating system. 2. User is active student at UTD
Test Steps:	1. Open resource booking system on browser 2. Enter valid userid 3. Enter valid password 4. Click on login button
Expected Result:	User is logged in to resource booking system and is displayed the resource booking homepage with list of available resources.

Test Case ID:	2
Title:	Adding Violation Penalty to User

Description:	To test whether the user is charged with a violation penalty when user causes a violation in the resource booking system.
Type:	Functionality
Preconditions:	User has already booked a resource and is currently using the resource.
Test Steps:	1. Login using administrator 2. Open reservation page for the already booked resource. 3. Enter return time of resources as a time later than the due time. 4. Logout of administrator console. 5. Login using user credentials of the user who booked the resource. 6. Navigate to accounts page. 7. Check the penalties section of the accounts page.
Expected Result:	User has been levied a penalty with a comment mentioning the late return of university resources.

Test Case ID:	3
Title:	Retrieve Booking Details successfully from the system
Description:	To test whether existing resource reservation details are retrieved upon request by user
Type:	Functionality
Preconditions:	User has already booked a resource.
Test Steps:	1. Login using user who has currently booked the resource 2. Open list of booked resources. 3. Click on one of the upcoming reservations.
Expected Result:	Reservation details are displayed to the user with following details: • Equipment ID • Table Number • Court Number • Booking From Time and Date • Booking Until Time and Date • Netid of user who booked the resource • Current Booking Status

Project Management Documents

2Project Charter and Scope Statement

1.0 PROJECT IDENTIFICATION		
Name	Check-Book-Play	
Description	A web-based application, which will allow to book student union resources	
Sponsor	Dan Goodwin (Director, Student Union UTD)	
Project Manager	Rohan Singh	
Project Team Resources	Sam Oh Boney Parikh	Chinmay Karandikar Songyun Peng

2.0 BUSINESS REASONS FOR PROJECT

- Student Union is usually busy during the day and snooker table, table tennis table are in high demand. At times, there is peak demand in Student Union resources which prevents students to make use of them
- There is no resource management system to effectively control and predict the demand
- Creating a web-based reservation system is a countermeasure to solve this issue

3.0 PROJECT OBJECTIVES (PURPOSE)

- This project would help in proper Distribution of student union resources (Snooker Table, Table Tennis)
- Check-Book-Play will enable the user to reserve a slot for themselves using NetID
- This will improve the present condition, after implementing this application everyone can make use of resources by making an online reservation.
- This Project will resolve the issue of some students who don't get chance to play in student union

4.0 PROJECT SCOPE

- Availability of various facilities in Student Union can be monitored online
- Available resource can be booked with a valid NetID
- Booking a resource for a specific time block
- Generate reports about the user pattern and recreational resources

5.0 ASSUMPTIONS

- Student Union allows to test the web-based application twice a week for at least one hour after completion of phase 1
- The student Union POC will be available for three days a week to clarify doubts
- All open queries will be resolved in 48 hours
- Changes more than 10% in UI/UX will affect the cost of the project

6.0 KEY PROJECT DELIVERABLES

Name	Description
Framework	*Overall roadmap outlining key components of recognition activities*
Project charter	*It serves as a reference of authority for the future of the project.*
Logic Model	Outlines key activities, outcomes and measures
Project backgrounder	A supplement to the project charter outlining definitions and outcomes
Research summary	To include general, jurisdictional and corporate research
Guidelines	To include general guidelines and rules
Communication/ Implementation plan	Communication of framework, tools resources to stakeholder groups, communication plan
SWOT Analysis	Analysis of Strengths, weaknesses, opportunities and Threats
Phase 1 code modules	This will contain UX/UI of the website & development reports of application engine
Phase 2 code modules	Infrastructure setup along with integration with UT Dallas system
High Level Design	Infrastructure and Database design of Check-Book-Play
Low Level Design	Reports of step by step refinement process
Test summary report	Document will contain weekly test summary and test results
Website	To contain framework, guidelines, general information for use by students and staff of UTD, along with reservation system for student union resources.

7.0 PROJECT'S CRITERIA FOR SUCCESS (MUST BE MEASURABLE)

- No server crash on each stage (1st 100hr 2nd 300hr 3rd 500hr)
- No reservation conflict between two or more reservations made through C-B-P
- Project deliverables meet the deadlines as proposed

8.0 SIGNOFF
Project Sponsor: Mr. Goodwin Date: 02/20/2019

Work Breakdown Structure

No	TASK TITLE	PREDECESSOR	TASK OWNER	DURATION	START	DUE
		(Task No)		(Days)	MM/DD/YR	MM/DD/YR
1	Planning			15	02/09/19	02/24/19
1.1	Project Charter documentation	-	Boney			
1.2	Project Scope Determination	1.1	Boney			
1.3	Finalization of functional & non-functional requirement	1.1	Rohan			
1.4	Manhour Estimation	1.3	Rohan			
2	Analysis			15	02/25/19	03/10/19
2.1	Risk Management	1	Songyun			
2.2	Forecasts	1	Songyun			
2.3	SWOT Analysis	1	Songyun			
2.4	Feasibility Analysis	1	Songyun			
2.5	Finalization of software tools in use	1	Sam			
2.6	Adaptability of existing software	1	Chinmay			
2.7	Third Party Library Analysis	1	Sam, Chinmay			
3	Design			20	03/11/19	03/31/19
3.1	High Level Design Implementation	2	Sam, Chinmay			
3.2	Low Level Design Implementation	3.1	Sam, Chinmay			

3.3	Prototyping	3.2	Sam, Chinmay			
4	Implementation			30	04/01/19	04/30/19
4.1	Phase I		Chinmay			
4.1.1	Development of application engine	3.3	Boney			
4.1.2	UI/UX of website	3.3	Rohan			
4.2	Phase II		Sam			
4.2.1	Infrastructure Setup	4.2.1	Boney			
4.2.2	App Deployment / Release	4.2.2	Rohan			
4.2.3	Integration with UT Dallas system	4.2.3	Songyun			
5	Quality			15	05/01/19	05/15/19
5.1	Debugging	4.2	Chinmay, Sam			
5.2	Troubleshooting	5.1	Sam, Chinmay			
5.3	A/B Testing	5.2	Chinmay, Sam			
6	Deployment			15	05/16/19	05/31/19
6.1	User Manual Documentation	5.3	Sam, Rohan			
6.2	Warranty (no of months)	6.1	Sam, Rohan			
6.3	Software Training / Demonstration	6.2	Sam, Rohan			
7	Collaboration/Integration			10	06/01/19	06/11/19
7.1	Compatibility testing	6.3	Songyun, Boney			
7.2	License agreements	7.1	Songyun, Boney			

Minutes of Meetings

Project Milestone 2

Meeting Title		
Date : Feb 16th 2019	Meeting Time : 12 – 2 pm	Meeting Location : JSOM MBA Lounge
Attendees	SongYun, Sam, Boney, Chinmay, Rohan	
Attendees Not Present		
Agenda Topic(s) Discussed/Approved		

Agenda1	Allocation of Works: Systems Proposal		
Conclusions	Tasks assigned per member(s)		
Action Items		Person Responsible	Deadline
Executive Summary & Problem Statement		SongYun	Feb 20th 18:00
Project Charter & Scope Management		Rohan, Boney	Feb 20th 18:00
Work Breakdown Structure		Sam, Chinmay	Feb 20th 18:00
MOM (1st meeting)		Sam, Chinmay	Feb 20th 18:00
Action Items		Person Responsible	Deadline
Agenda Topic(s) for Next Meeting			
Date : Feb 20th 2019	Meeting Time : 7 – 10 pm	Meeting Location : JSOM MBA Lounge	
Agenda1	Completion of Systems Proposal		
Discussion	1. Cross-check each member's works 2. Bundle the deliverables as one package on eLearning		

Meeting Title			
Date : Feb 20th 2019	Meeting Time : 7 – 10 pm	Meeting Location : JSOM MBA Lounge	
Attendees	SongYun, Sam, Boney, Chinmay, Rohan		
Attendees Not Present			
Agenda Topic(s) Discussed/Approved			
Agenda1	Completion of Systems Proposal		
Conclusions	Still needs improvement on each component		
Action Items		Person Responsible	Deadline
Executive Summary & Problem Statement		SongYun	Feb 24th 14:00
Project Charter & Scope Management		Rohan, Boney	Feb 24th 14:00
Work Breakdown Structure		Sam, Chinmay	Feb 24th 14:00
MOM (2nd meeting)		Sam	Feb 24th 14:00
Agenda2	Template needs to be unified as whole		
Conclusions	Format (font and size) needs to be in uniform		

Action Items	Person Responsible	Deadline
Unify the template and submit on eLearning	Chinmay	Feb 25th 12:00

Agenda Topic(s) for Next Meeting		
Date : Mar 27th 2019	Meeting Time : 7 – 10 pm	Meeting Location : JSOM MBA Lounge
Agenda1	Brainstorm ideas for Group Project Milestone3	
Discussion	Read over the necessary documents, if any	

Project Milestone 3

Meeting Title		
Date: March 29th 2019	Meeting Time : 12 – 2 pm	Meeting Location : JSOM MBA Lounge
Attendees	Songyun, Sam, Boney, Chinmay, Rohan	
Attendees Not Present		

Agenda Topic(s) Discussed/Approved		
Agenda1	Allocation of work of analysis phase	
Conclusions	Tasks assigned to each member	
Action Items	Person Responsible	Deadline
Preparation of requirements document	Sam	April 3rd 18:00
Creation of use case diagram	Rohan	April 3rd 18:00
Creation of class diagram	Chinmay	April 3rd 18:00
Creation of sequence diagram	Boney	April 7th 18:00
MOM (1st meeting)	Songyun	April 3rd 18:00
Agenda2		
Conclusions		
Action Items	Person Responsible	Deadline

Agenda Topic(s) for Next Meeting		
Date: April 3rd 2019	Meeting Time : 7 – 10 pm	Meeting Location : JSOM MBA Lounge
Agenda1	Completion of analysis activities	
Discussion	1. Cross-check each member's works 2. Bundle the deliverables as one complete report submitting on eLearning	
Agenda2		
Discussion		

Meeting Title			
Date: April 3rd 2019	Meeting Time : 7 – 10 pm	Meeting Location : JSOM MBA Lounge	
Attendees	Songyun, Sam, Boney, Chinmay, Rohan		
Attendees Not Present			
Agenda Topic(s) Discussed/Approved			
Agenda1	Completion of analysis activities		
Conclusions	Still needs improvements on each component		
Action Items		Person Responsible	Deadline
Preparation of requirements document		Sam	April 6th 14:00
Creation of use case diagram		Rohan	April 6th 14:00
Creation of class diagram		Chinmay	April 6th 14:00
Creation of sequence diagram		Boney	April 7th 14:00
MOM (2nd meeting)		Songyun	April 6th 14:00
Agenda2	Template needs to be unified as whole		
Conclusions	Format (font and size) needs to be in uniform		
Action Items		Person Responsible	Deadline
Unify the template and submit on eLearning		Songyun	April 8th 12:00
Agenda Topic(s) for Next Meeting			
Date: April 10th 2019	Meeting Time : 7 – 10 pm	Meeting Location : JSOM MBA Lounge	

Agenda1	Brainstorm ideas for Group Project Milestone 4
Discussion	Read over the necessary documents, if any

Project Milestone 4

Meeting Title		
Date: April 22nd 2019	Meeting Time : 12 – 2 pm	Meeting Location : JSOM 2.712
Attendees	Songyun, Sam, Boney, Chinmay, Rohan	
Attendees Not Present		
Agenda Topic(s) Discussed/Approved		
Agenda1	Allocation of work of the Milestone 4 project	
Conclusions	Tasks assigned to each member and confirm the date for next meeting.	
Action Items	Person Responsible	Deadline
Project presentation PowerPoint	Sam	April 28th 18:00
UI Design	Rohan	April 28th 18:00
Final Report	Chinmay	April 28th 18:00
Test cases and strategy	Boney	April 28th 18:00
MOM (1st meeting), Software design	Songyun	April 28th 18:00
Agenda2		
Conclusions		
Action Items	Person Responsible	Deadline
Agenda Topic(s) for Next Meeting		
Date: April 28rth 2019	Meeting Time : 6 – 10 pm	Meeting Location : JSOM MBA Lounge
Agenda1	Completion of Milestone 4	

Discussion	1. Cross-check each member's works 2. Bundle the deliverables as one complete report/presentation submitting on eLearning
Agenda2	
Discussion	

Lessons Learnt

Sam Oh

Overall, this hands-on project experience enabled me to better understand how projects in the IT industry are initialized and executed in the business settings. It would have been difficult to grasp the concepts solely from textbook and lectures; however, each milestone was well structured/designed that matched well with the theory/concepts covered in class. I enjoyed each milestone from the letter proposal, systems proposal, analysis (use case/class/sequence diagram) activities and design (Software design, UI design, Testing) activities.

I learned that communication is the key component in group-based project, especially in the IT field. Project may lead into a complete chaos when there is limited interaction among team members. Unlike other teams, we were open-minded to discuss and resolve the issues ahead of time so that we could finish the task on time. There was no issue in peer evaluation that could discourage the overall performance along the way.

Lastly, every milestone deliverable was equally distributed/broken down amongst team members in consideration of each member's strength and favor. Thus, not a single member felt overwhelming and helped each other out if one faced trouble/difficulty. Before submission, everyone offered thoughtful comments when proof-reading/reviewing other's work and there was a sense of team workmanship formed in the end.

Chinmay Karandikar

Managers are the most influential people in any work environment. They have the power and the determination to make or break any project. This subject, System Analysis and Project Management helped me in understanding the importance of the role of managers. Every manager must possess software and hardware skills. Expertise in the subject, even if not deep must be exercised for a successful project. This also helped me to understand the client manager interactions. There can be good managers, bad managers and worst managers. Worst need not necessarily mean that they lack technical expertise, but it often means that they lack the ability to control a team, in general, they lack leadership qualities.

Cost of a project is also something which is perhaps the most important for any project. It is up to the project manager to control the budget and avoid wasteful expenditure. Miscalculations can be devastating as a huge cost may lead to the closing down of the entire project. He needs to have the basic knowledge of the cost of each and every service that is used. A project manager must interact with the different teams under his command to motivate them and inspire them towards doing much better work.

Taking care of deadlines is another important aspect. No client likes his work to be delayed or completed in a haste. Determining the amount of time that a project will take has to be done by the project manager. He should know how good or bad people under him are. He should be able to allocate resources correctly by giving people having expertise to work on their domain and not elsewhere where they might take more time doing a particular job. Resource management is a must for any successful project.

All in all, on a much wider scope, this subject improved me as an individual. I realized how important team morale and communication is. I realized that instead of taking uncalculated and idiotic risks it is always better to take calculated risks in life. I realized the importance of safety, self-esteem and networking. It taught me how it is important to respect opinions of your peers and made me a very good listener. Summing up, this subject was indeed a very important learning of my life which had I not taken, I might have regretted it deeply somewhere down the line.

Songyun Peng

After taking SAPM this semester, I have a crystal clear and deep comprehension of what project manager really does in the real-life workplace. The knowledge I have learnt includes: the definition, structure, procedures, attributes, standards and other concepts about a project. Have a deep understanding of 4 major phases and the life cycle of a project. I learned different methods used to modeling the projects and how to draw different diagrams for each method. I also leaned to concepts of project time management, HR management, cost management and quality management, so that I can systematically apply these knowledges to my future job place in mainly three dimensions: Communication, vision and direction, tools. For communication, build a product is hard, building a product with remote teams is even harder, a remote project manager will need to clearly communicate the direction of our product and have the patience to listen to and address any miscommunications that are bound to occur. For vision and direction: we should provide the correct direction and vision if they are integrated and included into the broader strategy of our company. When we are having our planning, meetings make sure that they are involved so that they can communicate the timelines and the importance of various features to the dev team. For tools, when design a project, I can use class diagram, use case diagram, sequence diagram to interpret our ideas into actual visualization. Project management also teaches me the importance of time and goal setting. I will be able to prioritize these goals and help me make the most of our time. I also learned about the company's remaining resources and needs. This may be in the form of time, money or manpower. I can use project management knowledge to help me determine how to estimate the resources me need in our future projects and set our actual budget. I also learned how to generate a document for review. Each step before, during and after the project should be documented. This will ensure a reliable record that me can reference or verify during the audit. Project Management knowledge will provide me with the skills I need to produce a complete record of project completion. With project management skills, I can make better use of our information system. I can already use multiple applications and programs to track project milestones and progress. Project management knowledge will show me how to solve these problems without creating a steeper learning curve, especially for those who are not familiar with computers or who are not used to using them.

Boney Parikh

One of the most important lessons learnt from this project is that planning and design is the most important aspect of any project and that maximum amount of time should be dedicated for these activities. A bad plan leads to a lot of rework at the later stages in the project. The second most important lesson learnt is the importance of scrum meetings in the project. Lack of these meetings led to same work being done by multiple team members and the work among team members was not coordinated. If we have regular scrum meetings, each team member is made aware of what other team member is doing and if anyone's activities impact the other, the other will build the system taking into account all possible scenarios. Third important lesson that we learnt while executing this project is that there should always be a time and cost buffer considered whenever we are developing a system which has interactions with other systems. This is because, even though our project team is on track, lack of support from project teams of other systems can cause a delay in project.

For future projects, I will ensure that we are spending most of the time planning for the project and conceptualizing the design of the project. This will lead to faster implementation and deployment and will also lead to lesser issues in the system. Also, I will ensure that the team has weekly scrum meetings so that everyone's current and upcoming tasks are discussed in that meeting and everyone is conscious about what modules the other person is working on. This will benefit in the sense that suppose I am working on the UI module and another person working on the application engine encounters a technical setback and is forced to modify system behaviour slightly, then I as a UI developer need to modify user interface accordingly. Lastly, I will ensure that for all projects involving interactions with other subsystems, I will clearly outline the support required by third party teams and keep appropriate buffer while allocating time and resources.

Overall this project has been a good learning opportunity for me and I plan to rectify the mistakes made in this project in all future projects. Also, I hope that the learning from my project, helps similar projects in the organization and they do not face unnecessary setbacks.

Rohan Singh

This course helped me learning core concepts of Project Management including very minute details from initiating, planning and executing the project. I have learnt many concepts like planning, risk factors, quality management, communication which all contributes a lot to successful project.

The course included hands-on experience of creating the prototype required at different stages as Use-Case diagram, class diagram, activity diagram and even User Interface. The course was structured in a proper manner and this helped everyone to keep track of things being taught in class.

There was a diversity of topics that provided with the students' basic skills needed for Project management. it challenged my thinking regarding the application of planning and how to apply skills to different methodologies under project management. The course exceeded my expectations, because it explored other aspects of project management such as DBMS, security concerns, software design. The course has a very comprehensive approach to Project management.