



L5DC SECTION (62)

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**Myanmar Golf Club Member, Booking And Playing
Management System Project**

Acknowledgement

I would like to express my gratitude and thanks to all the teachers of KMD-NCC who teach me all the skill require to finish this project. I also want to give my sincere gratitude and thanks to my supervisors Mr. Shain Thu and Ms. Hnin Tha Zin Naing who give me various important advice, guidance and encouragement.

Finally, I want to thanks Mr. Khin Maung Yi (General Manager of Myanmar Golf Club) who provide me with all the information and allowing me to analyze business processes of Myanmar Golf Club.

Abstract

Myanmar Golf Club project is about developing dynamic website that club members can use to book their tee off time online and member management system including monthly fee payment system, locker booking system. Also booking slot creation system and playing payment management system.

Contents

Acknowledgement	2
Abstract	3

1.1 Current Business Introduction	9
1.1.1 History	9
1.1.2 Business Process	9
1.1.3 Issues	10
1.2 Proposed System Scope	11
1.2.1 System to Be Development	11
1.2.2 Aims and Objectives	11
1.2.3 Estimated cost and duration	12
1.2.4 Legal Ethical Social Professional Issues (New System)	
13	
1.2.5 Project Plan	14
CHAPTER – 1	16
1.1 Current Business Introduction	17
1.1.1 History	17
1.1.2 Business Process	17
1.1.3 Issues	19
1.2 Proposed System Scope	20
1.2.1 System to Be Development	20
1.2.2 Aims and Objectives	20
CHAPTER – 2	21
2.1 Similar Product Introduction	22
2.2 Functional Comparison	24
2.3 Non-Functional Comparison	27
2.4 Summary	34
CHAPTER – 3	35
Feasibility Study	35
3.1 Literature Review (Technical Feasibility)	36
3.1.1 Methods	36
3.1.2 Languages	38
3.1.3 Databases	40
3.2.1 Principle 1 - Focus on the business need	42

3.2.2 Principle 2 - Deliver on time	42
3.2.3 Principle 3 – Collaborate	42
3.2.4 Principle 4 - Never Compromise quality	42
3.2.5 Principle 5 - Build incrementally form firm foundation	
42	
3.2.6 Principle 6 - Develop iteratively	43
3.2.7 Principle 7 - Communicate continuously and clearly	43
3.2.8 Principle 8- Demonstrate Control	43
CHAPTER – 4	44
Foundation.....	44
4.1 Target User	45
4.2 Functional Requirement	45
4.3 MoSCow Prioritization	46
4.4 Non-Functional Requirements	48
4.5 Time box Plan	49
Time box 1: Member Management System Time Box	49
Time box 2: Tee off booking system and playing management timebox	
50	
4.6.1 Identification of Possible Risks	51
4.6.2 Critical Success Factors	52
Technical-Related Factors	52
Process-related factors	52
People-related factors	53
4.6.3 Risk Matrix	53
CHAPTER – 5	54
EXPLORATION	54
&	54
ENGINEERING	54
5.1 Timebox 1: Member Management System	55
Project Plan for Time Box 1	55
5.1.1 Functional Requirements	55

5.1.2 Use Case Diagram	56
5.1.3 Screen Design	57
Member Type Register Form and Member Type List	57
Member Registration Form.....	58
Locker Registration Form	59
Locker List for admin	59
Member List Form	60
Monthly Fee Form	60
Locker List For locker management	61
Book Locker Form	61
5.1.4 Iteration for Screen Design	62
5.1.5 Class Diagram	65
5.1.7 Usability Testing	77
5.1.8 Time-box 1 Iteration	80
5.1.9 Timebox Summary	80
5.2 Timebox 2: Booking and Playing Management System	81
Project Plan for Time Box 2	81
5.2.1 Functional Requirements	81
5.2.2 Use Case Diagram	82
5.2.3 Screen Design	83
5.2.4 Iteration for Screen Design	91
5.2.5 Class Diagram	93
5.2.6 Sequence Diagram for Booking Process	95
5.2.7 Functional Testing	96
5.2.8 Usability Testing	117
5.2.9 Iteration for Usability Testing	121
5.2.10 Time box 2 Summary	122
5.3 Overall Class Diagram	123
CHAPTER – 6	125
DEPLOYMENT	125
6.1 Deployment.....	126
6.1.1 Deployment Diagram	126

6.1.2 Explanation for diagram	126
6.2 Data Migration	127
6.2.1 Data to Migrate	127
6.2.2 Plan.....	128
6.3 Training	129
6.3.1 Training plan	129
6.3.2 User Manual	129
CHAPTER – 7	141
CONCLUSION	141
ENGINEERING &	141
EVALUATION	141
7.1 Evaluation against Aim & Objectives	142
Objective 1.....	142
Objective 2.....	142
Objective 3.....	142
Objective 4.....	142
Objective 5.....	142
Objective 6	142
7.2 Evaluation againt Similar System.....	143
Functional Comparison	143
Non-Functional Comparison	146
2.4 Summary	149
7.3 Evaluation against Justification Made	150
7.4 Evaluation against Time Box Plan	152
7.5 Personal Evaluation	154
7.6 Strength & Weakness	154
7.7 Future Amendment	155
7.8 Interview Scripts	156
APPENDIX	158
Section A: Use Case Descriptions	159
Timebox 1: Member Management System Timebox	159

Timebox 2: Booking and Playing Management System Timebox	160
Section B: Detailed Class Definitions	161
Timebox 1: Member Management System Timebox	161
Timebox 2: Booking and Playing Management System Timebox	162
Section C: Coding	164
Section D: Test Scripts	165
Test Scripts for timebox 1	165
Test scripts for member type form	165
Test Script for Member Register Form	168
Test scripts for Locker Register Form	175
Test scripts for Member List Form	177
Test scripts for Member Update Form	179
Test scripts for Book Locker Form	182
Test scripts for Monthly Fee Payment Form	185
Test script for timebox 2	186
Test scripts for Staff Register Form	186
Test scripts for Staff Login Form	190
Test scripts for Member Login Form	192
Test scripts for bookingcreator	194
Test scripts for bookinglistforadmin Form	196
Test scripts for Caddy Register Form	198
Test scripts for Caddy List Form	200
Test scripts for Buggy Register Form	202
Test scripts for Member Profile Update Form	204
Test scripts for booking (Member) Form	208
Test scripts for Member Playing Form	212
Test scripts for Guest Playing Form	220
References	
226	

1.1 Current Business Introduction

1.1.1 History

This project is about **Myanmar Golf Club** which is established in 1948. Myanmar golf club is formerly named Burma golf club and built by local architect. This golf course is located in 9 miles, Pyay Road, Mayangone Township, Myanmar. Myanmar golf course is 18-Hole course and total length is 6756 yards and have par: 72 total currently. Myanmar Golf club is created with following objectives

- To establish golf club in Yangon
- To promote golf in Myanmar and provide assistant to who interested in golf
- To improve and maintain skill of Myanmar golfers
- To create friendly community between club member and families

Myanmar golf club also have club house, pro shop, restaurant etc. Also have driving range for training. Have rental services for caddy and electric carts etc.

1.1.2 Business Process

Myanmar golf club is not profit club (mean all income is use for maintenance and improvement of golf club). Main business process includes

1) Member Management

Myanmar golf club allow both local and foreigner to become member. There are six types of member namely

- I. Life Member
- II. Honorary Member
- III. Ordinary Member
- IV. Foreigner Member
- V. Lady Member
- VI. Junior Member

2) Booking Management

Club allow club member to book tee off time using phone or in person 1 week before actual tee off times.

3) Playing management

When member and guest check in at golf course to play they need to pay respective

fees (Playing fees, booking fees, Caddy, buggy fees etc.) at front desk at the club.

4) Tender system

Restaurant, pro shop and driving range is lease to public companies using tender system.

1.1.3 Issues

Myanmar golf club didn't have computerized system for all the business process.

1) Member Management

Member record need a lot of place to store and hard to find record when needed.

Monthly fees and locker fees sometime have error in processing.

2) Booking management

Need a lot of paper to record the booking data. Take time to find if want to recheck something. Error are happen time to time.

3) Playing management

Manual playing fee system need a lot time to process and error prone. Caddy list is hard to manage manually.

4) Tender System

Take long time to work through a lot of paper and compare the bids.

1.2 Proposed System Scope

1.2.1 System to Be Development

- To develop computerized member registration
- To develop computerized monthly fee payment and locker booking and payment system
- To develop computerized caddy and buggies management system
- To develop computerized tee off booking ○ To develop computerized playing fee management ○ To develop user friendly website.

1.2.2 Aims and Objectives

Aim

To develop fast and reliable computerized golf course management system to solve all the issues mention above.

Objectives

- Create good project plan to have better control on each steps of the project, to avoid going over end date etc.
- Analyze business processes and functional requirements of Myanmar golf club to determine areas that computerize system can add improvements.
- Design the computerize system structure, design the website for club members, and produce minimalist design admin site web application.
- Transform the analyze business process, functional requirement, design by coding to produce easily useable and error free system.
- Testing finish system to improve system quality and robustness and confirm all function work properly.
- Give proper training to staffs of Myanmar golf club so they can use new system efficiently.

1.2.3 Estimated cost and duration**Software**

No	Software Name	Price	Quantity	Sub-Total
1	XAMPP	Free	1	N/A
2	Microsoft Window 10 PRO	199 USD	4	796 USD
3	Microsoft Office 365	Free	4	N/A
4	Avira antivirus Prime 2019 edition	Free	4	N/A

Hardware

No	Hardware Name	Price	Quantity	Sub-Total
1	Personal Computer	900 USD	4	3600 USD
2	Dell SE2216H 22-inch LED Monitor	130 USD	4	520 USD
3	Power Pro 1200 VA UPS	50 USD	4	200 USD
4	A4 Tech 7200N Wireless Keyboard & Mouse	23 USD	4	92 USD

5	Cisco 10 /100 4 Port VPN Router RV042	140 USD	1	140 USD
6	Epson Expression ET-2750 wireless all in one printer with scanner and copier	300 USD	1	300 USD

License

No	Name	Price	Quantity	Sub-Total
1	Microsoft Office 365	79.99 USD per year	4	319.96 USD
2	Avira antivirus Prime 2019 edition	34.99 USD per year	4	139.96 USD For 1 year
3	Global Tech ISP services 20Mbps	200 USD per month	1	200 USD for 1 month
4	Web hosting services	47 USD per month	1	47 USD for month

Development

Development cost will be estimate around \$9000.

Summary

Category	Cost
Software	\$796
Hardware	\$4852
License	\$706.92
Development	\$9000
Total	\$15354.92

Duration

Duration for this project is 1 year.

1.2.4 Legal Ethical Social Professional Issues (New System)**Legal**

Security of the personal data of club member is important. If this project system got hack and detail member information are exposed there will be legal action to club and system development team. So, need to ensure that cyber security of this project is good.

Ethical

Sharing of important data to third party without acknowledgement of business stakeholder can be regard unethical. For example, sharing or leaking of detail business process of this Myanmar

golf club to their rival golf courses may damage their business potential. It may not be led to legal action but is unethical for developer and will not have good reputation in this field.

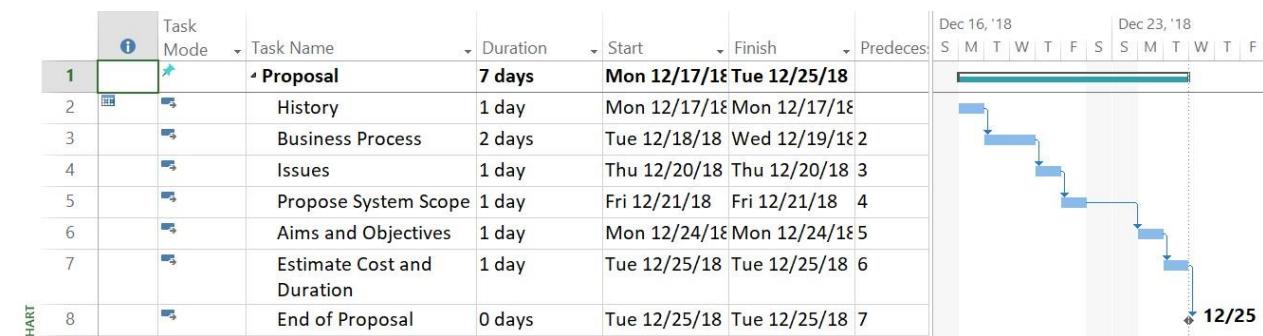
Social

Need to consider computer related liability problem. This is to ensure that this web base application and website develop from this project will not do any damage to social, financial etc of the end user. Also need to consider equality in access by making website more assessable by disabled user. For example, adding subtitle to video on website so hearing impair user can be enjoy and more assessable.

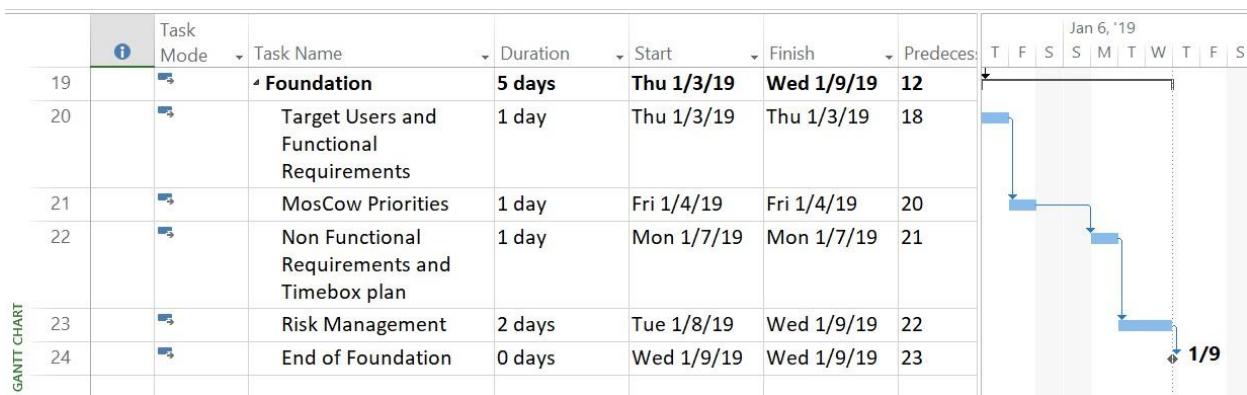
Professional

- Should not claim level of competence that did not possess during project.
- Develop professional knowledge, skill and competence during project and maintain awareness of changes in standard and technology of IT field.
- Respect and value the alternative point of view and seek, offer, accept honest criticisms during project.
- Avoid injuring other, damaging their property, reputation or by malicious action during project.
- Reject and do not make any bribery or unethical action while doing project. (BCS, n.d.)

1.2.5 Project Plan



Similar Product comparison	1 day	Wed 12/26/18	Wed 12/26/18	1				
Similar Product comparison	1 day	Wed 12/26/18	Wed 12/26/18	8				
End of Similar Product comparison	0 days	Wed 12/26/18	Wed 12/26/18	10				



	Task Mode	Task Name	Duration	Start	Finish		Jan 13, '19	Jan 27, '19
GANITT CHART	25	- Exploration and Engineering for timebox 1	16 days	Thu 1/10/19	Thu 1/31/19	1	W	S
	26	Time Box 1 Requirements definition and Functional Requirements	1 day	Thu 1/10/19	Thu 1/10/19	2	S	T
	27	UseCase and UseCase description	2 days	Fri 1/11/19	Mon 1/14/19	3	M	F
	28	Screen Design	5 days	Tue 1/15/19	Mon 1/21/19	4	T	T
	29	Timebox 1 iteration	2 days	Tue 1/22/19	Wed 1/23/19	5	S	M
	30	Class Diagram	1 day	Thu 1/24/19	Thu 1/24/19	6	S	F
	31	Functional Testing	3 days	Fri 1/25/19	Tue 1/29/19	7	T	T
	32	Usability Testing	1 day	Wed 1/30/19	Wed 1/30/19	8	S	M
	33	Time Box Summary	1 day	Thu 1/31/19	Thu 1/31/19	9	S	F
	34	End of Exploration and Engineering	0 days	Thu 1/31/19	Thu 1/31/19	10	T	S

	Task Mode	Task Name	Duration	Start	Finish		Jun 2, '19	Jun 16, '19	Jun 30, '19	Jul 14, '19	J	
GANITT CHART	35	- Exploration and Engineering for timebox 2	20 days	Wed 6/19/19	Tue 7/16/19	1	W	S	T	M	F	
	36	Time Box 2 Requirements definition and Functional Requirements	2 days	Wed 6/19/19	Thu 6/20/19	2	S	T	M	F	T	
	37	Time Box 2 UseCase and UseCase Description	2 days	Fri 6/21/19	Mon 6/24/19	3	S	T	M	F	T	
	38	Time Box 2 Screen Design	2 days	Tue 6/25/19	Wed 6/26/19	4	S	T	M	F	T	
	39	Time Box 2 iteration	2 days	Thu 6/27/19	Fri 6/28/19	5	S	T	M	F	T	
	40	Time Box 2 Class Diagram	3 days	Mon 7/1/19	Wed 7/3/19	6	S	T	M	F	T	
	41	Time Box 2 Functional Testing	6 days	Thu 7/4/19	Thu 7/11/19	7	S	T	M	F	T	
	42	Time Box 2 Usability Testing	2 days	Fri 7/12/19	Mon 7/15/19	8	S	T	M	F	T	
	43	Time Box 2 Summary	1 day	Tue 7/16/19	Tue 7/16/19	9	S	T	M	F	T	
	44	End of Time Box 2	0 days	Tue 7/16/19	Tue 7/16/19	10	S	T	M	F	T	J

	Task Mode	Task Name	Duration	Start	Finish		Jun 2, '19	Jun 16, '19	Jun 30, '19	Jul 14, '19	Jul 28, '19	
GANITT CHART	45	- Deployment	7 days	Wed 7/17/19	Thu 7/25/19	1	W	S	T	M	F	
	46	Deployment Diagram and Explanation	2 days	Wed 7/17/19	Thu 7/18/19	2	S	T	M	F	T	
	47	Data Migration	1 day	Fri 7/19/19	Fri 7/19/19	3	S	T	M	F	T	
	48	Training	3 days	Mon 7/22/19	Wed 7/24/19	4	S	T	M	F	T	
	49	User Manual	1 day	Thu 7/25/19	Thu 7/25/19	5	S	T	M	F	T	
	50	End of Deployment	0 days	Thu 7/25/19	Thu 7/25/19	6	S	T	M	F	T	J

	Task Mode	Task Name	Duration	Start	Finish		Jun 2, '19	Jun 16, '19	Jun 30, '19	Jul 14, '19	Jul 28, '19	
GANITT CHART	51	- Conclusion and Evaluation	6 days	Fri 7/26/19	Fri 8/2/19	1	W	S	T	M	F	
	52	Evaluation against aims and objectives	1 day	Fri 7/26/19	Fri 7/26/19	2	S	T	M	F	T	
	53	Evaluation against similar system	1 day	Fri 7/26/19	Fri 7/26/19	3	S	T	M	F	T	
	54	Evaluation against justification made	1 day	Mon 7/29/19	Mon 7/29/19	4	S	T	M	F	T	
	55	Evaluation against time box plan	1 day	Tue 7/30/19	Tue 7/30/19	5	S	T	M	F	T	
	56	Personal Evaluation	1 day	Wed 7/31/19	Wed 7/31/19	6	S	T	M	F	T	
	57	Strength & weakness	1 day	Thu 8/1/19	Thu 8/1/19	7	S	T	M	F	T	
	58	Future Amendment	1 day	Fri 8/2/19	Fri 8/2/19	8	S	T	M	F	T	
	59	End of Conclusion and Evaluation	0 days	Fri 8/2/19	Fri 8/2/19	9	S	T	M	F	T	
	60	- Appendix	1 day	Mon 8/5/19	Mon 8/5/19	10	S	T	M	F	T	
	61	Appendix	1 day	Mon 8/5/19	Mon 8/5/19	11	S	T	M	F	T	
	62	End of Appendix	0 days	Mon 8/5/19	Mon 8/5/19	12	S	T	M	F	T	

CHAPTER – 1

INTRODUCTION

1.1 Current Business Introduction

1.1.1 History

This project is about **Myanmar Golf Club** which is established in 1948. Myanmar golf club is formerly named Burma golf club and built by local architect. This golf course is located in 9 miles, Pyay Road, Mayangone Township, Myanmar. Myanmar golf course is 18-Hole course and total length is 6756 yards and have par: 72 total currently. Myanmar Golf club is created with following objectives

- To establish golf club in Yangon
- To promote golf in Myanmar and provide assistant to who interested in golf
- To improve and maintain skill of Myanmar golfers
- To create friendly community between club member and families

Myanmar golf club also have club house, pro shop, restaurant etc. Also have driving range for training. Have rental services for caddy and electric carts etc.

1.1.2 Business Process

Myanmar golf club is not profit club (mean all income is use for maintenance and improvement of golf club). Main business process includes

1) Member Registration

Myanmar golf club allow both local and foreigner to become member. To become member, need to propose member registration form with vouch from two club members are needed. Government staff can have lower member registration fees. There are six member type in Myanmar golf club.

I. Life Member

Any member who have been member of the club for 20 years and age over 60 years old become life member.

II. Honorary Member

Honorary member is chosen from member such as former club captain etc.

III. Ordinary Member

After member registration is approve that person will become ordinary member. Need to be 18 years old at least and need the vouch of two club members.

IV. Foreigner Member

To become foreigner member, apply same rule as ordinary member. Need to be vouch by 2 member of the club and need to be 18 years old minimum.

V. Lady Member

Apply same rule as ordinary member and foreigner member.

VI. Junior Member

To become junior member, need age of 10 years old minimum (both male and female) and need to be child of the club member. Moreover confirmation from two other club member is needed.

2) Tee off time booking

Club member can book for tee off time using phone. One booking allow 4 players to start playing at that time. Extra one person is allow with extra green fee. Booking can be cancel 2 days before tee off time that have been booked. Booking fees need to be paid when player arrive at golf course.

3) Playing fee management

All the player member or guest need to go to counter and paid all the fee before tee off. Fees include playing fees, green fees, caddy fee and buggy fees if want to hire one. Green fees is different for Member and guest. Also foreigner and local guests have different green fees. Staff need to fill the voucher accordingly and record the name of the member and guest. Then 1 voucher slip is given to caddy master who handle which caddy to pairs with the golfer. Member can call caddy by name. Guest can only get caddy by their order. For buggy service golfer may or may not hire the buggy. Buggy service also have different fee for local and foreigner. Daily income is calculated using voucher after each day.

4) Tender system

Restaurant, pro shop and driving range is lease to public companies using tender system.

1.1.3 Issues

Myanmar golf club didn't have computerized system for all the business process.

1) Member Registration

Member register are recorded in book and take a lot of place to store. Have hard time finding member record if need one. Monthly fee record is hard to check since golfers can pay monthly fees in advance (e.g. some pay 1 year advance not month by month) so when need to check who have paid till which month is hard. Error are happen sometime when need to audit monthly member fees.

2) Tee off time booking

Need a lot of paper to record the booking data. Take time to find if want to recheck something. Error are happen time to time.

3) Playing fee management

Staff use voucher to fill player name and fee accordingly and take a lot of time. For caddy services caddy master need to come to club house where staff counter is located and collect the slip of voucher to allocate the caddies accordingly so want to reduce the work load caddy master. Caddy attendance list and order is need to record everyday using book and need to record which caddy is already go out and who not. Then some caddy finish their job and want to work again are need to be record again into caddy order. So is hard to manage the caddy record.

1.2 Proposed System Scope

1.2.1 System to Be Development

Propose system scope is to develop computerize member register, monthly fee payment, locker booking and payment, booking system for tee off time and various playing fee management, caddy and buggy management system.

1.2.2 Aims and Objectives

Aims

To develop fast and reliable computerized golf course management system to solve all the issues mention above.

Objective

- Create good project plan to have better control on each steps of the project, to avoid going over end date etc.
- Analyze business processes and functional requirements of Myanmar golf club to determine areas that computerize system can add improvements.
- Design the computerize system structure, design the website for club members, and produce minimalist design admin site web application.
- Transform the analyze business process, functional requirement, design by coding to produce easily useable and error free system.
- Testing finish system to improve system quality and robustness and confirm all function work properly.
- Give proper training to staffs of Myanmar golf club so they can use new system efficiently.

SWOT Analysis

<u>Strength</u>	<u>Weakness</u>
<ul style="list-style-type: none"> • Long standing golf club since 1947 • Have good reputation • Have more than 2700 members • Nearest golf course to city 	<ul style="list-style-type: none"> • Manual member management system has a lot of issues • Didn't have website • Can't book tee off time online
<u>Opportunities</u>	<u>Threats</u>
<ul style="list-style-type: none"> • Can attract more golfer with new website • Can manage member, locker booking, tee off time booking etc. • Can manage playing payment more easily • Reduce space needed to store paper 	<ul style="list-style-type: none"> • Have many new golf courses in recent years • New golf courses have website that can book tee off time online • New golf courses have can attract a lot of new member and guest golfer to their courses.

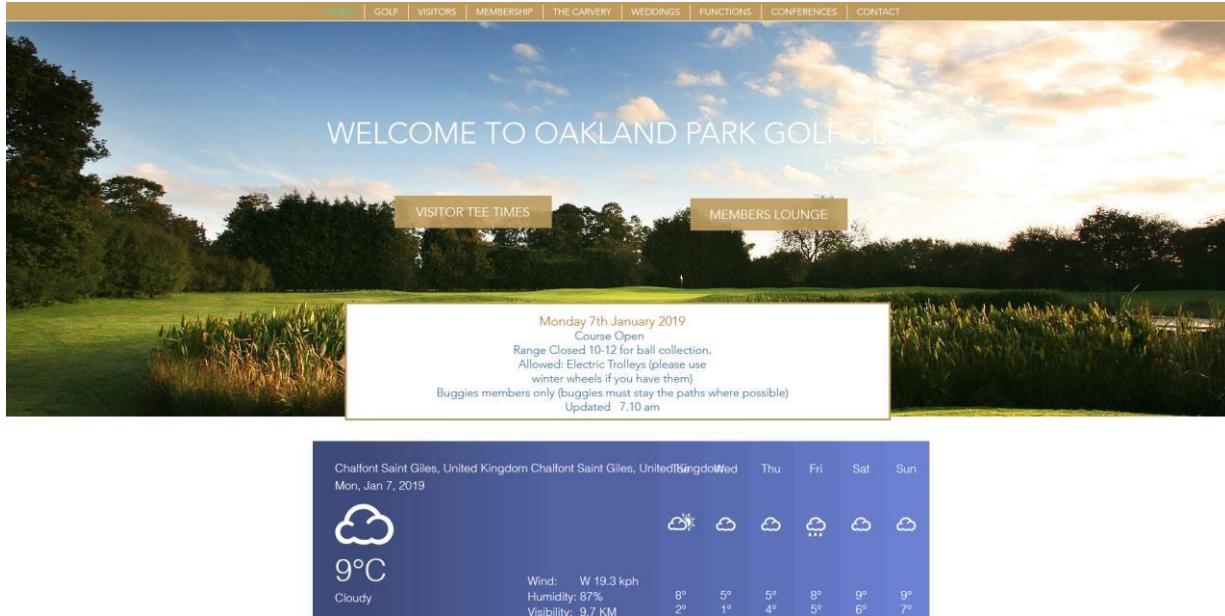
CHAPTER – 2

STUDY OF SIMILAR

SYSTEM

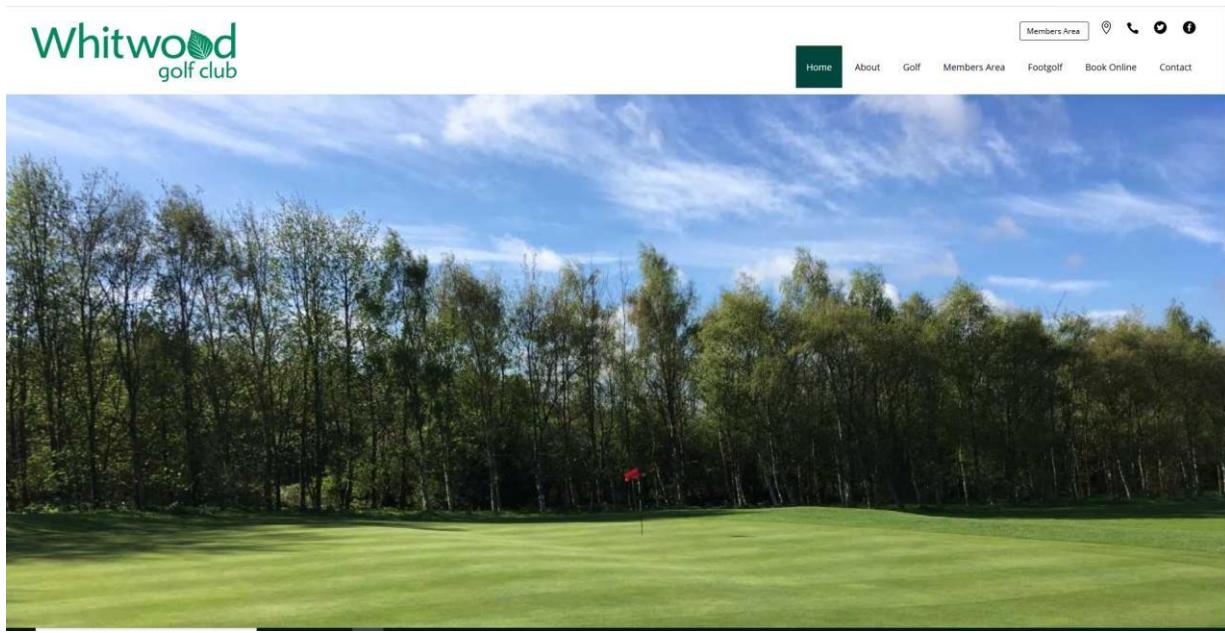
2.1 Similar Product Introduction

Two similar websites that will compare are www.oaklandparkgolf.co.uk and www.whitwoodgolf.com. Oakland park golf course is located in Three households, Chalfont St. Giles, Buckinghamshire, HP8 4LW, UK. This golf course is the 18-hole, par 67 golf course with driving range and practice putting green. Allow both member and visitor to play. Whitwood golf club is located in Altofts lane, Whitwood, Castleford, West Yorkshire, WF10 5PZ , UK. This golf course is a full size 9-hole facility built on undulating ground. The Course has seen new tees built over winter 2018 and is now Par 70, 6,099 yards course.



Home page of Oakland Park Golf Club

Oakland golf club home page include link to detail about history of the club, services of the club etc. Main page also has link for visitors to book tee off time and member log in. Also give update info about the golf club and weather of the location of the course.

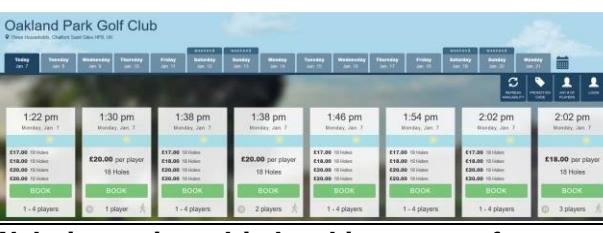


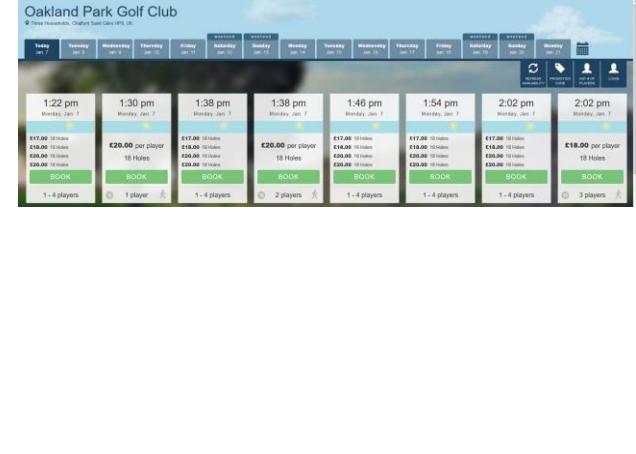
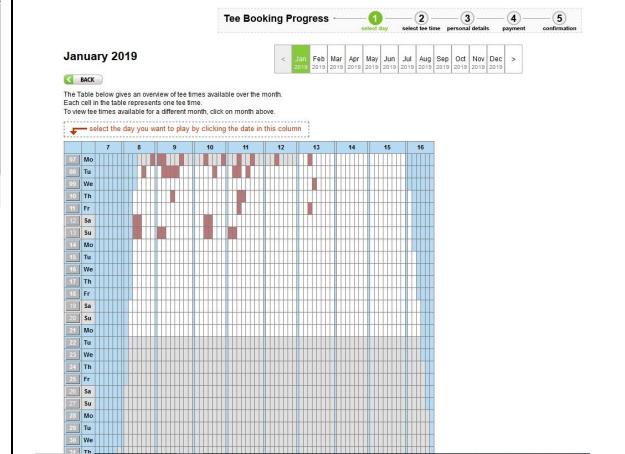
Home page of Whitwood golf club

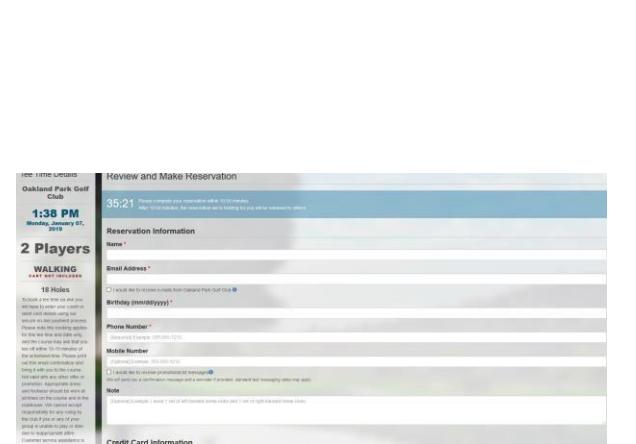
Whitwood golf club home page is simple and contain link for detail of the club history and its services, log in page for member, booking tee off time for both member and visitors, connect with twitter and Facebook etc.

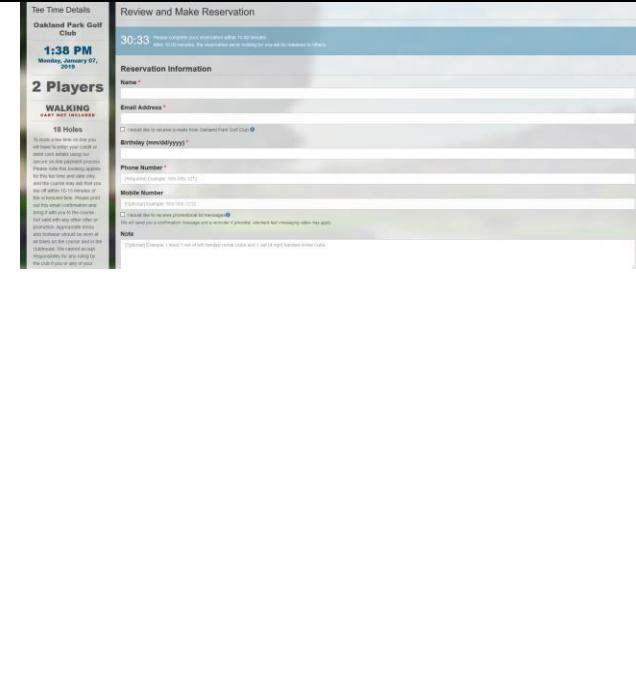
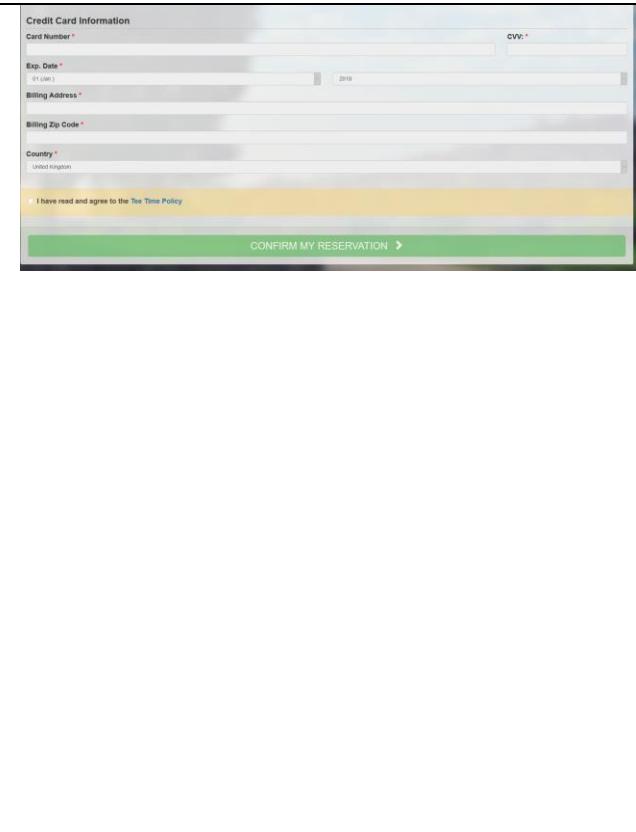
2.2 Functional Comparison

Booking System Comparison

Oakland Park Golf Club	Whitwood Golf Club
	
Both website have tee off time boking for members and visitors	Both website have tee off time boking for members and visitors
	
Website go into this booking page after clicking visitor tee times.	Whitwood golf club website have other functions and information page before going to actual booking page.

	
<p>This webpage have better User Interface (Can choose date and time more easily)</p>	<p>User interface seem poor (Need to choose date first and go next step to choose time)</p>

	<table border="1"> <tbody> <tr> <td>13:00</td><td>Golf Only</td><td><input type="radio"/> £14.00</td><td><input type="radio"/> £28.00</td><td><input type="radio"/> £42.00</td><td><input type="radio"/> £56.00</td><td>BOOK NOW [18]</td></tr> <tr> <td>13:08</td><td>Golf Only</td><td><input type="radio"/> £9.00</td><td><input type="radio"/> £18.00</td><td><input type="radio"/> £27.00</td><td><input type="radio"/> £36.00</td><td>BOOK NOW [9]</td></tr> <tr> <td>13:16</td><td>Tee Booked</td><td colspan="5">Internet Booking Not Available</td></tr> <tr> <td>13:24</td><td>Golf Only</td><td><input type="radio"/> £14.00</td><td><input type="radio"/> £28.00</td><td><input type="radio"/> £42.00</td><td><input type="radio"/> £56.00</td><td>BOOK NOW [18]</td></tr> <tr> <td>13:32</td><td>Golf Only</td><td><input type="radio"/> £9.00</td><td><input type="radio"/> £18.00</td><td><input type="radio"/> £27.00</td><td><input type="radio"/> £36.00</td><td>BOOK NOW [9]</td></tr> <tr> <td>13:40</td><td>Golf Only</td><td><input type="radio"/> £14.00</td><td><input type="radio"/> £28.00</td><td><input type="radio"/> £42.00</td><td><input type="radio"/> £56.00</td><td>BOOK NOW [18]</td></tr> <tr> <td>13:48</td><td>Golf Only</td><td><input type="radio"/> £9.00</td><td><input type="radio"/> £18.00</td><td><input type="radio"/> £27.00</td><td><input type="radio"/> £36.00</td><td>BOOK NOW [9]</td></tr> <tr> <td>13:56</td><td>Golf Only</td><td><input type="radio"/> £14.00</td><td><input type="radio"/> £28.00</td><td><input type="radio"/> £42.00</td><td><input type="radio"/> £56.00</td><td>BOOK NOW [18]</td></tr> <tr> <td>14:04</td><td>Golf Only</td><td><input type="radio"/> £9.00</td><td><input type="radio"/> £18.00</td><td><input type="radio"/> £27.00</td><td><input type="radio"/> £36.00</td><td>BOOK NOW [9]</td></tr> </tbody> </table>	13:00	Golf Only	<input type="radio"/> £14.00	<input type="radio"/> £28.00	<input type="radio"/> £42.00	<input type="radio"/> £56.00	BOOK NOW [18]	13:08	Golf Only	<input type="radio"/> £9.00	<input type="radio"/> £18.00	<input type="radio"/> £27.00	<input type="radio"/> £36.00	BOOK NOW [9]	13:16	Tee Booked	Internet Booking Not Available					13:24	Golf Only	<input type="radio"/> £14.00	<input type="radio"/> £28.00	<input type="radio"/> £42.00	<input type="radio"/> £56.00	BOOK NOW [18]	13:32	Golf Only	<input type="radio"/> £9.00	<input type="radio"/> £18.00	<input type="radio"/> £27.00	<input type="radio"/> £36.00	BOOK NOW [9]	13:40	Golf Only	<input type="radio"/> £14.00	<input type="radio"/> £28.00	<input type="radio"/> £42.00	<input type="radio"/> £56.00	BOOK NOW [18]	13:48	Golf Only	<input type="radio"/> £9.00	<input type="radio"/> £18.00	<input type="radio"/> £27.00	<input type="radio"/> £36.00	BOOK NOW [9]	13:56	Golf Only	<input type="radio"/> £14.00	<input type="radio"/> £28.00	<input type="radio"/> £42.00	<input type="radio"/> £56.00	BOOK NOW [18]	14:04	Golf Only	<input type="radio"/> £9.00	<input type="radio"/> £18.00	<input type="radio"/> £27.00	<input type="radio"/> £36.00	BOOK NOW [9]
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	<p>Marketing Preferences</p> <p>I agree to receive information, newsletters, promotions and offers from Whitwood Golf Club.</p> <p><input type="checkbox"/> Email <input type="checkbox"/> Text Message <input type="checkbox"/> Post <input type="checkbox"/> Phone</p> <p>Privacy Policy and Visitor Terms and Conditions</p> <p><input type="checkbox"/> * I have read and I accept the Privacy Policy and Visitor Terms and Conditions</p> <p>Player Two Details</p> <p>Player Name: <input type="text"/></p> <p>Handicap: <input type="text"/></p> <p>Club: <input type="text"/></p> <p>Player Three Details</p> <p>Player Name: <input type="text"/></p> <p>Handicap: <input type="text"/></p> <p>Club: <input type="text"/></p> <p>Player Four Details</p> <p>Player Name: <input type="text"/></p> <p>Handicap: <input type="text"/></p> <p>Club: <input type="text"/></p> <p>Prove you are not a robot</p> <p><input type="checkbox"/> I'm not a robot  reCAPTCHA Privacy - Terms</p> <p>Proceed</p>														
This website have less detail info needed	This website ask more detail information to book.														
	<p>Tee Booking Progress</p> <p>1 select day 2 select tee time 3 personal details 4 payment 5 confirmation</p>														
This website have less step to reserve book time	This website have 2 more steps need to book then OakLand Park golf club														

Register System Comparison

Oakland Park Golf Club	Whitwood Golf Club
<p>Register Account</p> <p>Registering an account is quick and easy. With a HowDidIDo Passport account you only need to login once to access multiple Club Systems services such as HowDidIDo, ClubSkills and more.</p> 	<p>Whitwood Golf Club</p> <p>Email Enter the email address you wish to use to log in to HowDidIDo.</p>  <p>Password Enter a secure password you wish to use to log in to HowDidIDo, the password must be at least 6 characters long and contain a number, an upper case character and a lower case character.</p>  <p>Personal Details</p> 
Oakland park golf club website have sing page registration	Whitwood golf club website use step by step registration.

2.3 Non-Functional Comparison

Visibility of system status



Figure-1 Oakland park golf club home page.



Figure-2 Whitwood golf club home page

Both website use color change to show user which page they are currently browsing but Whitwood golf club have more visible system status with background highlight color.

Aesthetic and minimalist design

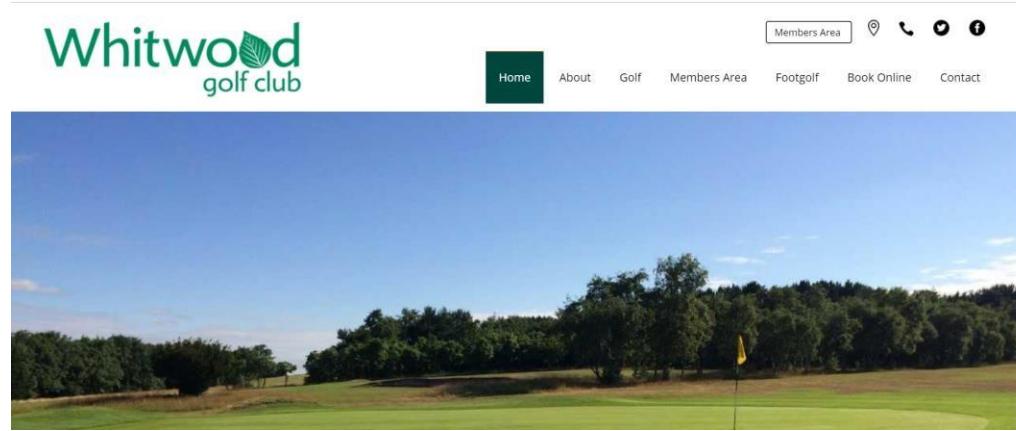


Figure- 1 Home page of Whitwood golf club website**Figure-2 and 3 Home page of Oakland Park Golf club website**

Both websites have simple and aesthetic design but whitwood golf club website use darker color font scheme on white background and is more minimalist and aesthetic design.

Error Prevention



Figure-1 Member register page of Oakland Park golf club

The screenshot shows a registration form titled "Register Account". It includes fields for Email (bobo.lm2@gmail.com), Password (*****), Confirm (*****), Forename (Bo), and Surname (Bo). A red "Register" button is at the bottom.

Register Account

Registering an account is quick and easy. With a HowDidiDo Passport account you only need to login once to access multiple Club Systems services such as HowDidiDo, ClubSites and more.

Passwords must be at least 6 characters long and contain at least one of each of the following: lowercase, uppercase, digit

Email	bobo.lm2@gmail.com
Password	*****
Confirm	*****
Forename	Bo
Surname	Bo

Register

Figure-2 After clicking register button (Oakland Park golf club)**Password**

Enter a secure password you wish to use to log in to HowDidiDo, the password must be at least 6 characters long and contain a number, an upper case character and a lower case character.

A red error message box appears above the password field, stating: "⚠ Password must contain a number, an upper case character and a lower case character." Below the message, two password input fields are shown. The first field has a small icon and contains "*****". The second field also has a small icon and contains "*****", with the entire field highlighted in blue, indicating it is the current focus or selected.

⚠ Password must contain a number, an upper case character and a lower case character.

♂	*****
♂	*****

Figure-3 Member register page of whitwood golf club

Oakland Park golf club member register show password error to user after press register button. Whitwood golf club register page show error in password format as soon as user type in the password so Whitwood golf club website have better error prevention in this aspect.

User control and freedom

Register Account

Registering an account is quick and easy. With a HowDidiDo Passport account you only need to login once to access multiple Club Systems services such as HowDidiDo, ClubSites and more.

Email	<input type="text"/>
Password	<input type="password"/>
Confirm	<input type="password"/>
Forename	<input type="text"/>
Surname	<input type="text"/>
<input type="button" value="Register"/>	

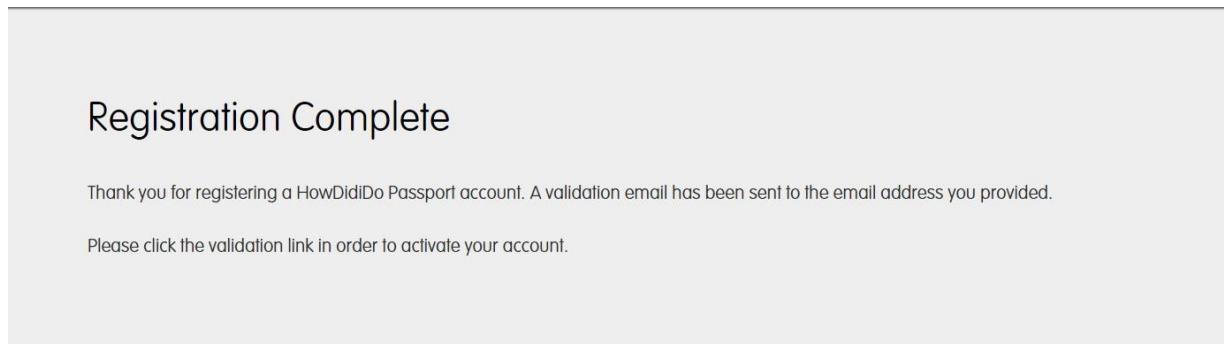
Figure-1**Figure-2**

Figure 1 and 2 show member registration process of Oakland park golf club.

Email	
Enter the email address you wish to use to log in to HowDidiDo.	
<input type="text"/>	<input type="text" value="Enter email (e.g. alex.smith@SomeClub.co.uk)"/>
<input type="text"/>	<input type="text" value="confirm email"/>
Password	
Enter a secure password you wish to use to log in to HowDidiDo, the password must be at least 6 characters long and contain a number, an upper case character and a lower case character.	
<input type="text"/>	<input type="text" value="enter a secure password"/>
<input type="text"/>	<input type="text" value="confirm password"/>
<input type="button" value="Next ►"/>	

Figure-3

The screenshot shows a registration form for a golf club. At the top, there's a navigation bar with 'Home / Register' and a 'Register' button. Below it, a progress bar indicates the user is on step 2 'About You' of 5 total steps. The form itself is titled 'Personal Details' and contains four input fields: Gender (Male), Title (Mr), Forename (Your Forename (e.g. Alex)), and Surname (Your Surname (e.g. Smith)). At the bottom right of the form area, there are 'Back' and 'Next' buttons, with 'Back' being circled in red.

Figure-4

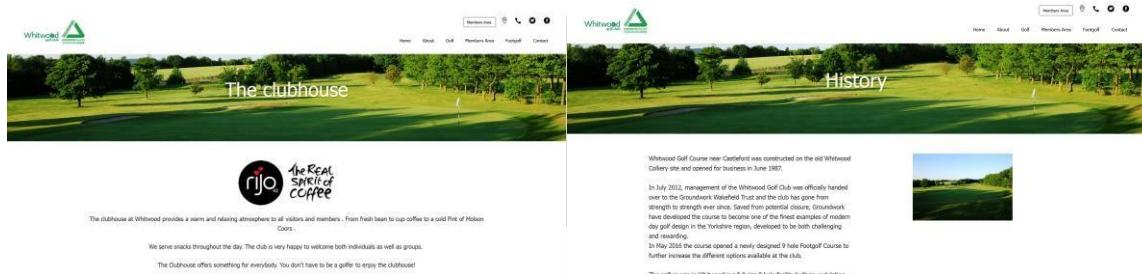
Figure 3 and 4 show member registration process of whitwood golf club.

From this above figure can know oak land golf club can't go back to start of registration if user type in wrong email or password. Whitwood golf club register page allow user to go back to change things. So whitwood golf club website have more user control and freedom.

Consistency and standards



Home page and driving range page of oakland park website



Club history page and club house page of whitwoodgolf.com

For this aspect both websites have consistency and standards for color scheme, fonts, action on all pages.

(Anon., n.d.)

Evaluation on Functional Comparison

Functionality	Oaklandparkgolf website	Whitwoodgolf website
Registration	1 2 3 <u>4</u> 5	1 2 3 4 <u>5</u>
Booking	1 2 3 4 <u>5</u>	1 2 <u>3</u> 4 5

Legend

0 – 1 Very Poor | 2 Poor | 3 Moderate | 4 Good | 5 Excellent

Evaluation on Non-Functional Comparison

Criteria	Oaklandparkgolf website	Whitwoodgolf website
Visibility of system status	1 2 3 <u>4</u> 5	1 2 3 4 <u>5</u>

Aesthetic and minimalist design	1 2 <u>3</u> 4 5	1 2 3 4 <u>5</u>
Error prevention	1 2 3 <u>4</u> 5	1 2 3 4 <u>5</u>
User control and freedom	1 2 <u>3</u> 4 5	1 2 3 4 <u>5</u>
Consistency and standard	1 2 3 4 <u>5</u>	1 2 3 4 <u>5</u>

Legend

0 – 1 Very Poor | 2 Poor | 3 Moderate | 4 Good | 5 Excellent

2.4 Summary

Functional comparison summary

For registration function whitwoodgolf website is better since it includes 5 steps to complete register than one step register of Oaklandpark golf website. So, when register user make mistake at some step, they can go back to redo that step. It makes a lot easier to use.

For booking function Oaklandpark golf website is a lot better than whitwoodgolf website because Oaklandpark golf website have better user interface that make it easier for golfers to choose their desire tee off time.

Non-Functional comparison summary

For visibility of system status both websites meet the criteria of this principle but whitwoodgolf website have more distinct feature with dark green background highlight which make it more visible.

For aesthetic and minimalist design whitwoodgolf website is a lot better with simple and more pleasant design where Oakland park golf website use more complex design than whitwoodgolf website.

For error prevention whitwoodgolf website also have better feature with showing error before user submit the data where Oakland park golf website only show after submit.

For user control and freedom criteria whitwoodgolf website is a lot better with multiple step in registration which allow user more freedom and control. For example, if input wrong data at 1 step they can go back to that step to change back. Oaklandpark golf website didn't have feature like that.

For consistency and standard both websites follow that principle and equal on that aspect.

CHAPTER – 3

Feasibility Study

3.1 Literature Review (Technical Feasibility)

3.1.1 Methods

Structured Systems Analysis & Design Methodologies (SSADM) is a set of standards developed in the 1980s for systems analysis and application design. SSADM divides that project development into series of stages or step to provide framework and clear management. (Anon., 2011)

Dynamic systems development method (DSDM) is an agile method of project development framework, mostly used as a software development method when it released. Purpose of DSDM is to provide more discipline to rapid application development method. (Anon., n.d.) **Strength of SSADM**

- Measuring the progress of project is can do easily just by checking the stages
- Easy to make project plan and schedule
- Easy to document each stages of development **Weakness of SSADM**

- There is no flexibility
- Stakeholder involvement is limited
- Take more time than DSDM to provide end product **Strength of DSDM**

- Is more flexible (in requirements)
- Improve stakeholder involvement in development process
- Incorporates stakeholders into the development process
- Focus on early testing
- Business requirements are prioritized

Weakness of DSDM

- Need a lot of stakeholder's involvement (if stakeholder not cooperate can't finish project successfully)
- Require high skill team for project development
- Its strict methodology

Comparison of SSADM and DSDM

Criteria	SSADM	DSDM
----------	-------	------

View	Hard, have clear solutions for problem that can be solve by increasing automation	Focus on business need
Stages	6 stages Feasibility Study Analysis and Requirements Specification Design Implementation Testing Maintenance	5 stages Feasibility study Foundations Exploration Engineering Deployment
Where to Use	Appropriate for large-scale projects and organizations,	Appropriate for both large and small scale projects
Tools	Interviewing, questionnaires, observation, analysis of documents	Timeboxing MoSCoW Rules Prototyping Testing Modeling

Recommendation for Methodology

DSDM will be used for this project since project scope is not big and DSDM is suitable for small to medium size project. Moreover, DSDM support iteration so easy to change things when needed and this Myanmar golf club project will need to do iterations since is first time student project. DSDM support timeboxing and with proper timebox management this project can finish before end date. DSDM project timeframe is 6 to 9 months which also meet the time allow for this project so DSDM is most suitable for Myanmar golf club project.

3.1.2 Languages

Definition

ASP.NET

ASP.NET is web development tool created by Microsoft that allow web developer to develop dynamic website using visual interface. ASP.NET also supports JavaScript, Python, Perl etc. ASP.NET is based on .NET framework which can provide API (Application Program Interface) for web developer.

(techterms.com, n.d.)

PHP

PHP also known as PHP: Hypertext Preprocessor, a programming language that used to create dynamic websites. When a website user browses a web page, web server processes PHP commands then sends results back to the visitor's browser. PHP is easy to use for beginner programmers. Also provide a lot of useful tools and advanced features for professional programmers. PHP is open-source, cross-platform language that can run efficiently on a lot of OS. PHP work most efficiently on Apache server.

(techopedia.com, n.d.)

Strength & Weakness of ASP.Net Strength

- Reduce time needed to code
- Include high quality toolbox
- Flexibility
- Simplicity
- Customizability

Weakness

- Security need to be extra care
- Expensive
- ASP.NET core is not sufficient
- Porting ASP application from one platform to another is costly

(www.software-developer-india.com, n.d.)

Strength & Weakness of PHP Strength

- Speedy website development
- Open source
- Good library support

- Stable
- Easy to use **Weakness**

- Can't modify core behavior
- Can affect speed of website (medium.com, n.d.)

Comparison of ASP and PHP

Criteria	ASP	PHP
Operating system	Only work with window base program. Can run on Linux program but need ASP-APACHE installed on its server	Can run in Linux, Window, Unix etc.
Speed	ASP use overhead server and run slower	PHP code run faster
Base language	Interface and syntax of Visual Basic programming	C/C++ as base language. Most are similar to each other
Database	Use Microsoft sql database	Flexible can use many databases.
Cost	Need to buy additional tools to work with its program	Most tools are open source and free.

Recommendation

PHP is selected for this project because is more flexible to use with many databases, many operating system, can have better performance. PHP is also open source and this project is also student project so didn't have budget to use pricy ASP.NET etc. Moreover, PHP is more suitable for beginner programmers like students to use and can use efficiently to develop this Myanmar golf club project. So PHP is chosen to use for development of this project.

3.1.3 Databases

Definition Microsoft SQL server

Microsoft SQL server is relational database management system (RDBMS) created by Microsoft that allow variety of transaction processing. Microsoft SQL server include fullfeatured tools that mainly designed to compete against rival databases such as Oracle Database (DB) and MySQL etc.

(searchsqlserver.techtarget.com, n.d.)

MySQL

MySQL, also known as "My Sequel," is open source RDBMS that is based on the structure query language (SQL), which can be used for creating, deleting, and updating information in the database. Standard SQL command can be used in MySQL. MySQL can be used together with a lot of application but is mostly used by web servers.

(techterms.com, n.d.)

Strength & Weakness of Microsoft SQL server Strength

- Enterprise level RDBMS
- Good data recovery support
- Good security features

Weakness

- Can be expensive
- Slow update features
- Limited Usability (Choose OS)
- More complex to learn

(www.techwalla.com, n.d.)

Strength & Weakness of MySQL Strength

- Widely used for web development
- Easy to use
- Open sourced
- Great performance

Weakness

- Scalability is low
- Not suitable for large data size
- Not fully compliance to SQL standard

(makble.com, n.d.)

Comparison

Criteria	Microsoft SQL server	MySQL
Cost	MS-SQL is closed source and need to buy.	MySQL is open source and free
Disk Space	MS-SQL need more disk space	MySQL need less disk space than MS-SQL server
Language	MS-SQL use complex language need more detail understanding to use	MySQL use simple language

Performance	Performance of MS-SQL is less than MySQL	MySQL provide better performance
Operating System	MS-SQL server didn't work on Linux and Unix	MySQL work on Window, Linux, Unix etc

(www.quora.com, n.d.)

Recommendation

MySQL is selected for this project because is free, work on a lot of different operating system, easier to code and have better performance than MS-SQL server. Moreover, programming language that will be used to develop Myanmar golf club project is PHP which is compatible with MySQL. For above reason MySQL is more suitable for this project.

3.2 DSDM Feasibility

3.2.1 Principle 1 - Focus on the business need

It is about understanding priorities of this golf club. It can be achieved by analyzing the user business priorities. Focus and priorities for this project is to develop member registration system, booking management system and playing fees management system. This project include MosCow Prioritization so this principle can be achieved.

(Anon., n.d.)

3.2.2 Principle 2 - Deliver on time

This project is student project and it need to be delivered before end date (in 1 year). So, it is important to deliver on time. It can be achieved by well-planned timeboxing and focusing on the business priorities. This project include project plan, timeboxing and MosCow prioritization so this principle can be achieved. (Anon., n.d.)

3.2.3 Principle 3 – Collaborate

Staffs of the club are not willing to collaborate with developer for system development because of their busy schedule but manager manage schedule for them to have some free time to collaborate. So collaborate is not a problem for this project. (Anon., n.d.)

3.2.4 Principle 4 - Never Compromise quality

Software quality need to meet the previously agree standard. For this project need to meet the previously agree functions and scopes at the deadlines. To achieve this need to work with aim to achieve that level from the start. Need to start testing from early

stage of the development and test continuously throughout the development. All test needs to be documented clearly. I got some experience of testing when doing time box based assignment such as DDOOCP at Level 4 diploma so this aspect will not have issues. (Anon., n.d.)

3.2.5 Principle 5 - Build incrementally from firm foundation

It is about deliver software to end user after some function are usable before final product is complete. For example, in this project golf club member management system and monthly fee payments system may be delivered to golf club to use before whole system is complete. By doing this can confirm the progress and the business priorities of the golf club. Can re-assess the priorities and project viability. Can get more clear feedback. (Anon., n.d.)

3.2.6 Principle 6 - Develop iteratively

DSDM allows developer to allow for changes when solution is not right one. For this project develop iteratively not only can fix the issues of previously finished process/stages but also can recognize the feedback from club staffs and can be applied in further development. (Anon., n.d.)

3.2.7 Principle 7 - Communicate continuously and clearly

Need to communicate with all levels of staffs (Manager, staff, caddy master etc) to develop good system for the golf club. This can be done by prototyping and face to face communication with all levels involved. And golf club is located in same city that developer live and talk same language so communicate continuously and clearly is not a problem. (Anon., n.d.)

3.2.8 Principle 8- Demonstrate Control

This project will have report for each stages of project development, critical report, evaluation and review for each timebox and evaluation of whole project when finished to control each stages of development. So this principle can be achieved. . (Anon., n.d.)

CHAPTER – 4

Foundation

4.1 Target User

Target User	Computer skill	Typing skill	Handling skill	Language skill (especially English skill)	Age
Golfers	Low to High	Low to High	Moderate	moderate	Vary15 to 80
Club Manager	Moderate	Moderate	Moderate	High	40
Club House Staff	Good	Good	Good	Good	20 to 50

4.2 Functional Requirement

Member management

Confirmation of member type will be handle by Club manager and Club house staff. Registration of member, managing locker and managing monthly member fee will be handle by Club house staff.

Booking management

Tee off time will be book by golfer using club website and booking slot will be manage by club house staff. Golfers can also cancel the booking till two days before booked tee off time by phone. Club house staff will handle the booking cancelation. Playing payment will be done when golfer come to club to play at booking time.

Playing management

All the playing fee, caddy fee, buggy fee are manage by club house staff. Registration of buggy and assign buggy are also done by club house staff. Registration of caddy, and daily caddies list will also manage by club house staff.

4.3 MoSCow Prioritization

Name	Must	Should	Could	Would	Justification
Member Type register	<input type="checkbox"/>				To register different member type to distinguish member register.
Member Register	<input type="checkbox"/>				To register member is must for the club since member are the main priority of this golf club
Locker Register		<input type="checkbox"/>			To record Locker is moderately important for the club.
Book Locker		<input type="checkbox"/>			Same as Locker register book locker function is moderately important for the club
Monthly Fee Management	<input type="checkbox"/>				Monthly Fee Management function is must have for the club.
Record Tee Off time	<input type="checkbox"/>				Record tee off time is must have because without tee off time slot member can't book to play.
Tee off time booking	<input type="checkbox"/>				Tee off time booking allow member to book tee off time to play so is must have
Caddy Register	<input type="checkbox"/>				Caddy is must have for member to play golf so is must have
Buggy Register	<input type="checkbox"/>				Buggy role is not as important as Caddy for member to play golf but is also should have
Playing Payment	<input type="checkbox"/>				Playing fee management is must have function for the club because is

					needed to manage the payment.
User Login	□				User log in function is must have for Myanmar golf club because only member is allow to booked.
Staff Register	□				Registration of staff is also must have to control all management
Staff Log in	□				Staff log in is another must have
Guest Register				□	Guest register is not much needed for club since manual system didn't record guest detail too.

4.4 Non-Functional Requirements

Performance Requirements

Website can be accessed by multiple user at the same time without any problem.

Website need to be loaded quickly without any delay.

Database should be able to perform without any delay and can handle large amount of record, query.

Usability

All function needs to be easy to understand and easy to use for both staff and member of the club. User input error should be handled with clear alert or messages with detail instruction.

Design Requirements

Website design need to be easy to use for all staff and golfer of varying age, consistent and need to be eye catching to attract more golfers to club.

Security

Website need to be robust and can handle multiple security threats such as DDOS, SQL injection, hacking etc. Secure Socket layer (SSL) is must have for Myanmar golf club website to establish encrypted connection between web servers and browser for more secure connection. HTTPS protocol also need to be used together with SSL to ensure this website can be trusted. Without https attack can spoof the web page more easily. HTTPS can also improve search ranking on search engine such as Google.

Maintainability

Website and web application for Myanmar golf club should be easily maintain if needed. Since this project will be written in PHP and simple coding it can be easily maintainable.

Reliability

Website and web application should be robust to handle most user error, hardware error and software error. This project coding will be written to prevent or handle most of the user input error and will try to reduce software error as much as possible so Myanmar golf club website and web application will have good reliability.

4.5 Time box Plan

Time box 1: Member Management System Time Box

Time Box Name		Member Management System Time Box	
Start Date		Jan 10,2019	
End Date		Jan 30,2019	
Duration		21 days	
Task	Duration	Start Date	End Date
Functional Requirements	1 day	Jan 10,2019	Jan 10,2019
UseCase Diagram	1 day	Jan 11,2019	Jan 11,2019
Initial Class Diagram	1 day	Jan 14,2019	Jan 14,2019
Detail Class Diagram	3 days	Jan 15,2019	Jan 17,2019
Coding	6 days	Jan 18,2019	Jan 24,2019
Functionality Testing	3 days	Jan 25,2019	Jan 29,2019
Usability Testing	1 days	Jan 30,2019	Jan 30,2019

Key Deliverables

Design

- Usecase
- Class Diagram
- Screen Design

Implementation

- Member Type Register
- Member Register
- Locker Register
- Locker Booking
- Monthly Fee Record
- Member Type Update & Delete
- Update Member
- Delete Locker

Testing

- Functionality Testing
- Usability Testing

Time box 2: Tee off booking system and playing management timebox

Time Box Name		Tee off booking system and playing management timebox	
Start Date		June 19,2019	
End Date		July 15,2019	
Duration		27 days	
Task	Duration	Start Date	End Date
Functional Requirements	2 days	June 19,2019	June 20,2019
UseCase Diagram	1 day	June 21,2019	June 21,2019
Initial Class Diagram	1 day	June 24,2019	June 24,2019
Detail Class Diagram	2 days	June 25,2019	June 26,2019
Coding	8 days	June 27,2019	July 08,2019
Functionality Testing	3 days	July 04,2019	July 11 ,2019
Usability Testing	2 days	July 12,2019	July 15,2019

Key Deliverables

Design

- Usecase
- Class Diagram
- Screen Design

Implementation

- Staff Register
- Staff log in
- User log in
- Booking creator
- User log in
- Update profile (Member)
- Booking (Member)
- Booking list and search function(admin)
- Caddy register
- Caddy rooster list
- Buggy Register and update
- Member Playing management
- Guest record
- Guest Playing management **Testing**
- Functionality Testing
- Usability Testing

4.6 Risk Management

4.6.1 Identification of Possible Risks

Technical

Lack of technical skill level

Lack of technical skill can lead to some serious problem and delay of the project. Example some process or function can't be implemented using the language chosen or not supported at midway of the project may lead to serious problem.

People

Lack of communication and collaboration

Example customers or staff of the company didn't understand their requirements or lack of collaboration with developer will need to some serious problem later on in project. This may lead to developing product that does not meet the specification of the customer. Or another example is key people for develop of the project leave midway of the project development.

Lack of Project Management Experience

Lack of experience in project management will also lead to project failure. Without enough experience on project management this project will go beyond end date, incomplete functional requirement etc.

Planning

Going behind end date

Late behind schedule is serious risk too. For example it can happen there is some requirement changes midway of project development or when individually working fine unit are put together and got a lot of error. It may damage the project seriously and can have some conflict with customer. For this project going over end date will lead to failure of this subject so is extremely important.

Environment

Computer Virus

Virus may corrupt or delete the file associated with project may highly impact the project development.

Losing laptop or get stolen

Losing laptop or laptop got stolen may also affect negatively on project development.

Physical Damage to storage device

Damaging to laptop or hard disk drive that contain project data by factor such as accident or natural disaster will lead to slow down project development or even failure of the project.

4.6.2 Critical Success Factors

Technical-Related Factors

Error prevention

Prevent all the software error that can happen in this project need to be prevent and reduce as much as possible to have good quality end product. So this is one of the success factors.

Easy to use

Website and web based application for Myanmar golf club should be easy to use since it will be used by users with wide range of age and skill level. All the function should be easy to use without complex steps to complete functions. So it can be regard as one success factor of this project.

Process-related factors

Deliver on time

Finish project before end date is one of the success factors since going behind end date will result in reduce mark and failure of project. This can be achieve since this project include project plan, timeboxing etc.

Set clear requirement and project scope

Without clear requirement specification and scope project will have high chance of failure. So it also one of the success factor of the project. This project will have clear cut requirement and scope since usecase and initial class are confirm before coding started so it can be achieved.

Clear objective and goals

Without clear objective and goals for each step of project development will lead to failure of project so having clear objective and goals is one of the critical success factor for this project. This project have project plan, and timebox plan for each step of development with clear goal and objective so it can be achieved.

Realistic schedule

All the steps of project development need to have realistic schedule since some task can't be done without enough time. So it is also important success factor. In this project will have project plan (Gantt chart), Timeboxing, MosCow etc so will have realistic schedule for each step of project development.

People-related factors

Sufficient skill level of staffs

Staffs from Myanmar golf club also need to have sufficient IT, language knowledge and skill level to use this web application efficiently. If not this project can't regard successful since end user can't use effectively. This can be also achieved project report have set target user. Also program will be easy to use since this project will have high range of targeted end user.

User Training

Good user training is also important for success of this project. This project documentation include training plan for end user and will also have user manual so this will not be problem.

4.6.3 Risk Matrix

Risk	Probability	Impact	Risk Owner	Prevention Action	Corrective Action
Lack of technical skill level	Low	High	Developer	Learn about all essential technical skill for before project start.	Finding online about the technical solution about the problem.
Lack of communication and collaboration	Medium	High	System Analyst	Prepare all necessary thing need to communicate with stakeholders of project (modelling, prototyping etc).	Find alternative way to effectively communicate with stakeholders.
Lack of project Management experience	Medium	High	Project Manager	Prepare project plan, timeboxing, MosCow etc.,	Discuss with project supervisor to get suggestion.
Going behind end date	Low	Medium	Project Manager	Prepare project plan, timeboxing, MosCow, timely review of each time box etc.	Make additional changes in project plan to overcome probability of delay
Computer virus	High	Medium	Developer	Install antivirus, back up data.	Recover lost data as soon as possible
Losing laptop or get stolen	Low	High	Developer	Back up all project data, upload to cloud storage etc.	Get back lost data from cloud storage or other storage device

Physical Damage to storage device	Low	Medium	Developer	Back up all project data, upload to cloud storage etc.	Get back lost data from cloud storage or other storage device
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High= <70%to100% moderate =<30%to>70% low=>30%

CHAPTER – 5

EXPLORATION

&

ENGINEERING

5.1 Timebox 1: Member Management System

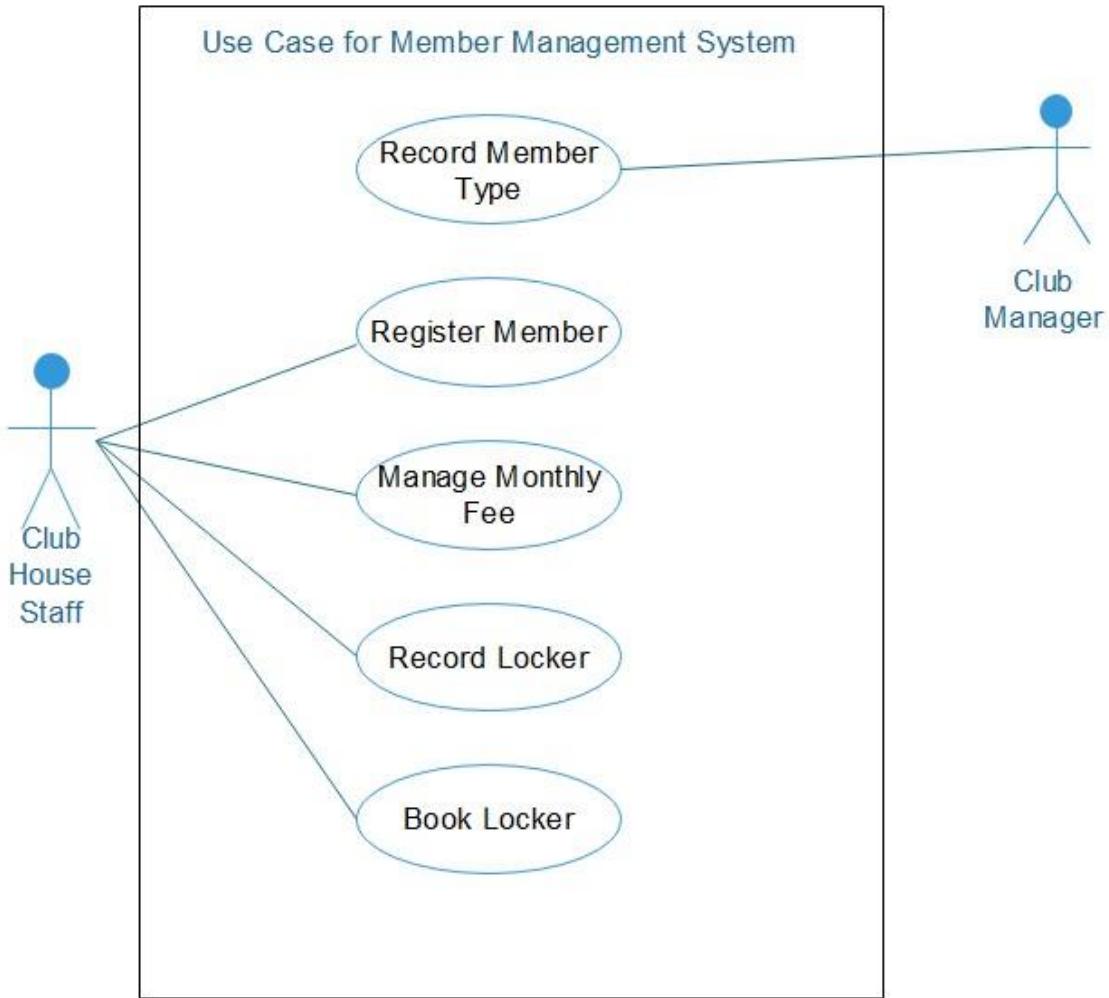
Project Plan for Time Box 1

	Task Mode	Task Name	Duration	Start	Finish		Jan 13, '19	Jan 27, '19						
							W	S	T	M	F	T	S	W
25		Exploration and Engineering for timebox 1	16 days	Thu 1/10/19	Thu 1/31/19		1							
26		Time Box 1 Requirements definition and Functional Requirements	1 day	Thu 1/10/19	Thu 1/10/19		2							
27		UseCase and UseCase description	2 days	Fri 1/11/19	Mon 1/14/19		3							
28		Screen Design	5 days	Tue 1/15/19	Mon 1/21/19		4							
29		Timebox 1 iteration	2 days	Tue 1/22/19	Wed 1/23/19		5							
30		Class Diagram	1 day	Thu 1/24/19	Thu 1/24/19		6							
31		Functional Testing	3 days	Fri 1/25/19	Tue 1/29/19		7							
32		Usability Testing	1 day	Wed 1/30/19	Wed 1/30/19		8							
33		Time Box Summary	1 day	Thu 1/31/19	Thu 1/31/19		9							
34		End of Exploration and Engineering	0 days	Thu 1/31/19	Thu 1/31/19		10							1/31

5.1.1 Functional Requirements

- Record Member Type (CRUD)
- Register Member (CRUD)
- Monthly Fee Payment
- Record Locker (CRU)
- Book Locker

5.1.2 Use Case Diagram



Use Case Description

Use Case Name	Record Member Type
Actor	Club Manager
Flow of Event	Record , Update , Delete Member Type

Remaining Use Case Description for timebox 1 in Appendix

5.1.3 Screen Design

Member Type Register Form and Member Type List

Register Member Type

Member Type	Green Fee
<input type="text"/>	<input type="text"/>
Save	

Member Type List

Member Type ID	MemberType	Green Fee	Action
4	Life Member	1000	Update Delete
5	Honorary Member	2000	Update Delete
7	Female	3000	Update Delete
8	Child	4000	Update Delete
10	Foreigner	20000	Update Delete
11	Guest	30000	Update Delete

Show 10 entries Search:

Showing 1 to 6 of 6 entries

Previous **1** Next

Member Registration Form

Member Register

Name	Member Type <input type="button" value="Select Member Type ▼"/>
Father Name	Nationality
Rank	Company/Department
NRC or Passport Number	Religion
Current Address	
Permanent Address	
<input checked="" type="radio"/> Male <input type="radio"/> Female	Date Of Birth <input type="text" value="mm/dd/yyyy"/>
Phone Number	Email
Handicap	<input type="button" value="Choose File"/> No file chosen
Proposer Member Name <input type="text"/>	Seconder Member Name <input type="text"/>
<input type="button" value="Register"/>	

Locker Registration Form

Locker Register

Locker Number

Save

Locker List for admin

Locker List					
Show 10 entries		Search: <input type="text"/>			
Locker No	Status	End Date	Actions		
11	Available	2019-08-24	Change Status		
12	Available	0000-00-00	Change Status		
13	Booked	2019-08-29	Change Status		

Showing 1 to 3 of 3 entries

Previous [1](#) Next

Member List Form

Member List							
Show 10 entries							Search:
Member No	Member Name	Member Type	Address	Phone	Email	Actions	
MGC-0001	Bo Bo	Life Member	Yangon	095141893	bobo.im2@gmail.com	Lockerlist MonthlyFee Update	
Showing 1 to 1 of 1 entries							
						Previous	1
						Next	

Monthly Fee Form

Monthly Fee Payment

Member No MGC-0001	Numbers of month
Monthly Fee Paid Until 2019-09-29	
Amount To Pay	Paid
Change	
Confirm	

Locker List For locker management

Locker List		
Show 10 entries		Search:
Locker No	Status	Actions
11	Available	Book Locker Delete Locker
12	Available	Book Locker Delete Locker
13	Booked	Book Locker Delete Locker

Showing 1 to 3 of 3 entries

Previous 1 Next

Book Locker Form

Locker Booking

Member No MGC-0001	Locker ID 11
Number of month	
Amount to Pay	Paid
Change	
Confirm	

5.1.4 Iteration for Screen Design

Iteration for member type register form

Member Type Register Form

Enter Member Type

Fig-1

Member Type register form before iteration

Register Member Type

Member Type	Green Fee
<input style="width: 100%; height: 30px; border: 1px solid #ccc; border-radius: 5px; font-size: 14px; padding: 5px;" type="text"/>	<input style="width: 100%; height: 30px; border: 1px solid #ccc; border-radius: 5px; font-size: 14px; padding: 5px;" type="text"/>
<input style="width: 100px; height: 30px; background-color: #28a745; border: 1px solid #28a745; border-radius: 5px; font-weight: bold; color: white; text-align: center; font-size: 12px; padding: 5px;" type="button" value="Save"/>	

Member Type List

Member Type ID	MemberType	Green Fee	Action
4	Life Member	1000	Update Delete
5	Honorary Member	2000	Update Delete
7	Female	3000	Update Delete
8	Child	4000	Update Delete
10	Foreigner	20000	Update Delete
11	Guest	30000	Update Delete

Show 10 entries Search:

Showing 1 to 6 of 6 entries Previous 1 Next

Fig-2

Member Type Register form after iteration

Screen design is change to improve the user interface. Green fee input is added since is needed in time box 2 playing management. Green fee is change according to member type so is needed to store together with member type. Member type list is also added to member type register form using data list so end user can easily manage existing user type.

Iteration for member register form**Before Iteration**

Enter Member Name	Password *
Member Type <input type="button" value="Select Member Type ▾"/>	Date Of Birth mm/dd/yyyy
Father Name	NRC/FRC or Passport Number*
Nationality	<input checked="" type="radio"/> Male <input type="radio"/> Female
Rank/Position	Company/Department
Religion	Email
Phone Number	Handicap
Current Address	Permanent Address
Select Proposer number *	Select Seconder number *
Member Photo <input type="button" value="Choose File"/> No file chosen	
<input type="button" value="SAVE"/>	

After Iteration

Member Register

Name	Member Type <input type="button" value="Select Member Type ▾"/>
Father Name	Nationality
Rank	Company/Department
NRC or Passport Number	Religion
Current Address	
Permanent Address	
<input checked="" type="radio"/> Male <input type="radio"/> Female	Date Of Birth mm/dd/yyyy
Phone Number	Email
Handicap	<input type="button" value="Choose File"/> No file chosen
Proposer Member Name	Seconder Member Name
<input type="button" value="Register"/>	

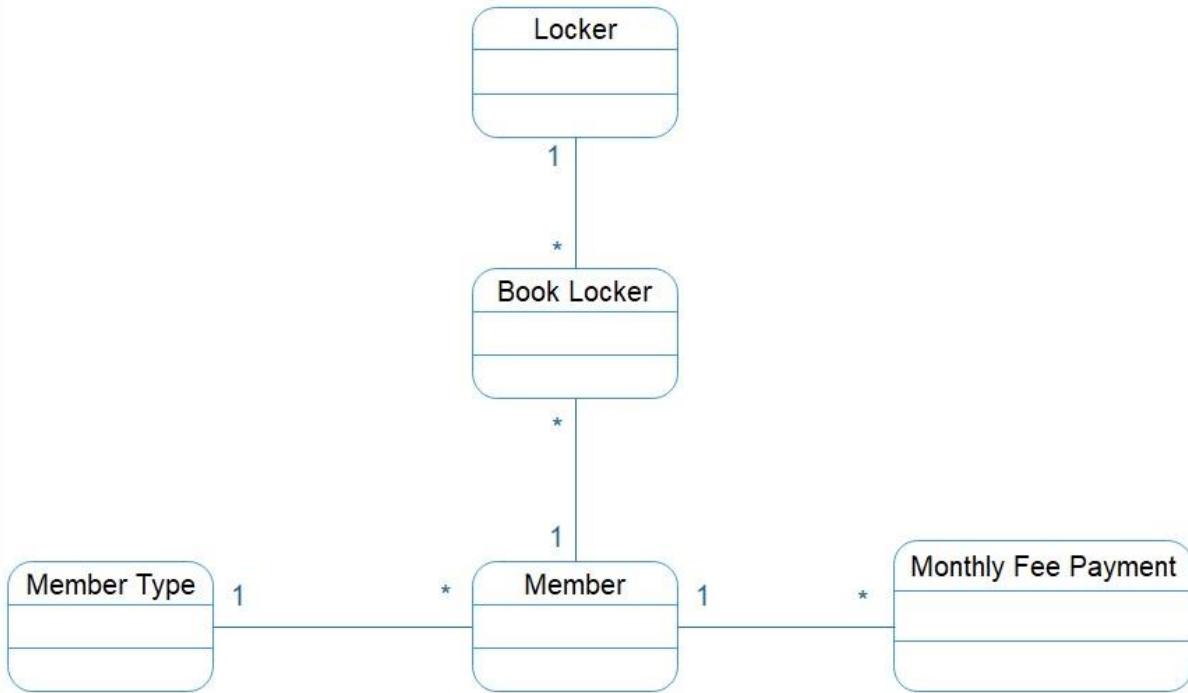
Iteration Explanation for member register form

User interface is changed to better aesthetic and easy to use. Proposer number and seconder number input are changed to datalist for easier search for end user instead of normal select option before iteration.

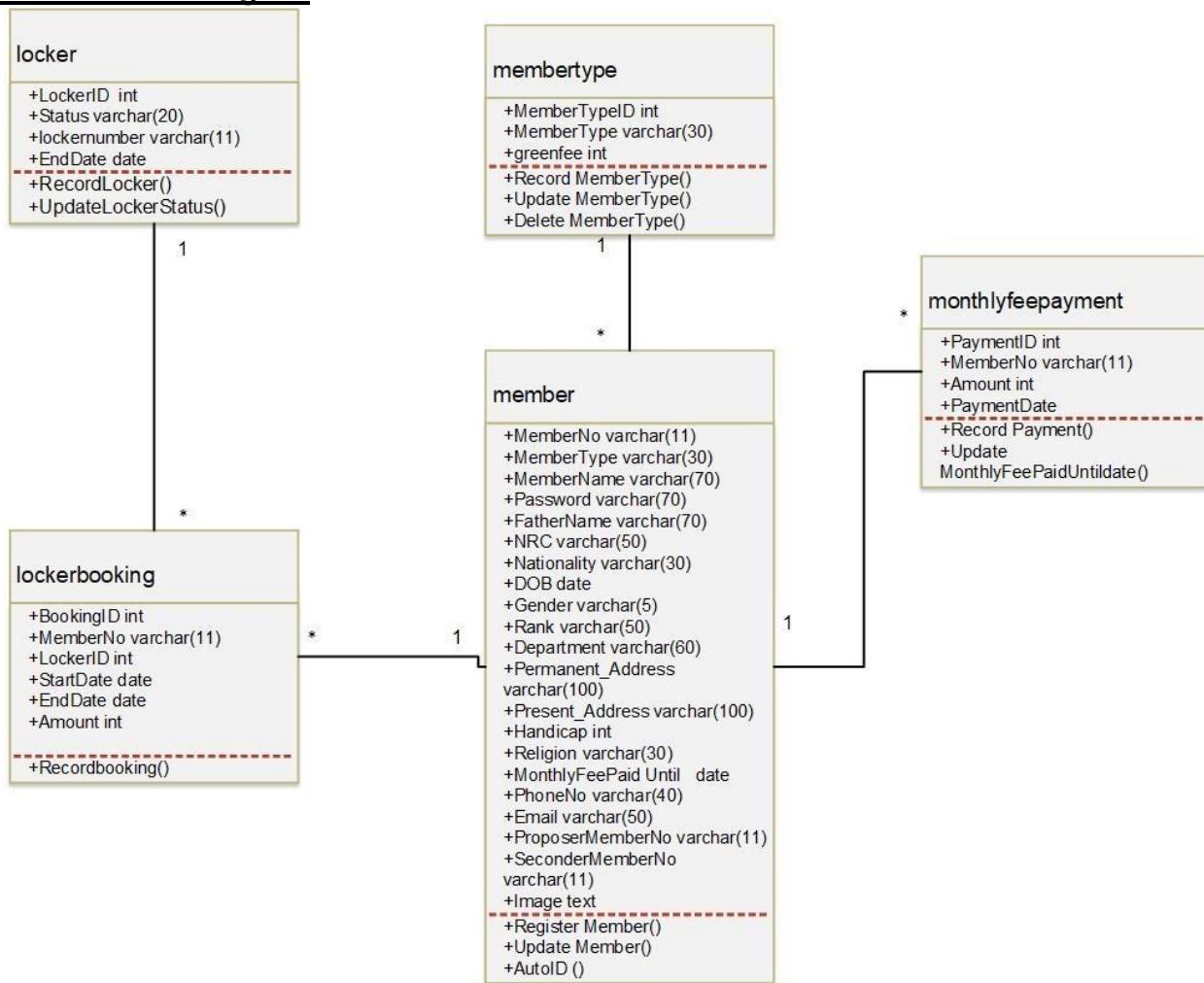
5.1.5 Class Diagram

Initial Class Diagram

Initial Class Diagram for Time Box 1



Detailed Class Diagram



Detail Class Definitions

Class Name	MemberType
Attribute	MemberTypeID, MemberType, greenfee
Operation	Record(), Update(), Delete()
Description	Record Member Type and greenfee into database table when click on save.

Remaining Detail Class Definitions for timebox 1 in appendix

5.1.6 Functional Testing

Test Plan

Test Script	Description	Date	Tester
1	Test member type form	25.1.2019	Bo Bo
2	Test Member Registration form	26.1.2019	Bo Bo
3	Test Locker Registration form	27.1.2019	Bo Bo
4	Test Member List form and member update	28.1.2019	Bo Bo
5	Test Monthly fee payment form	29.1.2019	Bo Bo
6	Test Locker booking form	29.1.2019	Bo Bo

Test Script

Unit Test 1		Test Case : 1.1	Designed by: Bo Bo	
DataSource: MemberType Form		Objective: To test Member Type Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
1.1	Testing membertype registration form	Leave Member Type input box blank and try to Save the data	Please Fill out this field message pop up	See Fig.1.1

Register Member Type

Member Type	Green Fee
<input type="text"/>	<input type="text"/>
<div style="background-color: #2e6b2e; color: white; padding: 5px; display: inline-block;"> ! Please fill out this field. </div>	

Fig-1.1

Remaining Testing for member type register form in Appendix

Unit Test 2		Test Case : 2.1	Designed by: Bo Bo	
DataSource: Member Register Form		Objective: To test Member Registration Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
2.1	Testing Member registration form	Leave blank to member name input box and fill in all other field then try to save.	Show Please Fill out this field alert	See Before Testing and After Testing

Before Testing

Member Register

Name	Member Type <input type="button" value="Select Member Type ▼"/>
Father Name Zaw Zaw	Nationality Myanmar
Rank Director	Company/Department abc
NRC or Passport Number 12/pbd(n)029622	Religion Buddhist
Current Address Yangon	
Permanent Address Yangon	
<input checked="" type="radio"/> Male <input type="radio"/> Female	Date Of Birth <input type="text" value="06/19/2007"/>
Phone Number 0999999999	Email zawzaw@email.com
Handicap 0	<input type="button" value="Choose File"/> _aj4detail.PNG
Proposer Member Name <input type="text" value="MGC-0001 Bo Bo"/>	Seconder Member Name <input type="text" value="MGC-0001 Bo Bo"/>
<input type="button" value="Register"/>	

After Testing

Member Register

Name <input type="text" value="Fath Zaw"/>	Member Type <input type="button" value="Select Member Type ▼"/>
Please fill out this field.	
Rank Director	Company/Department abc
NRC or Passport Number 12/pbd(n)029622	Religion Buddhist
Current Address Yangon	
Permanent Address Yangon	
<input checked="" type="radio"/> Male <input type="radio"/> Female	Date Of Birth <input type="text" value="06/19/2007"/>
Phone Number 099999999	Email zawzaw@email.com
Handicap 0	<input type="button" value="Choose File"/> _aj4detail.PNG
Proposer Member Name <input type="text" value="MGC-0001 Bo Bo"/>	Seconder Member Name <input type="text" value="MGC-0001 Bo Bo"/>
<input type="button" value="Register"/>	

Remaining Testing for member register form in Appendix

DataSource: Locker Register Form		Objective: To test Member Registration Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
3.1	Testing Locker Registration Form	Leave Enter Locker Number field and click on save	Show Please Fill out this field alert	See Fig.3.1 and 3.2

The screenshot shows a simple user interface titled "Locker Register". It features a single input field labeled "Locker Number" and a green "Save" button below it.

Fig-3.1

The screenshot shows the same "Locker Register" interface as Fig-3.1, but with an additional orange alert box. The box contains a yellow exclamation mark icon and the text "Please fill out this field." It is positioned over the "Save" button, indicating that the form is invalid because the "Locker Number" field is empty.

Fig-3.2

[Remaining Testing for locker register form in Appendix](#)

Unit Test 4	Test Case : 4.1	Designed by: Bo Bo
-------------	-----------------	--------------------

DataSource: Member List Form		Objective: To test Member List Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
4.1	Testing Member List Form	Click on Update	Show Member Update Form with all the require field load up with data accordingly	See Fig.4.1 and 4.2

Member List						
<input type="button" value="New"/> Show 10 entries <input type="text"/> Search: <input type="button" value="Search"/>						
Member No	Member Name	Member Type	Address	Phone	Email	Actions
MGC-0001	Bo Bo	Life Member	Yangon	095141893	bobo.im2@gmail.com	Lockerlist MonthlyFee Update
MGC-0002	Tun Tun	Child	Yangon	09999999	zawzaw@gmail.com	Lockerlist MonthlyFee Update
MGC-0003	john	Life Member	Yangon	09312312	smith@email.com	Lockerlist MonthlyFee Update

Showing 1 to 3 of 3 entries

[Previous](#) [1](#) [Next](#)

Figure-4.1

Member Update

Member Name	Password
Tun Tun	1234567
Member Type	Date Of Birth
8	2019-08-13
Father Name	NRC/Passport Number
Zaw Zaw	12/pbd(n)0296222222
Nationality	<input checked="" type="radio"/> Male <input type="radio"/> Female
Myanmar	Company/Department
Rank/Position	abc
director	Email
Religion	zawzaw@gmail.com
Buddhist	Handicap
Phone Number	0
09999999	Permanent Address
Current Address	Yangon
Yangon	Seconder Member Number
Proposer Member Number	MGC-0001
MGC-0001	
Update	

Figure-4.2

Remaining Testing for memberlist form in Appendix

Unit Test 5		Test Case : 5.1	Designed by: Bo Bo	
DataSource: Member Update Form		Objective: To test Member Update Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
5.1	Testing Member Update Form	Fill in the desire update fee and click on save	Show member update successful alert	See Fig 5.1 and 5.2

Member Update

Member Name Bo Bo	Password MGC-0001
Member Type 4	Date Of Birth 2018-07-09
Father Name UTS	NRC/Passport Number 12/pbd(n)029622
Nationality Myanmar	<input checked="" type="radio"/> Male <input type="radio"/> Female
Rank/Position Director	Company/Department ABCDE
Religion Christian	Email bobo.im2@gmail.com
Phone Number 095141893	Handicap 0
Current Address Yangon	Permanent Address Yangon
Proposer Member Number MGC-0002	Seconder Member Number MGC-0003
Update	

Figure-5.1

localhost:70 says

Member Update Sucessful

OK

Figure-5.2

Remaining Testing for member update form in Appendix

Unit Test 6	Test Case : 6.1	Designed by: Bo Bo
-------------	-----------------	--------------------

Data Source: BookLocker Form		Objective: To test BookLocker Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
6.1	Testing BookLocker Form	Choose the member that have already book locker from member list and click on locker list then book locker in locker list. Then try to save in BookLocker	Show member already have locker book alert	See Fig 6.1 and 6.2

The screenshot shows a 'Locker Booking' form. It includes fields for Member No (MGC-0001), Locker ID (11), Number of month (2), Amount to Pay (6000), Paid (10000), and Change (4000). A green 'Confirm' button is at the bottom.

Figure-6.1

localhost:70 says
this Member already have locker booked

OK

Figure-6.2

Remaining Testing for locker booking form in Appendix

Unit Test 7	Test Case : 7.1	Designed by: Bo Bo
-------------	-----------------	--------------------

Data Source: BookLocker Form		Objective: To test BookLocker Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
7.1	Test monthly fee payment form	Choose month and type in paid amount	Amout to pay auto calculate after month is choose and change auto calculate after paid is type in	See Fig 7.1 and 7.2

Monthly Fee Payment

The screenshot shows a user interface for a 'Monthly Fee Payment' form. It includes fields for 'Member No' (MGC-0001), 'Numbers of month' (3), 'Monthly Fee Paid Until' (2019-09-29), 'Amount To Pay' (6000), 'Paid' (7000), and a 'Change' field (1000). A green 'Confirm' button is at the bottom.

Figure-7.1

Monthly Fee Payment

The screenshot shows a user interface for a 'Monthly Fee Payment' form. It includes fields for 'Member No' (MGC-0001), 'Numbers of month' (3), 'Monthly Fee Paid Until' (2019-09-29), 'Amount To Pay' (6000), 'Paid' (7000), and a 'Change' field (1000). The 'Paid' field is highlighted with a blue border. A green 'Confirm' button is at the bottom.

Figure-7.2

Remaining Testing for monthly fee payment form in Appendix

5.1.7 Usability Testing

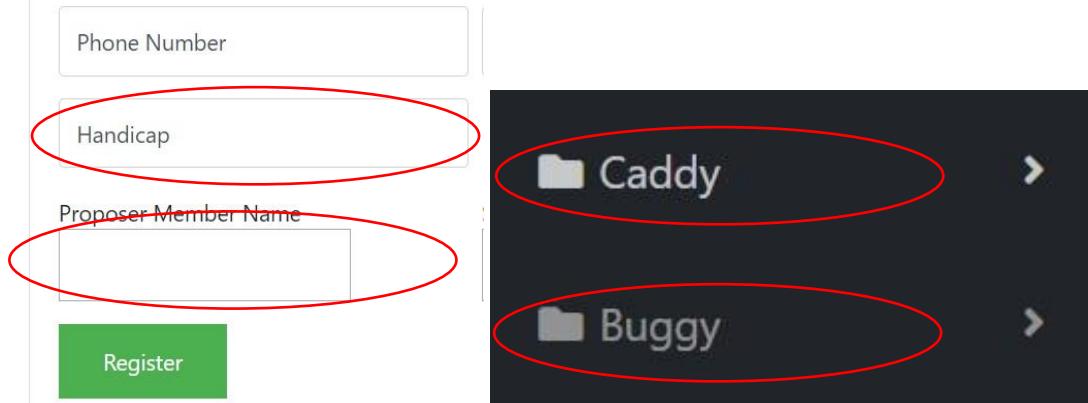
Visibility of System Status

Selected text box is highlighted for clear visibility

Name	Member
Father Name	Nation
Rank	Comp
NRC or Passport Number	Religio
Current Address	
Permanent Address	
<input checked="" type="radio"/> Male <input type="radio"/> Female	Date Of

All form have selected text box become highlight so user can know which text box is currently selected easily.

Match Between System and Real World



Most of the term such as handicap, proposer member name, caddy, buggy etc use in this project is match with real world term golfer and club staff use so they can easily understand the system.

Aesthetic and Minimalist Design

The screenshot shows the 'Member List' page. The left sidebar contains links for Member, Locker, Booking, Staff, Caddy, Buggy, and Log Out. The main content area has a header 'Member List' with a search bar and a table. The table columns are Member No, Member Name, Member Type, Address, Phone, Email, and Actions. Data rows are provided for MGC-0001 through MGC-0004. At the bottom, it says 'Showing 1 to 4 of 4 entries' and includes navigation buttons for Previous, 1, and Next.

Member No	Member Name	Member Type	Address	Phone	Email	Actions
MGC-0001	Bo Bo	Life Member	Yangon	095141893	bobo.im2@gmail.com	Lockerlist MonthlyFee Update
MGC-0002	Tun Tun	Child	Yangon	09999999	zawzaw@gmail.com	Lockerlist MonthlyFee Update
MGC-0003	john	Life Member	Yangon	09312312	smith@email.com	Lockerlist MonthlyFee Update
MGC-0004	Aung Phy	Life Member	Ygn	213213123	aungphyo@gmail.com	Lockerlist MonthlyFee Update

Screen design use for this project is simple and show only essential menu and also provide clear and simple looking dashboard for club house staff. Consistency and standard

The image displays two screenshots of the system. The top screenshot shows the 'Staff Register' page with fields for Name, Username, Password, and NRC Number, along with a 'Save' button. The bottom screenshot shows the 'Register Caddy' page with fields for Caddy name, NRC Number, Age, Address, and Phone Number, along with a 'Register' button. Both pages share a common dark header 'Myanmr Golf Club' and a sidebar with the same set of menu items: Member, Locker, Booking, Staff, Caddy, Buggy, and Log Out. Red circles are drawn around the sidebar and the main form areas to emphasize the consistency in design across different pages.

All pages use same layout design, same font style and color scheme so end user can feel same way on all the pages. So is match with consistency and standard principle

Error Prevention

Register Caddy

Caddy name	NRC Number
Age	! Please fill out this field.
Address	Phone Number
<input type="button" value="Register"/>	

Include error prevention message like this to prevent user from error.

Help and documentation**Booking Search**

Choose date to Book Tee Off 08/02/2019

! SEARCH

5

Date	Time	Status	Action
2019-08-02	7:00	Available	Book Teeoff Time
2019-08-02	7:08	Available	Book Teeoff Time
2019-08-02	7:16	Available	Book Teeoff Time
2019-08-02	7:24	Available	Book Teeoff Time
2019-08-02	7:32	Available	Book Teeoff Time
2019-08-02	7:40	Available	Book Teeoff Time

Help menu is available for log in member to download to learn about how to book tee off slot step by step.

5.1.8 Time-box 1 Iteration

Added green fee column in member type table to get green fee related with that member type which will be needed to use in time box 2.

Status and EndDate column added to locker table to update when that locker is booked.

AutoID () function is added to create member number with unique prefix instead of previous auto increment from database.

5.1.9 Timebox Summary

1. Problems

Problem with where to record monthly fee done for date. Later change back to put it in member table in database. There some problem with calculation of time in both monthly fee and locker booking. For locker list at first form have both locker id, startdate enddate column showing but it have one problem that will not show newly added locker since is select statement use lockerid from both locker and lockerbooking database table. So only show locker that already exist in booklocker table.

2. Solve

Time calculation problem is technical problem so is solve later after I learn more about that. For locker list is fix by just select only locker table and use php condition to check whether locker is already book or not in book locker form.

3. Lesson Learn

From doing this time box I learn about usecase diagram, class diagram, how to use MoSCow priorities to set priorities for the project. Moreover got more experience with testing and php language, MySQL.

4. Plan for Future time box

Initial class diagram and usecase are already done for future time box. Moreover experience gather from this time box will also help a lot in future time box.

5.2 Timebox 2: Booking and Playing Management System

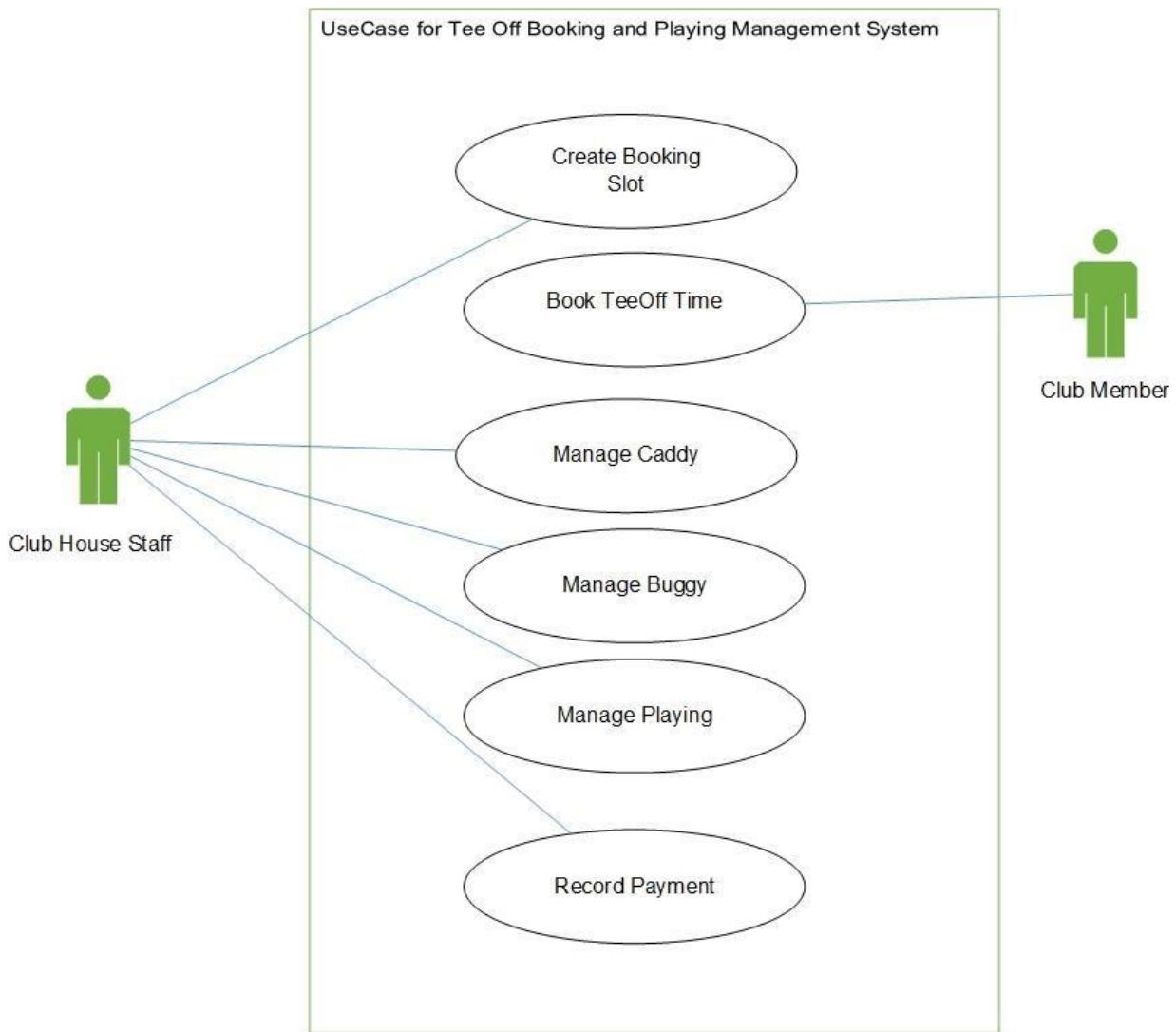
Project Plan for Time Box 2

	Task Mode	Task Name	Duration	Start	Finish	W	Jun 2, '19	Jun 16, '19	Jun 30, '19	Jul 14, '19	J
						W	S	T	M	F	S
35	Exploration and Engineering	Exploration and Engineering for timebox 2	20 days	Wed 6/19/19	Tue 7/16/19						
36	Development	Time Box 2 Requirements definition and Functional Requirements	2 days	Wed 6/19/19	Thu 6/20/19						
37	Development	Time Box 2 UseCase and UseCase Description	2 days	Fri 6/21/19	Mon 6/24/19						
38	Development	Time Box 2Screen Design	2 days	Tue 6/25/19	Wed 6/26/19						
39	Development	Time Box 2 iteration	2 days	Thu 6/27/19	Fri 6/28/19						
40	Development	Time Box 2 Class Diagram	3 days	Mon 7/1/19	Wed 7/3/19						
41	Development	Time Box 2 Functional Testing	6 days	Thu 7/4/19	Thu 7/11/19						
42	Development	Time Box 2 Usability Testing	2 days	Fri 7/12/19	Mon 7/15/19						
43	Development	Time Box 2 Summary	1 day	Tue 7/16/19	Tue 7/16/19						
44	Development	End of Time Box 2	0 days	Tue 7/16/19	Tue 7/16/19						

5.2.1 Functional Requirements

- Staff Register
- Staff log in
- User log in
- Booking creator
- Update profile (Member)
- Booking (Member)
- Booking list and search function(admin)
- Caddy register
- Caddy rooster list
- Buggy Register and update
- Member Playing management
- Guest record
- Guest Playing management

5.2.2 Use Case Diagram



Use Case Description

Use Case Name	Create Booking Slot
Actor	Club House Staff
Flow of Event	Choose date to create booking and click on Create to create booking

Remaining Use Case Description for timebox 2 in Appendix

5.2.3 Screen Design

Staff Register Form

Staff Register

Name

Username

Password

Save

Caddy Register Form

Register Caddy

Caddy name

NRC Number

Age

Address Phone Number

Register

Caddy Rooster Form

Caddy Rooster

Caddy ID

Add

Buggy Register Form

Buggy Register

Buggy Number

Save

Buggy List

Buggy List		
Show 10 entries <input type="button" value="▼"/> Search: <input type="text"/>		
Buggy No	Status	Actions
1	Available	Update Status
2	Unavailable	Update Status
3	Available	Update Status

Showing 1 to 3 of 3 entries Previous Next

Booking Creator Form

Booking Creator

Choose Date to create tee off booking slot

[Create](#)

Booking List for admin

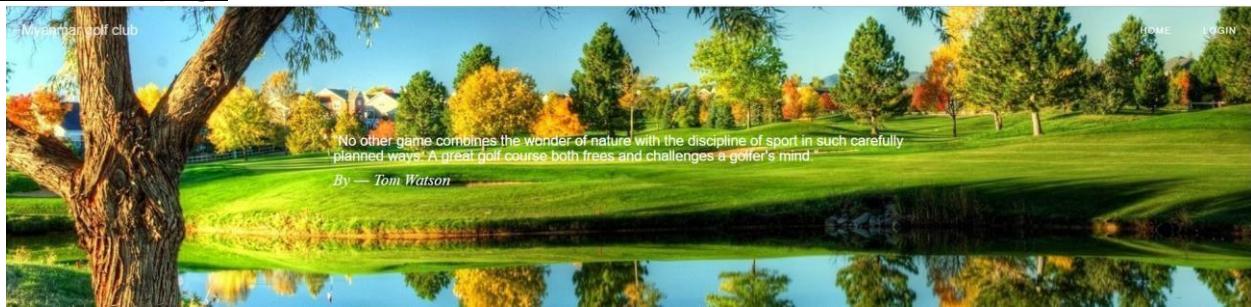
Booking Search Options:

<input checked="" type="radio"/> Search By Bookingid <input type="text"/>	<input type="radio"/> Search By Date <input type="text"/>	<input type="radio"/> Search By Member No <input type="text"/>
<input type="button" value="Search"/>		

Booking List

Booking List						
Show 10 entries <input type="button" value="▼"/> Search: <input type="text"/>						
BookingID	Member Number	Date	Time	Status	Action	
1282	MGC-0002	2019-07-23	7:00	Played	Play Cancel	

Showing 1 to 1 of 1 entries Previous Next

MGC home page**Member Log In Form****Member login**

**Member Booking List**

Booking Search

Choose date to Book Tee Off

Date	Time	Status	Action
2019-08-04	7:00	Available	Book Teeoff Time
2019-08-04	7:08	Available	Book Teeoff Time
2019-08-04	7:16	Available	Book Teeoff Time
2019-08-04	7:24	Available	Book Teeoff Time
2019-08-04	7:32	Available	Book Teeoff Time
2019-08-04	7:40	Available	Book Teeoff Time
2019-08-04	7:48	Available	Book Teeoff Time
2019-08-04	7:56	Available	Book Teeoff Time
2019-08-04	8:04	Available	Book Teeoff Time
2019-08-04	8:12	Available	Book Teeoff Time
2019-08-04	8:20	Available	Book Teeoff Time
2019-08-04	8:28	Available	Book Teeoff Time
2019-08-04	8:36	Available	Book Teeoff Time
2019-08-04	8:44	Available	Book Teeoff Time
2019-08-04	8:52	Available	Book Teeoff Time
2019-08-04	9:00	Available	Book Teeoff Time
2019-08-04	9:08	Available	Book Teeoff Time
2019-08-04	9:16	Available	Book Teeoff Time
2019-08-04	9:24	Available	Book Teeoff Time
2019-08-04	9:32	Available	Book Teeoff Time
2019-08-04	9:40	Available	Book Teeoff Time
2019-08-04	9:48	Available	Book Teeoff Time
2019-08-04	9:56	Available	Book Teeoff Time
2019-08-04	10:04	Available	Book Teeoff Time
2019-08-04	10:12	Available	Book Teeoff Time

Member Profile Update**Profile Update**

Member Name <input type="text" value="Bo Bo"/>	Password <input type="text" value="MGC-0001"/>
Member Type <input type="text" value="4"/>	Date Of Birth <input type="text" value="2018-07-09"/>
Father Name <input type="text" value="UTS"/>	NRC/Passport Number <input type="text" value="12/pbd(n)029622"/>
Nationality <input type="text" value="Myanmar"/>	Company/Department <input type="text" value="ABCDE"/>
Rank/Position <input type="text" value="Director"/>	Email <input type="text" value="bobo.im2@gmail.com"/>
Religion <input type="text" value="Christian"/>	Handicap <input type="text" value="0"/>
Phone Number <input type="text" value="095141893"/>	Permanent Address <input type="text" value="Yangon"/>
Current Address <input type="text" value="Yangon"/>	Seconder Member Number <input type="text"/>
Proposer Member Number <input type="text" value="Proposer Member Number"/>	

Update**Admin Log in form**

Login

Save

Member Playing Payment Form

Playing Payment

Booking ID 1831	Date 2019-08-04
Member Number	Member Name
<input type="text"/>	<input type="text"/>
Member Type	Green Fee
<input type="text"/>	<input type="text"/>
Caddy Number	Buggy Number
<input type="text"/>	<input type="text"/>
Booking Fee	▼
Confirm Payment	Guest Player

Guest Playing Payment Form

Guest Payment

Booking ID
1831Date
2019-08-04

Guest Name

Phone Number

--	--

Address

--

Member Type

Green Fee

Guest

30000

Caddy Number

Buggy Number

--	--

Booking Fee



Confirm Payment

Member

Guest Payment Detail Form**Guest Payment**

Guest Name	aung aung
booking id	1831
green fee	30000
Caddy fee	2000
booking Fee	2000
buggy Fee	25000
Total	59000
Paid	60000
Change	1000
back	Confirm

Member Payment Detail form**Member Payment**

Member Name	Bo Bo
booking id	1831
green fee	1000
Caddy fee	2000
booking Fee	0
buggy Fee	25000
Total	28000
Paid	
Change	
back	Confirm

5.2.4 Iteration for Screen Design

Before Iteration of Caddy Register Form and Staff Register Form

Caddy Register Form

Enter Caddy Name
Enter Caddy NRC No
Enter Age
Enter Address
Enter Phone Number
Register

Staff Register Form

Enter Staff Name
Enter UserName
Enter Password
Register

After Iteration

Register Caddy	
Caddy name	NRC Number
Age	
Address	Phone Number
Register	

Fig-1 Caddy Register Form

Staff Register

Name	Username
Password	
NRC Number	
Save	

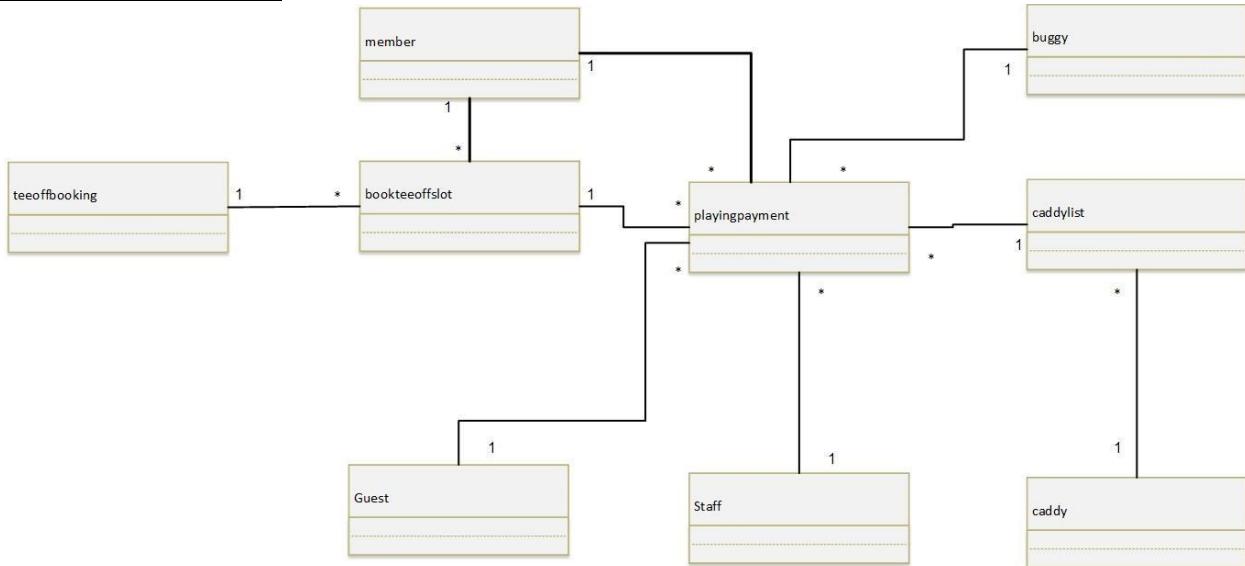
Fig-2 Staff Register Form

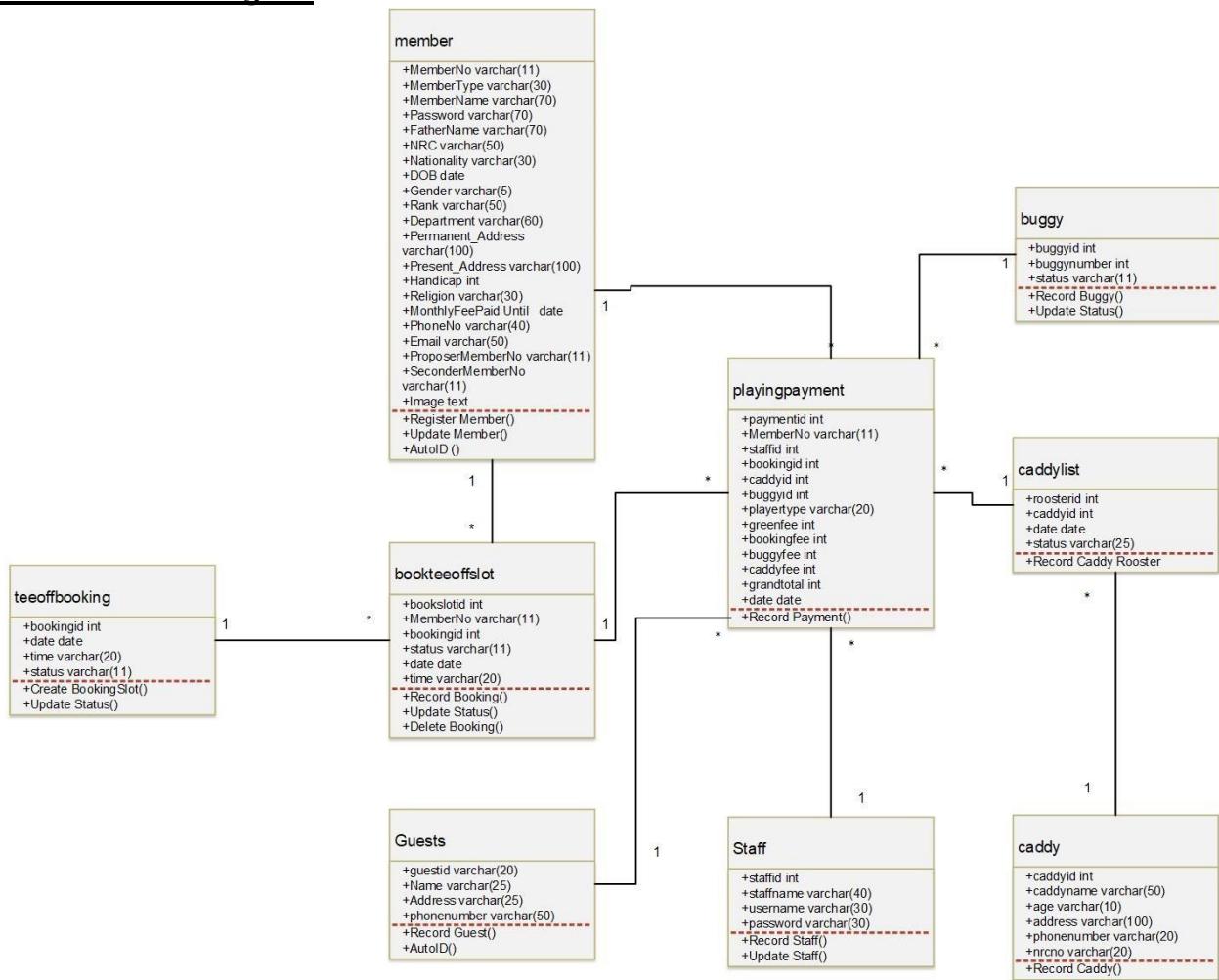
Iteration Explanation for Time-Box 2

For iteration most of the user interface for second time box is change for better design and easy to use design. In staff register NRC number is added to control the duplicate entry by checking them with their unique NRC number.

5.2.5 Class Diagram

Initial Class Diagram

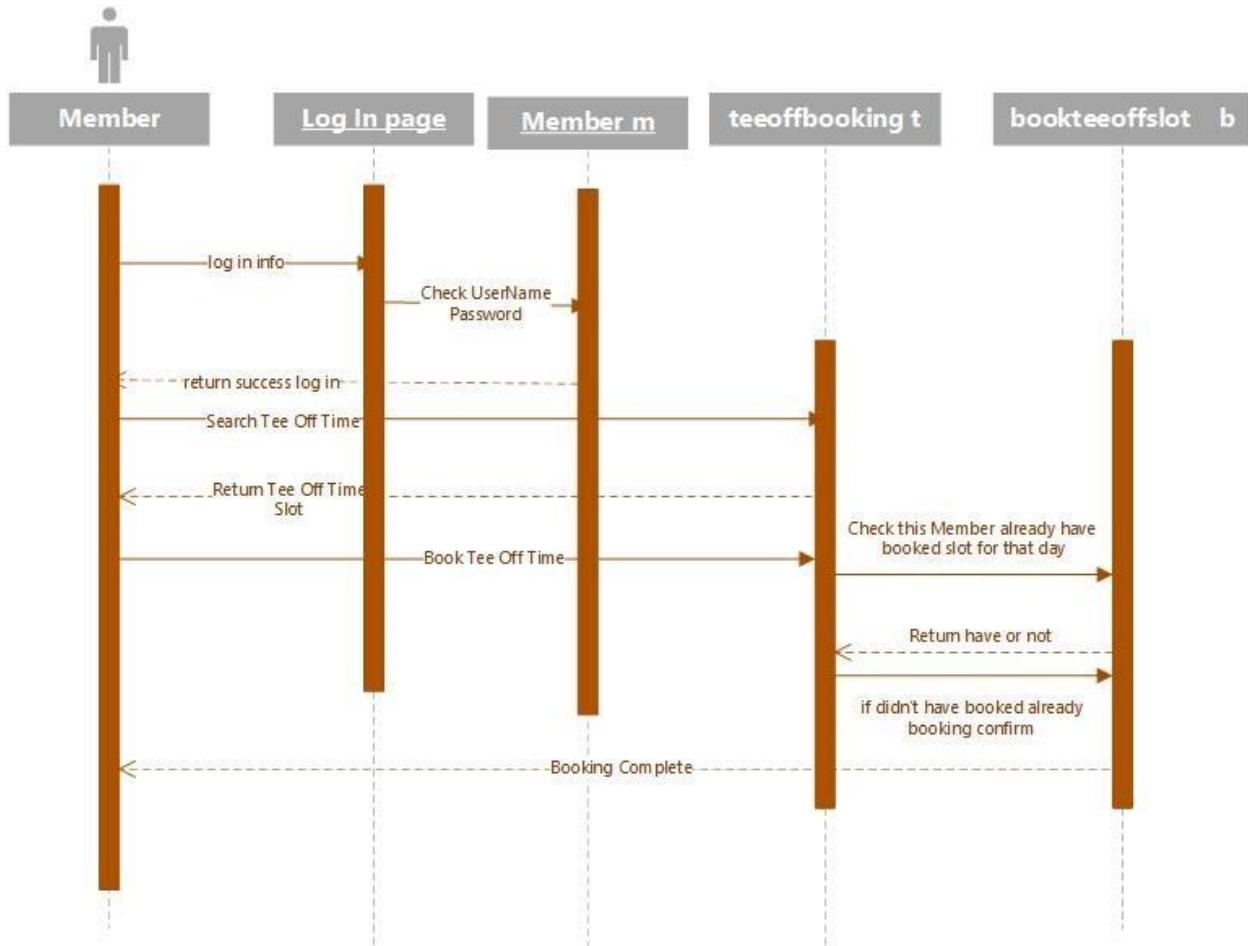


Detailed Class Diagram**Detail Class Definitions**

Class Name	teeoffbooking
Attributes	Bookingid, date, time, status
Operation	Record (), changestatus ()
Description	Record teeoffslot that club member can book to database

Remaining Detail Class Definitions for timebox 2 in Appendix

5.2.6 Sequence Diagram for Booking Process



Sequence Diagram Description

Member type in their username and password into login form. User log in form check input parameter with member table. Member can start booking after successfully log in. Member search tee off time by date they want to play. Teeoffbooking table return the available slot and show it to member in list in browsers. Member click on time slot they want to book. Then booking function check member already have booking slot for that day in bookteeoffslot table. If member don't have booking for that day tee off slot is booked into bookteeoffslot table with detail tee off time info. Then booking successful message is return to Member.

5.2.7 Functional Testing

Test Plan

Test Script	Description	Date	Tester
1.1	Test Staff Register Name text box accept blank or not	4- July- 2019	Bo Bo
1.2	Test username,password,nrc number text box accept blank or not	4- July- 2019	Bo Bo

1.3	Test register staff with already exist user name	4- July- 2019	Bo Bo
1.4	Test register staff with already exist NRC number	4- July- 2019	Bo Bo
1.5	Test register staff with all text box fill with new username and nrc number	4- July- 2019	Bo Bo
2.1	Test stafflogin form username or password text box blank accept or not	4- July- 2019	Bo Bo
2.2	Test staff login accept incorrect username or password	4- July- 2019	Bo Bo
2.3	Test can login with correct username or password or not	4- July- 2019	Bo Bo
3.1	Test member log in accept username or password text box blank	4- July- 2019	Bo Bo
3.2	Test member log in accept incorrect username or password or not	4- July- 2019	Bo Bo
3.3	Test member can log in with valid username or password or not	4- July- 2019	Bo Bo
4.1	Test booking creator calendar function	4- July- 2019	Bo Bo
4.2	Test can create booking for date that already have created tee off slot	4- July- 2019	Bo Bo
4.3	Test can create booking slot for date that didn't have booking slot created	4- July- 2019	Bo Bo
5.1	Test admin booking search function using bookingid search	4- July- 2019	Bo Bo
5.2	Test admin booking search	5- July- 2019	Bo Bo

	function using date		
5.3	Test admin booking search function using member no	5- July- 2019	Bo Bo
6.1	Test booking cancel	5- July- 2019	Bo Bo

7.1	Test caddy register form accept blank for caddy name or Nrc Number or Age or Address or Phone Number input box	5- July- 2019	Bo Bo
7.2	Test can register with already exist nrc number in caddy register form	5- July- 2019	Bo Bo
7.3	Test can register caddy with new nrc number and all text boxes fill	5- July- 2019	Bo Bo
8.1	Test can add caddy without choosing caddy number from datalist in caddy list form	5- July- 2019	Bo Bo
8.2	Test caddy can added if already available in list	5- July- 2019	Bo Bo
8.3	Test caddy can added if not available in list	5- July- 2019	Bo Bo
9.1	Test Buggy register accept buggy number input box is blank	8- July- 2019	Bo Bo
9.2	Test buggy register accept already exist buggy number or not	8- July- 2019	Bo Bo
9.3	Test buggy can register with new buggy number	8- July- 2019	Bo Bo
10.1	Test buggy status can change in buggy list form	8- July- 2019	Bo Bo
11.1	Test user profile loaded with respective data when click on update profile	8- July- 2019	Bo Bo
11.2	Test profile update form accept blank or null in text boxes	8- July- 2019	Bo Bo
11.3	Test profile update form accept non email format	8- July- 2019	Bo Bo
11.4	Test profile can update after all must fill text boxes fill	8- July- 2019	Bo Bo
12.1	Test calendar function of booking(user) form	9- July- 2019	Bo Bo
12.2	Test booking search function in booking (user) form	9- July- 2019	Bo Bo
12.3	Test can book slot or not	9- July- 2019	Bo Bo

12.4	Test booking(user) form show already booked slot info or not	9- July- 2019	Bo Bo
12.5	Test can book with already book slot for that day	9- July- 2019	Bo Bo
13.1	Test member play form load or not	10- July- 2019	Bo Bo
13.2	Test when member no choose other related text box auto fill with data or not in playing payment form	10- July- 2019	Bo Bo
13.3	Test accept caddy number input blank or not playing payment form	10- July- 2019	Bo Bo
13.4	Test payment detail form load after all field fill	10- July- 2019	Bo Bo
13.5	Test auto calculate function work or not in member payment detail	10- July- 2019	Bo Bo
13.6	Test back on payment detail can go back to playing payment or not	10- July- 2019	Bo Bo
13.7	Test payment detail form accept blank paid input or not	10- July- 2019	Bo Bo
13.8	Test confirm payment in member payment detail	10- July- 2019	Bo Bo
14.1	Test guest payment form load or not	11- July- 2019	Bo Bo
14.2	Test guest payment form accept blank input boxes	11- July- 2019	Bo Bo
14.3	Test change to member payment work or not	11- July- 2019	Bo Bo
14.4	Test confirm payment after all box fill	11- July- 2019	Bo Bo
14.5	Test can done payment after all input fill in guest payment detail	11- July- 2019	Bo Bo
15.1	Test one bookingid can have more than 4 player playing or not	11- July- 2019	Bo Bo

Test Script

Unit Test 1		Test Case: Staff Register	Designed by: Bo Bo	
Data Source: staff register form		Objective: To test the staff register entry	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
1.1	Test Staff Register Name text box accept blank or not	Save button is clicked with name text box blank	Show 'Please fill out this field' message.	See Fig.1.2

Before Testing

Staff Register

Name	Username admin5
Password	
...	
NRC Number 12/pbd(n)0111234	
Save	

Fig.1.1

After Testing

Staff Register

Name	Username admin5
Password	 Please fill out this field.

Fig.1.2



Designed by: Bo Bo

Tester:

Remaining Test Case for staff register in Appendix

Unit Test 2		Test Case: Staff Login		
Data Source: staff log in form		Objective: To test the staff log in	Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
2.1	Test stafflogin form username or password text box blank accept or not	login button is clicked with username or password text box blank	Show 'Please fill out this field' message.	See Fig.2.1 and 2.2

The screenshot shows a 'Login' interface. At the top, it says 'Login'. Below that is a 'UserName' input field which is empty and has a blue border. Below the 'UserName' field is a 'Password' input field, also empty. A tooltip with an exclamation mark icon and the text 'Please fill out this field.' is positioned above the 'Password' field. At the bottom is a large green 'Login' button.

Fig.2.1

Designed by: Bo Bo

Tester:

The screenshot shows a 'Login' screen with two input fields: 'UserName' containing '123' and 'Password' which is currently empty. A green 'Login' button is positioned below the password field. An orange tooltip message 'Please fill out this field.' with an exclamation mark icon is displayed above the password field, indicating a validation error.

Fig.2.2

Remaining Test Case for staff register in Appendix

Unit Test 3		Test Case: Member Login		
Data Source: Member log in form		Objective: To test the Member log in form entry	Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
3.1	Test member log in accept username or password text box blank	login button is clicked with username or password text box blank	Show 'Please fill out this field' message.	See Fig.3.1 and 3.2

	Designed by: Bo Bo Tester:
--	---

Member login

The screenshot shows a member login interface. At the top is a text input field labeled "Enter Member Number". Below it is another text input field containing three dots (...). A validation message "Please fill out this field." is displayed in a callout box next to the second field. At the bottom is a "LOG IN" button.

Fig.3.1

Member login

This screenshot shows the same member login interface as Fig.3.1. The "Enter Member Number" field contains "MGC-0001". The "Enter Password" field is empty. A validation message "Please fill out this field." is shown above the "LOG IN" button. Below the button are three social media icons: Twitter, Facebook, and Google+.

Fig.3.2

Remaining Test Case for Member Login in Appendix

	Designed by: Bo Bo
--	---------------------------

Tester:

Unit Test 4		Test Case: Booking Creator	Bo Bo	
Data Source:	Booking Creator Form	Objective: To test the Booking Create function	Expected Result	Actual Results
4.1	Test booking creator calendar function	Click on Choose Date input to check previous day are lock or not	Today date is highlighted and dates before today are dim on calendar	See Fig.4.1

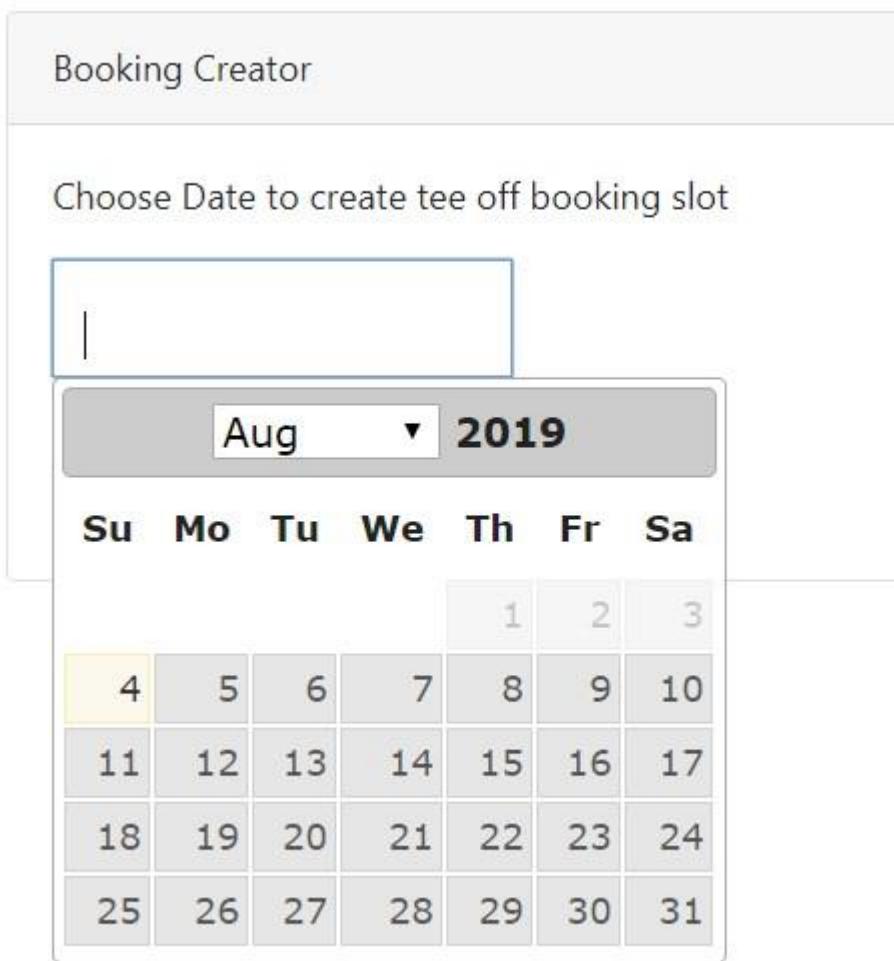


Fig.4.1

--

|

Remaining Test Case for bookingcreator in Appendix

Unit Test 5		Test Case: Booking list for admin	Designed by: Bo Bo	
Data Source: Booking list for admin Form		Objective: To test the Booking list search function	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
5.1	Test admin booking search function using bookingid search	Choose booking id that want to search in search by booking id datalist input and click on search	Detail about that booking id is show up in datatable	See Fig.5.1and Fig 5.2

Before Testing

Booking Search Options:

<input checked="" type="radio"/> Search By Bookingid <input type="text" value="177d"/>	<input type="radio"/> Search By Date <input type="text"/>	<input type="radio"/> Search By Member No <input type="text"/>
<input type="button" value="Search"/>		
No Record Found.		

Fig.5.1

After Testing

Booking Search Options:

<input type="radio"/> Search By Bookingid <input type="text"/>	<input type="radio"/> Search By Date <input type="text"/>	<input type="radio"/> Search By Member No <input type="text"/>
<input type="button" value="Search"/>		

Booking List

Booking List						
Show <input type="button" value="10"/> entries Search: <input type="text"/>						
BookingID	Member Number	Date	Time	Status	Action	Action
1770	MGC-0001	2019-08-02	7:00	Pending	Play Cancel	1

Showing 1 to 1 of 1 entries

Previous Next

Fig-5.2

Remaining Test Case for bookinglist for admin in Appendix

Unit Test 6		Test Case: Booking cancel	Designed by: Bo Bo	
Data Source: Booking list for admin Form		Objective: To test the Booking Cancel function	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
6.1	Testing booking cancellation	Click cancel in booking detail datatable	Show 'Booking Cancel Successful' message box and data deleted from bookteeofslot table and status change back to available in teeoffbooking table	See Fig.6.1, Fig 6.2, 6.3, 6.4, 6.5, 6.6

Before Testing

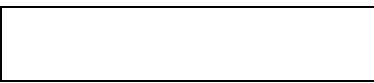
Booking List

Booking List						
Show <input type="button" value="10"/> entries Search: <input type="text"/>						
BookingID	Member Number	Date	Time	Status	Action	Action
1770	MGC-0001	2019-08-02	7:00	Pending	Play Cancel	1

Showing 1 to 1 of 1 entries

Previous Next

Fig.6.1



|

After Testing

localhost:70 says

Booking Cancel Sucessfull

OK

Fig-6.2

Test Case 6.1 Before Testing

+ Options		← →	bookslotid	MemberNo	bookingid	status	date	time
<input type="checkbox"/>	Edit Copy Delete		18	MGC-0001	1770	Pending	2019-08-02	7:00
	<input type="checkbox"/> Check all	With selected:	Edit Copy Delete		Export			

Fig-6.3

After Testing

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0005 seconds.)

```
SELECT * FROM `bookteeoffslot`
```

Fig-6.4 Before Testing

<input type="checkbox"/>	Edit Copy Delete	1770	2019-08-02 7:00	Booked
--------------------------	--------------------	------	-----------------	--------

Fig-6.5

After Testing

<input type="checkbox"/>	Edit Copy Delete	1770	2019-08-02 7:00	Available
--------------------------	--------------------	------	-----------------	-----------

Fig-6.6

Unit Test 7	Test Case: Caddy Register Form	Designed by: Bo Bo
Data Source: Caddy Register Form	Objective: To test the Caddy Register form	Tester: Bo Bo

Test Case	Description	Test Procedure	Expected Result	Actual Results
7.1	Test caddy register form accept blank for caddy name or Nrc Number or Age or Address or Phone Number input box	Leave blank for caddy name or Nrc Number or Age or Address or Phone Number input box and click register	Please fill out this field message is show	See Fig 7.1,7.2,7.3,7.4,7.5

Register Caddy

The screenshot shows a registration form for a caddy. The 'Caddy name' field contains 'Caddy name'. The 'Age' field contains '31'. The 'Address' field contains 'ygn'. The 'Phone Number' field contains '09999999'. A green 'Register' button is at the bottom. Validation messages are displayed: 'Please fill out this field.' above the 'Age' field and above the 'NRC Number' field.

Caddy name	NRC Number 123
Age 31	Please fill out this field.
Address ygn	Phone Number 09999999

Fig.7.1

Register Caddy

The screenshot shows a registration form for a caddy. The 'Caddy name' field contains 'abc'. The 'Age' field contains '31'. The 'Address' field contains 'ygn'. The 'Phone Number' field contains '09999999'. A green 'Register' button is at the bottom. Validation messages are displayed: 'Please fill out this field.' above the 'NRC Number' field.

Caddy name abc	NRC Number
Age 31	Please fill out this field.
Address ygn	Phone Number 09999999

Fig.7.2

Register Caddy

Caddy name abc	NRC Number 1231231
Age	
Address ygn	 Please fill out this field.
Register	

Fig.7.3

Register Caddy

Caddy name abc	NRC Number 1231231
Age 32	
Address	Phone Number 099999999
 Please fill out this field. Re	

Fig.7.4

Register Caddy

Caddy name abc	NRC Number 1231231
Age 32	
Address ygn	Phone Number

Register

 Please fill out this field.

Fig.7.5

Remaining Test Case for Caddy register in Appendix

	Designed by: Bo Bo
	Tester: Bo Bo
Expected	Actual Results

Unit Test 8		Test Case: Caddy list		
Data Source: Caddy list form		Objective: To test the Caddy list function		
Test Case	Description	Test Procedure	Result	Actual Results
8.1	Test can add caddy without choosing caddy number from datalist in caddy list form	Click add without choosing caddy number from datalist	Show please fill out this field message	See Fig 8.1 and 8.2

Before Testing

The screenshot shows a user interface for 'Caddy Rooster'. At the top, there is a header labeled 'Caddy Rooster'. Below it, there is a label 'Caddy ID' followed by a dropdown menu with a single item and a downward arrow icon. At the bottom, there is a green rectangular button with the word 'Add' in white text.

Fig-8.1

Designed by: Bo Bo

Tester: Bo Bo

Expected

After Testing

The screenshot shows a web form with a header 'Caddy Rooster'. Below it is a field labeled 'Caddy ID' containing a dropdown menu icon (a blue rectangle with a white downward arrow). A validation message box is overlaid on the field, displaying a yellow exclamation mark icon and the text 'Please fill out this field.' A green button is visible at the bottom left of the message box.

Fig-8.2

Remaining Test Case for caddy list form in Appendix

	Designed by: Bo Bo
	Tester: Bo Bo
Expected	Actual Results

Unit Test 9		Test Case: Buggy Register		
Data Source: Buggy Register form		Objective: To test buggy register form		
Test Case	Description	Test Procedure	Result	
9.1	Test Buggy register accept buggy number input box is blank	Buggy number input box is leave blank and click on save	Show pelase fill out this field message	See Fig 9.1 and 9.2

Before Testing

The screenshot shows a user interface for 'Buggy Register'. At the top, there is a header bar with the text 'Buggy Register'. Below it is a form area with a single input field labeled 'Buggy Number'. The input field is currently empty. At the bottom of the form is a green rectangular button labeled 'Save'.

Fig-9.1

Designed by: Bo Bo

Tester: Bo Bo

Expected

After Testing

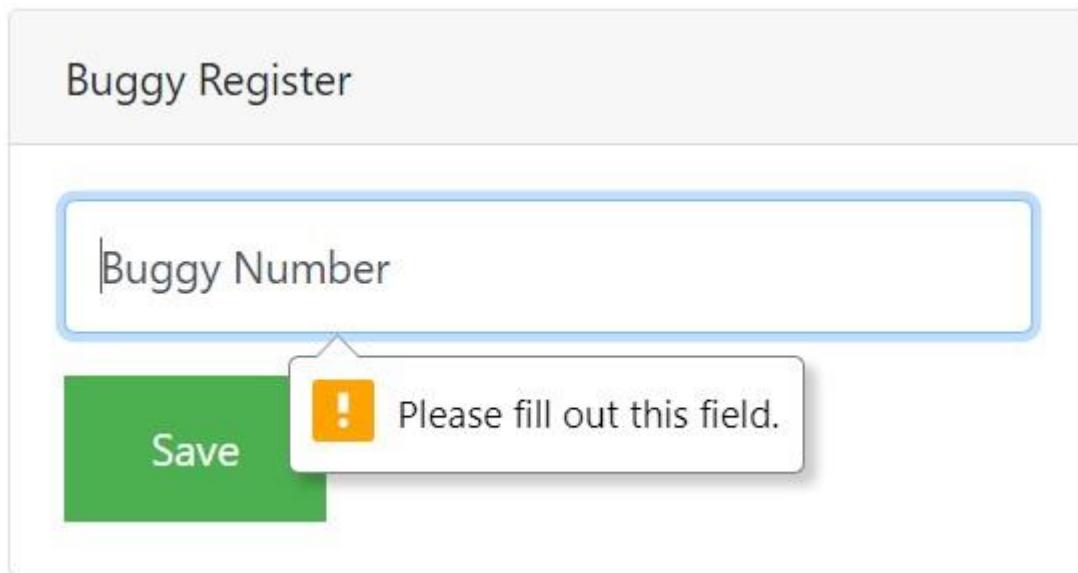


Fig-9.2

Remaining Test Case for buggy register in Appendix

	Designed by: Bo Bo
	Tester: Bo Bo
Expected	Actual Results

Unit Test 10		Test Case: Buggy list		
Data Source: Buggy list form		Objective: To test buggy list form		
Test Case	Description	Test Procedure	Result	Actual Results
10.1	Test buggy status can change in buggy list form	Choose buggy number that want to change status in buggylist datatable and click on Update Status	Buggy No 2 status change from Unavailable to available	See Fig 10.1 and 10.2

Before Testing

Buggy List			
Show 10 entries		Search:	
Buggy No	Status	Actions	
1	Available	Update Status	
2	Unavailable	Update Status	
3	Available	Update Status	
4	Available	Update Status	

Showing 1 to 4 of 4 entries Previous **1** Next

Fig-10.1

After Testing

Buggy List			
Show 10 entries		Search:	
Buggy No	Status	Actions	
1	Available	Update Status	
2	Available	Update Status	
3	Available	Update Status	
4	Available	Update Status	

Showing 1 to 4 of 4 entries Previous **1** Next

Designed by: Bo Bo

Tester: Bo Bo

Expected

Fig-10.2

	Designed by: Bo Bo
	Tester: Bo Bo

Unit Test 11		Test Case: Member Profile Update	Expected	Actual Results
Test Case	Description	Test Procedure	Result	
11.1	Test user profile loaded with respective data when click on update profile	Click on update profile menu in menu bar	Profile update page load with pre fill up input according to log in user member no	See Fig 11.1 and 11.2

Before Testing

Fig-11.1

After Testing

Profile Update

Member Name <input type="text" value="Tun Tun"/>	Password <input type="text" value="MGC-0002"/>
Member Type <input type="text" value="Select Member Type"/>	Date Of Birth <input type="text" value="2019-08-13"/>
Father Name <input type="text" value="Zaw Zaw"/>	NRC/Passport Number <input type="text" value="12/pbd(n)02962222222"/>
Nationality <input type="text" value="Myanmar"/>	Company/Department <input type="text" value="ABCD"/>
Rank/Position <input type="text" value="Director"/>	Email <input type="text" value="zawzaw@email.com"/>
Religion <input type="text" value="Buddhist"/>	Handicap <input type="text" value="0"/>
Phone Number <input type="text" value="09312312"/>	Permanent Address <input type="text" value="Yangon"/>
Current Address <input type="text" value="Yangon"/>	Seconder Member Number <input type="text" value="MGC-0001"/>
Proposer Member Number <input type="text" value="MGC-0001"/>	
<input type="button" value="Update"/>	

Designed by: Bo Bo

Tester: Bo Bo

Expected

Fig-11.2

Remaining Test Case for member profile update in Appendix

	Designed by: Bo Bo
	Tester: Bo Bo
Expected	Actual Results

Unit Test 12		Test Case: Tee off time booking		
Data Source: booking list form		Objective: To member profile update form		
Test Case	Description	Test Procedure	Result	
12.1	Test calendar function of booking(user) form	Click on choose date to book tee off input box to check calendar	Calendar showing today date is highlighted and previous dates are unclickable and dim	See Fig 12.1 and 12.2

Before Testing

Booking Search

Choose date to Book Tee Off

My Booking

Booking ID	Date	Time	Status
------------	------	------	--------

Fig-12.1

After Testing

Booking Search

Choose date to Book Tee Off

SEARCH	Aug 2019																																										
	<table border="1"> <thead> <tr> <th>Su</th><th>Mo</th><th>Tu</th><th>We</th><th>Th</th><th>Fr</th><th>Sa</th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td><td></td><td>1</td><td>2</td><td>3</td></tr> <tr><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td></tr> <tr><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td></tr> </tbody> </table>	Su	Mo	Tu	We	Th	Fr	Sa					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Su	Mo	Tu	We	Th	Fr	Sa																																					
				1	2	3																																					
4	5	6	7	8	9	10																																					
11	12	13	14	15	16	17																																					
18	19	20	21	22	23	24																																					
25	26	27	28	29	30	31																																					

Fig-12.2

Remaining Test Case for booking (Member) in Appendix

Unit Test 13		Test Case: Member Playing Form	
Data Source: Member Playing form		Objective: To test member playing form	
Test Case	Description	Test Procedure	Result
13.1	Test member play form load or not	Click on play in datatable of bookinglistforadmin page	Member Playing payment form loaded with booking id and today date pre loaded See Fig 13.1 and 13.2

Before Testing

Booking List										
<input type="checkbox"/> Booking List Search: <input type="text"/>										
Show 10 entries										
BookingID		Member Number	Date	Time	Status	Action				
1832		MGC-0002	2019-08-04	7:08	Pending	Play Cancel				

Showing 1 to 1 of 1 entries

Fig-13.1

	Designed by: Bo Bo
	Tester: Bo Bo
Expected	Actual Results

After Testing

Playing Payment

Booking ID 1832	Date 2019-08-04
Member Number	Member Name
<input type="text"/>	<input type="text"/>
Member Type	Green Fee
<input type="text"/>	<input type="text"/>
Caddy Number	Buggy Number
<input type="text"/>	<input type="text"/>
Booking Fee	<input type="text"/>
<input type="button" value="Confirm Payment"/> <input type="button" value="Guest Player"/>	

Fig-13.2

Remaining Test Case for member playing form in AppendixBefore Testing

Playing Payment

Booking ID 1832	Date 2019-08-04
Member Number	Member Name
<input type="text"/>	<input type="text"/>
Member Type	Green Fee
<input type="text"/>	<input type="text"/>
Caddy Number	Buggy Number
<input type="text"/>	<input type="text"/>
Booking Fee	<input type="text"/>
<input type="button" value="Confirm Payment"/> <input type="button" value="Guest Player"/>	

Fig-14.1

Unit Test 14		Test Case: Guest Playing Form	Designed by: Bo Bo	
Data Source: Guest Playing form		Objective: To test Guest playing form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
14.1	Test guest payment form load or not	Click on Guest Player in playing payment form	Guest payment form loaded with booking id and today date ,member type and green fee already fill up	See Fig 14.1 and 14.2

After Testing

The screenshot shows a 'Guest Payment' form. At the top left is a 'Booking ID' field containing '1832'. Next to it is a 'Date' field showing '2019-08-04'. Below these are 'Guest Name' and 'Phone Number' fields. An 'Address' field is present. Under 'Member Type', 'Guest' is selected. The 'Green Fee' is listed as '30000'. There are fields for 'Caddy Number' and 'Buggy Number'. A dropdown menu for 'Booking Fee' is open. At the bottom are two buttons: a green 'Confirm Payment' button and a grey 'Member' button.

Fig-14.2

Remaining Test Case for guest playing form in Appendix

Unit Test 15		Test Case: Booking playing limit	Designed by: Bo Bo	
Data Source: Member Payment form		Objective: To test booking playing limit	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
15.1	Test one bookingid can have more than 4 players playing or not	Click on confirm in Member or guest payment when booking already have 4 people paid for playing already	Booking already have four player playing message show	See Fig 15.1 and 15.2

Before Testing

Member Payment

Member Name	john
booking id	1832
green fee	1000
Caddy fee	2000
booking Fee	0
buggy Fee	0
Total	3000
Paid	<input type="text" value="5000"/>
Change	<input type="text" value="2000"/>
<input type="button" value="back"/>	<input type="button" value="Confirm"/>

Fig-15.1

After Testing

localhost:70 says

Booking Already have four players Playing

OK

Fig-15.2

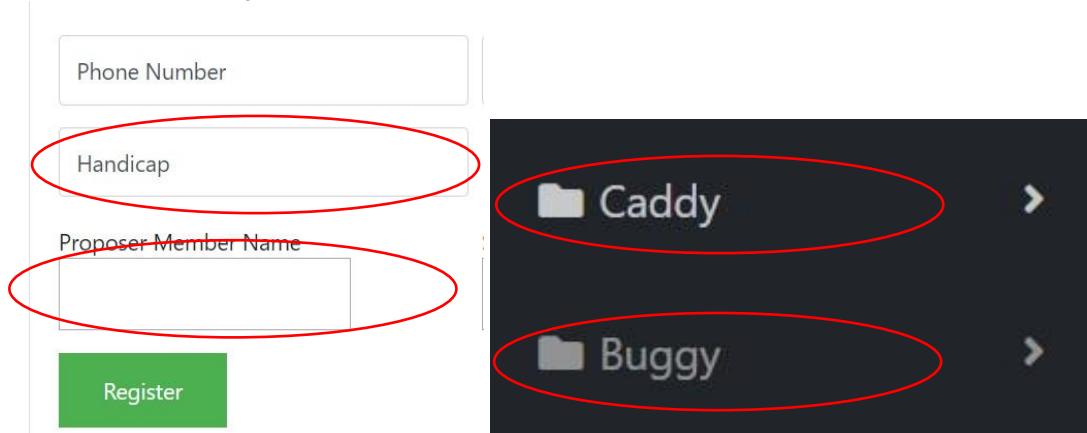
5.2.8 Usability Testing

Visibility of System Status

The screenshot shows a registration form titled 'Register Caddy'. It contains several input fields: 'Caddy name' (highlighted with a blue border), 'NRC Number', and 'Age'. A callout box with a blue arrow points to the 'Caddy name' field, containing the text: 'Selected text box is highlighted for clear visibility'.

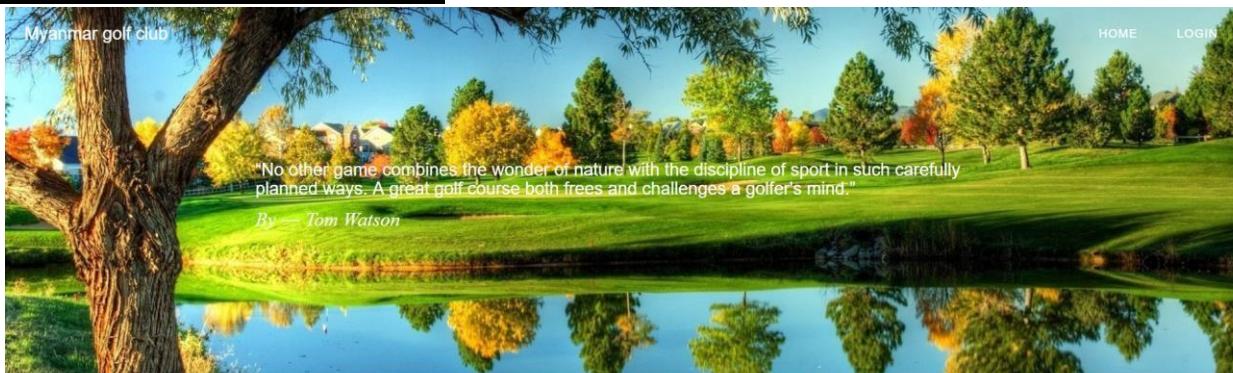
All form have selected text box become highlight so user can know which text box is currently selected easily.

Match Between System and Real World



Most of the term such as handicap, proposer member name, caddy, buggy etc use in this project is match with real world term golfer and club staff use so they can easily understand the system.

Aesthetic and Minimalist Design



Welcome to Myanmar golf club

Screen design use for this project is simple and show only essential menu and also provide clear and simple looking home page for club members. **Consistency and standard**

The image displays two screenshots of the application's user interface. The top screenshot shows the 'Staff Register' form, which includes fields for Name, Username, Password, and NRC Number, along with a 'Save' button. The bottom screenshot shows the 'Register Caddy' form, which includes fields for Caddy name, NRC Number, Age, Address, Phone Number, and a 'Register' button. Both forms and their respective sidebar menus are circled in red to emphasize consistency. The sidebar menu on the left contains links for Member, Locker, Booking, Staff, Caddy, Buggy, and Log Out.

All pages use same layout design, same font style and color scheme so end user can feel same way on all the pages. So is match with consistency and standard principle

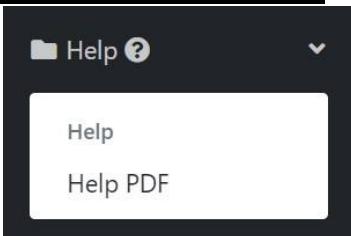
Error Prevention

Register Caddy

Caddy name	NRC Number
Age	 Please fill out this field.
Address	Phone Number
<input type="button" value="Register"/>	

Include error prevention message like this to prevent user from error.

Help and documentation



Member List

Member No	Member Name	Member Type	Address	Phone	Email	Actions
MGC-0001	Bo Bo	Life Member	Yangon	095141893	bobo.im2@gmail.com	 LockerList MonthlyFee Update
MGC-0002	Tun Tun	Child	Yangon	090909099	zawzaw@gmail.com	LockerList MonthlyFee Update
MGC-0003	john	Life Member	Yangon	09312312	smith@gmail.com	LockerList MonthlyFee Update
MGC-0004	Aung Phy	Life Member	Vgn	213213123	aungphyo@gmail.com	LockerList MonthlyFee Update

Showing 1 to 4 of 4 entries

Choose Locker List

Actions

LockerList|MonthlyFee|Update

LockerList|MonthlyFee|Update

LockerList|MonthlyFee|Update

LockerList|MonthlyFee|Update

Search:

Previous Next

Locker List

Locker No	Status	Actions
11	Available	 Book Locker Delete Locker
12	Available	Book Locker Delete Locker
13	Booked	Book Locker Delete Locker

Showing 1 to 3 of 3 entries

Search:

Previous Next

Choose Book Locker

Actions

Book Locker|Delete Locker

Book Locker|Delete Locker

Book Locker|Delete Locker

Search:

Previous Next

Booking

Choose number of lockers you want to get locker

Help menu link is available with download or viewable help pdf file which include detail instructions about function that need to take multiple steps to complete. So user can use this system more efficiently.

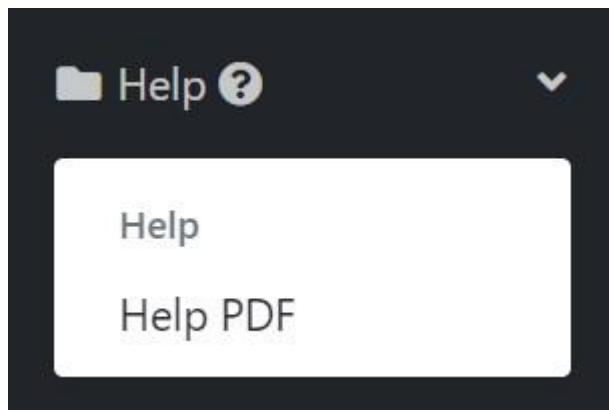
User Control and Freedom**Member Payment**

Member Name	Bo Bo
booking id	1831
green fee	1000
Caddy fee	2000
booking Fee	0
buggy Fee	0
Total	3000
Paid	<input type="text"/>
Change	<input type="text"/>
Back	Confirm

Allow user to go back to previous step if some field is wrongly choose or inserted in previous step to redo their wrong. Thus allow user to have more freedom and control.

5.2.9 Iteration for Usability Testing

Iteration for help feature



The image displays three screenshots of a management system's user interface, illustrating the addition of a 'Help' feature:

- Top Screenshot:** Shows a 'Member List' table. The 'Actions' column for each member includes links such as 'Lockerlist|MonthlyFee|Update'. A callout box labeled 'Choose Locker List' has an arrow pointing to the 'Lockerlist' link for the first row.
- Middle Screenshot:** Shows a 'Locker List' table. The 'Actions' column for each locker includes links such as 'Book Locker|Delete Locker'. A callout box labeled 'Choose Book Locker' has an arrow pointing to the 'Book Locker' link for the first row.
- Bottom Screenshot:** Shows a 'Booking' interface with a callout box labeled 'Choose number of want to get locker'.

Help function didn't included at first but is added later on to improve usability of user. PDF with step by step instruction for some features of the system is added to download or view.

5.2.10 Time box 2 Summary

Timebox 2 is about booking management system and playing management system. It includes creation of bookable tee off slot, staff registration system, staff and member login system, buggy and caddy management system, available caddy rooster list for every day and playing fee management system for member and guests. End date for timebox 2 is 16 July 2019 and all functional requirement needed for timebox 2 was finished within that time. Also, all iteration needed for that timebox is finished within plan timeframe.

Problems

One of the problems of time box 2 is about creating booking slot. Want to create time slot with 8 min interval after choosing date and submit action. But didn't know how to implement this with PHP. Another problem is whether member and guest playing payment to be done in same page or doing with different pages. Another problem is auto loading data to input boxes when one input box choose data without submit the form. This also can't be done or i don't have enough skill to implement this with PHP.

Solve

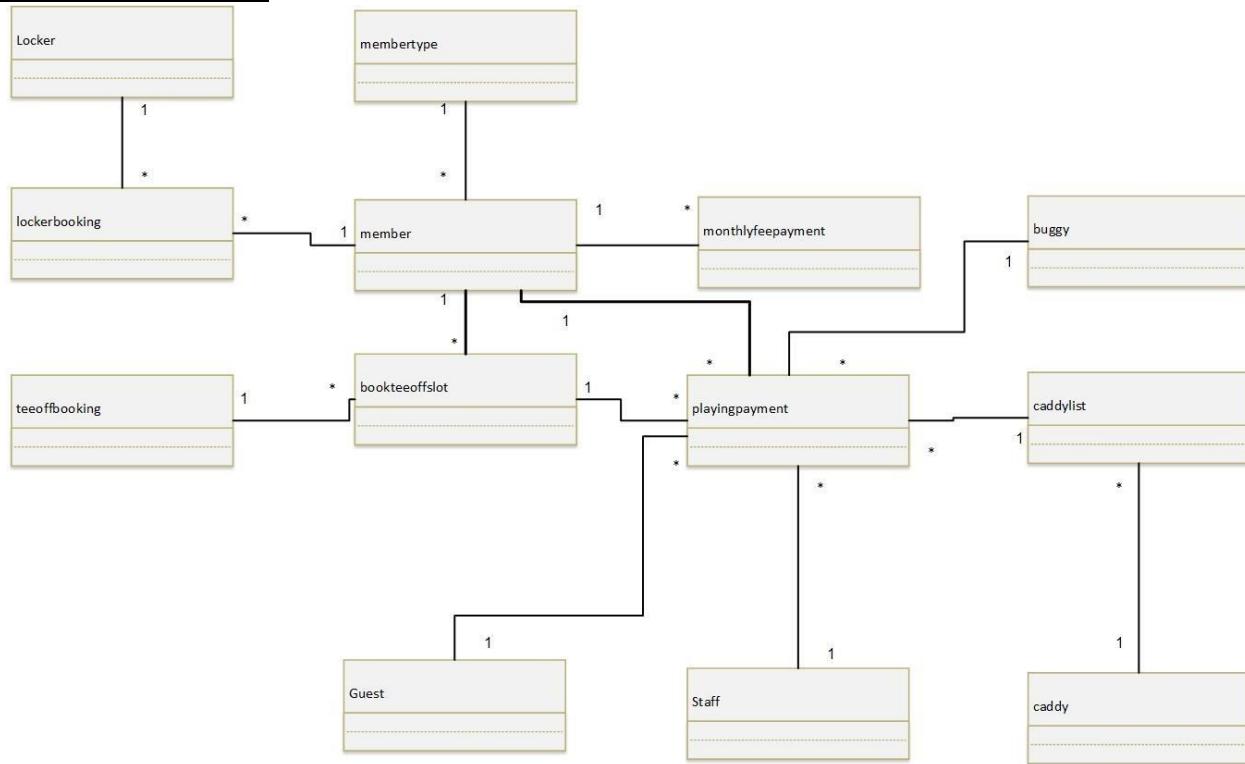
Creating booking slot with 8 min time gap problem is solved by written JavaScript function that can split time by 8 min within 2-time interval. Another problem is later solved by deciding to do two payment on two different pages. For auto loading data when one input box type in or choose input is solved by using XML.

Lesson Learn

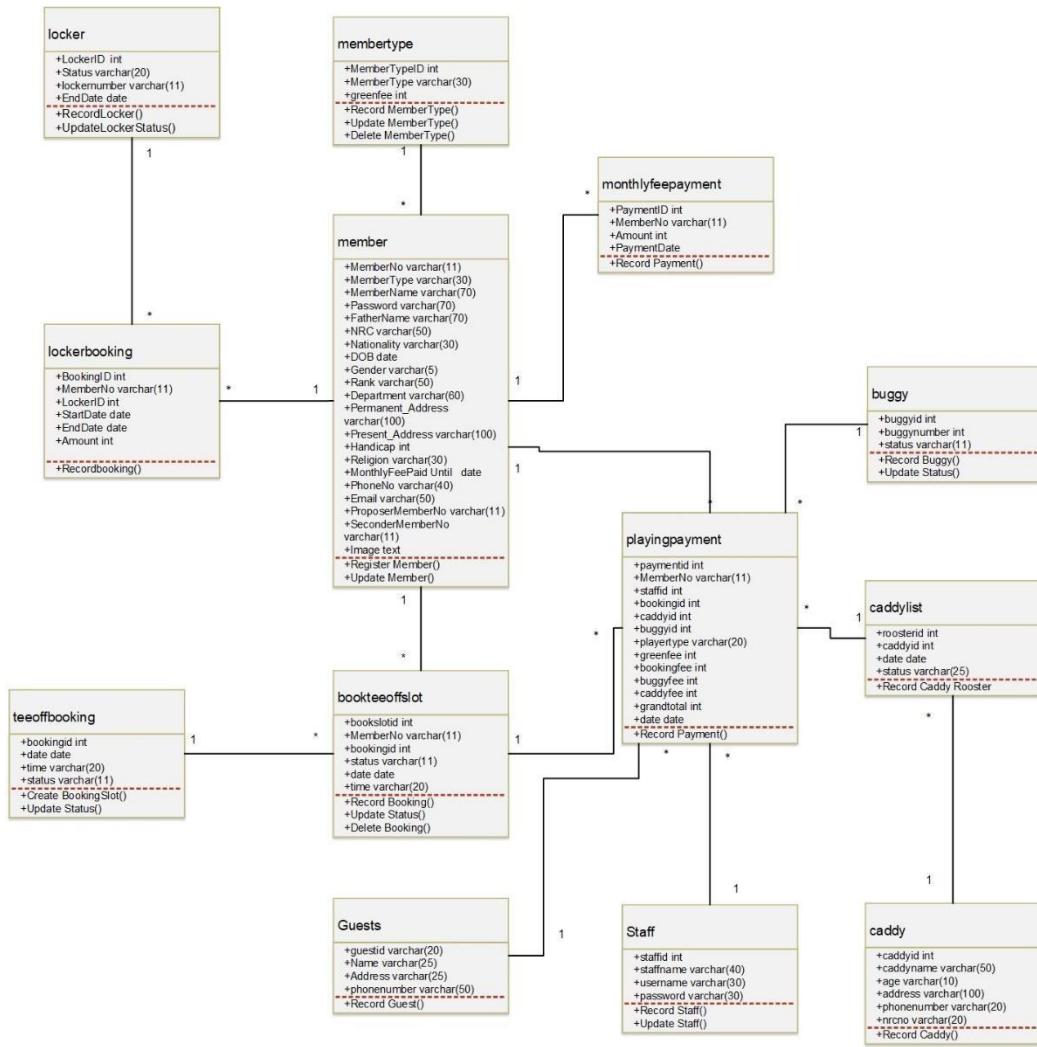
By doing time box 2 improve knowledge and skill about how to use JavaScript to create function that can split time, how to use XML to auto load data without submitting the form etc.

5.3 Overall Class Diagram

Overall Initial Class



Overall Detail Class



Explanation of Detail Class Diagram

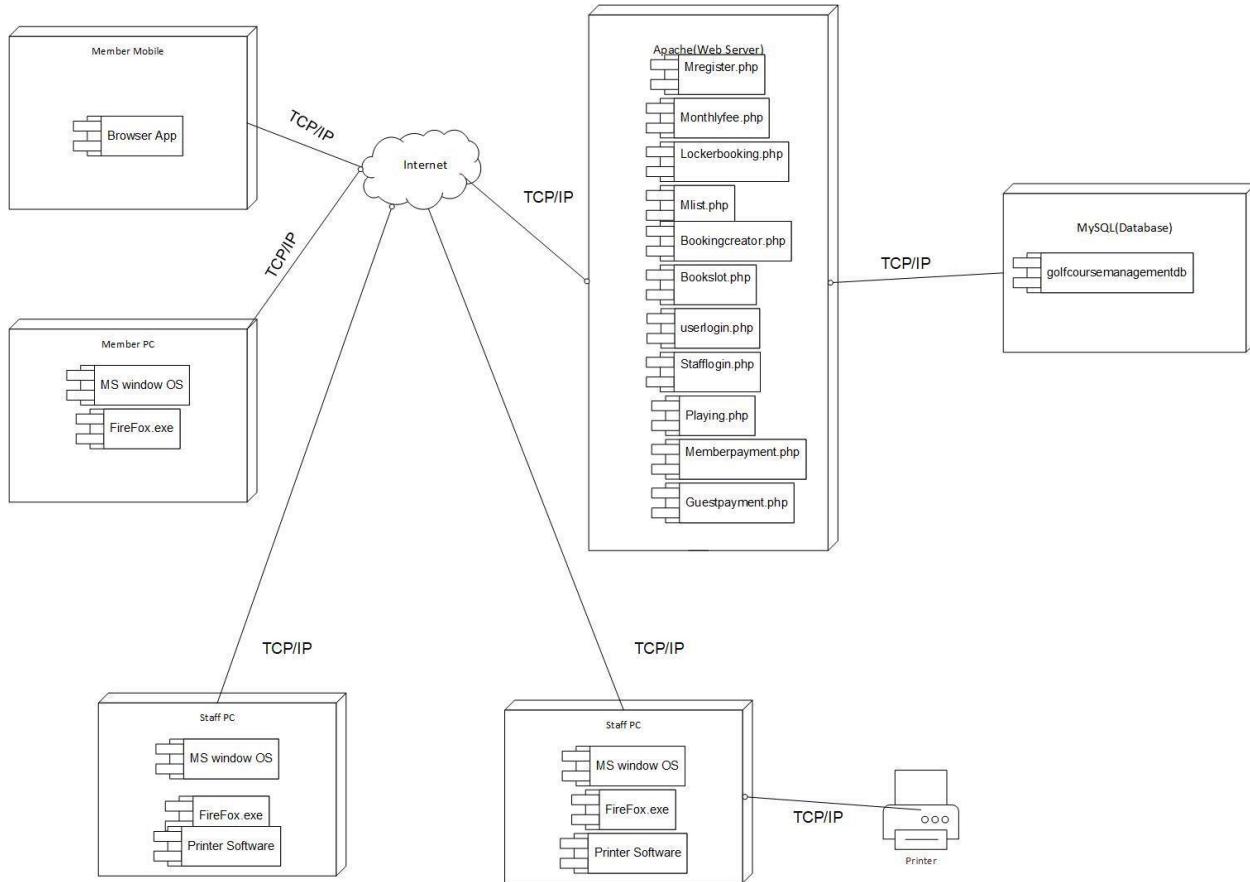
This diagram is detail class diagram of Myanmar golf club project. In this diagram membertype, member, locker, teeoffbooking, guests, staff, caddy and buggy are parent class while locker booking, monthlyfeeparent, bookteeoffslot, playingpayment and caddylist are missing class.

CHAPTER – 6

DEPLOYMENT

6.1 Deployment

6.1.1 Deployment Diagram



6.1.2 Explanation for diagram

Myanmar golf club database is hosted using MySQL server. All the require files of this project will be hosted in webserver. Both user and staff will access to this file according to their permission through internet. End user will need operating system in their computer and one browser software or app.

6.2 Data Migration

6.2.1 Data to Migrate

Definition

Data migration transport data between computer, hard drives or between different formats. It needs to consider before any new system implementation, upgrades etc. Software or scripts are used during data migration to map system data and automated migration process. Can categorize data migration process into following-

- Storage migration

- Database migration
- Application migration
- Business process migration

(www.techopedia.com, n.d.)

Stages of data migration

1. Identify data format, data location

Before starting data migration, need to identify the data which will be migrate about the format of the data, location of the data and what format data will be after data migration. By doing this can get better understanding about the data that will be migrated and can find possible risk before data migration so can make security measure in advance.

2. Planning the size and scope of migration

Make sure the scope of data that need to be migrate. Plan the resources and budget that will need during migration process. Analyze both source of data and new system that date will be migrate to check data migration will impact normal business or will have downtime in daily processes. So can plan weekend or free time to avoid possible downtime.

3. Back up all data

Before migration all the data that need to migrate should be backed up so if got any problem during migration such as corrupting data or incomplete and missing data etc. If back up before migration can restore the error data to original state.

4. Assess staff and migration tool

Data migration may be big and complex for some project so need to reassess the staff and tool that will be use for migration before starting the migration process. That is to make sure that company have staff that can handle the data migration or need to hire external expert to handle the migration and if data migration software is used for migration need to reassess that software to make sure that it can handle this project data migration.

5. Execution of data migration

This phase is about execute the data migration after completing all the above steps. Extract all the data need to migrate and make sure that data is clean (without virus, malware etc.) and then change that data into require format for successful data migration.

6. Testing after data migration

When data migration finish, need to make sure that there is no problem with both source and new system. To confirm this need to test the system, application that link with data, web application etc.

7. Maintenance after data migration

Even with proper testing, it can't be sure that there will be no error happen within data migration. So, to make sure need to audit the whole system and data quality to confirm

everything is correct after data migration. If notice error, corrupt or missing data start restoration of data from the back up data.
 (nordic-backup.com, n.d.)

Time Box	Master Data	Transaction Data
Time Box 1: Member Management System	MemberType, Member, locker	Lockerbooking, monthlyfeepayment
Time Box 2 : Booking and Playing Management System	Member, teeoffbooking, buggy, guest, staff, caddy	Bookteeofslot, playingpayment, caddylist,

6.2.2 Plan

TimeBox	Data To Migrate	Duration	Start Date	End Date	Responsible person
TimeBox 1: Member Management System	<ul style="list-style-type: none"> • MemberType • Member • Locker • Lockerbooking • monthlyfeepayment 	5 days	1 August 2019	7 August 2019	Club Manager Club house staffs
TimeBox 2: booking and playing management system	Member Teeoffbooking Buggy Caddy Staff Guest Bookteeofslot Playingpayment caddylist	5 days	7 August 2019	13 August 2019	Club Manager Club house staffs

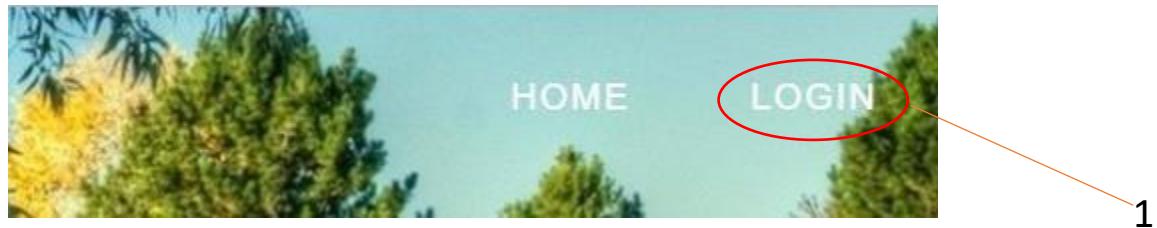
6.3 Training

6.3.1 Training plan

No	Contact	Trainee	Start Date	End Date	Venue	Time
1	Time Box 1 Member Management System	Club Manager Club house staffs	14 August 2019	16 August 2019	Myanmar golf club club house	5 pm – 7 pm

2	Time Box 2 booking and playing management system	Club Manager Club house staffs	19 August 2019	23 August 2019	Myanmar golf club club house	5 pm – 7 pm
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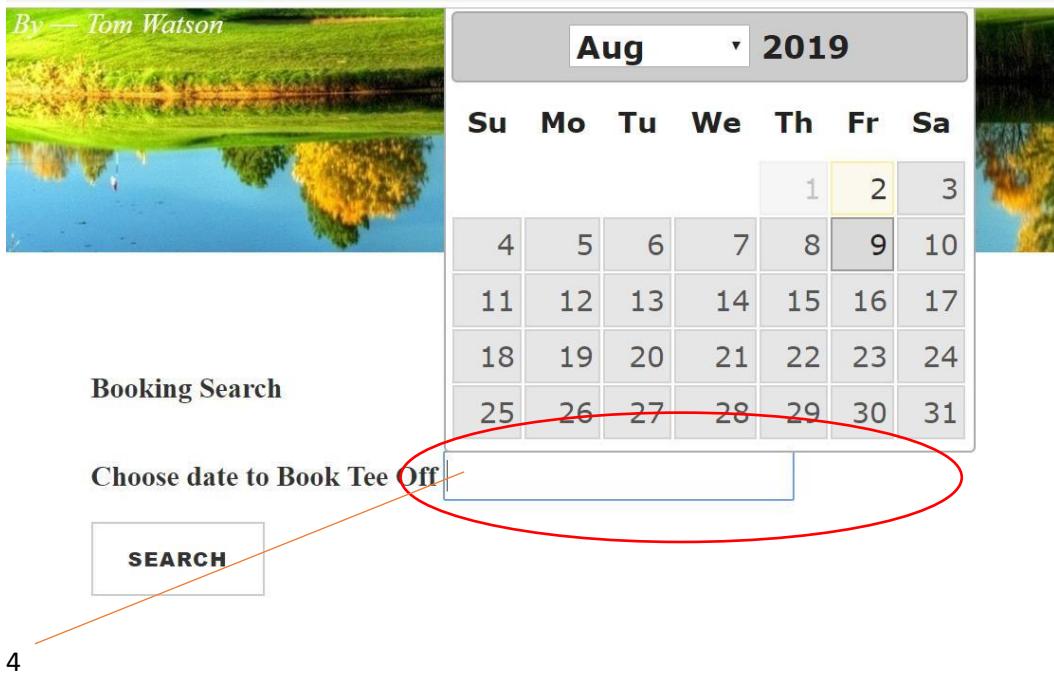
6.3.2 User Manual



User login

A screenshot of a user login form. It consists of two input fields: the top one contains the text "MGC-0001" and the bottom one contains five dots ("....."). Below these fields is a blue rectangular button labeled "LOG IN", which is also circled with a red oval. A red arrow points from the number "2" at the bottom left towards this "LOG IN" button.

A screenshot of a dashboard or menu bar. It includes several buttons: "HOME", "UPDATE PROFILE", "BOOKING" (which is circled with a red oval), and "LOG OUT". A red arrow points from the number "3" at the bottom left towards the "BOOKING" button.



Booking Search

Choose date to Book Tee Off

SEARCH

5

Date	Time	Status	Action
2019-08-02	7:00	Available	Book Teeoff Time
2019-08-02	7:08	Available	Book Teeoff Time
2019-08-02	7:16	Available	Book Teeoff Time
2019-08-02	7:24	Available	Book Teeoff Time
2019-08-02	7:32	Available	Book Teeoff Time
2019-08-02	7:40	Available	Book Teeoff Time
2019-08-02	7:48	Available	Book Teeoff Time
2019-08-02	7:56	Available	Book Teeoff Time
2019-08-02	8:04	Available	Book Teeoff Time
2019-08-02	8:12	Available	Book Teeoff Time
2019-08-02	8:20	Available	Book Teeoff Time

6

localhost:70 says

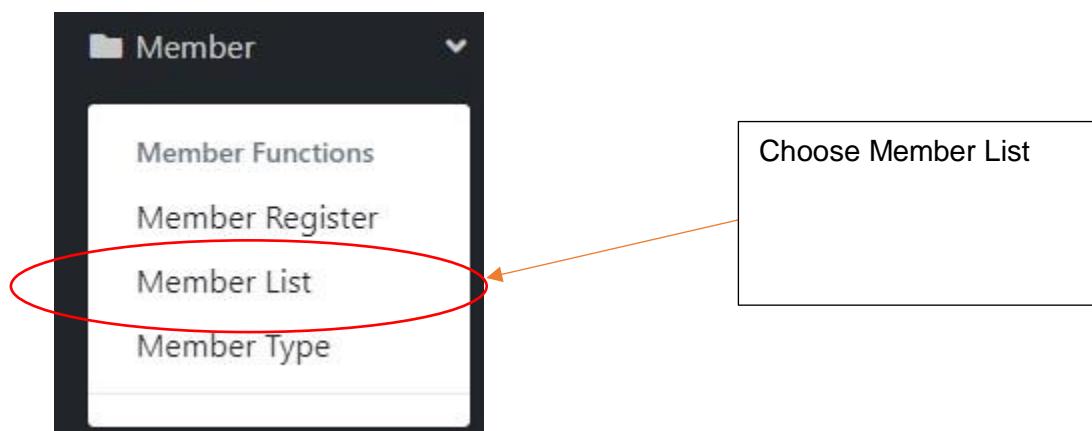
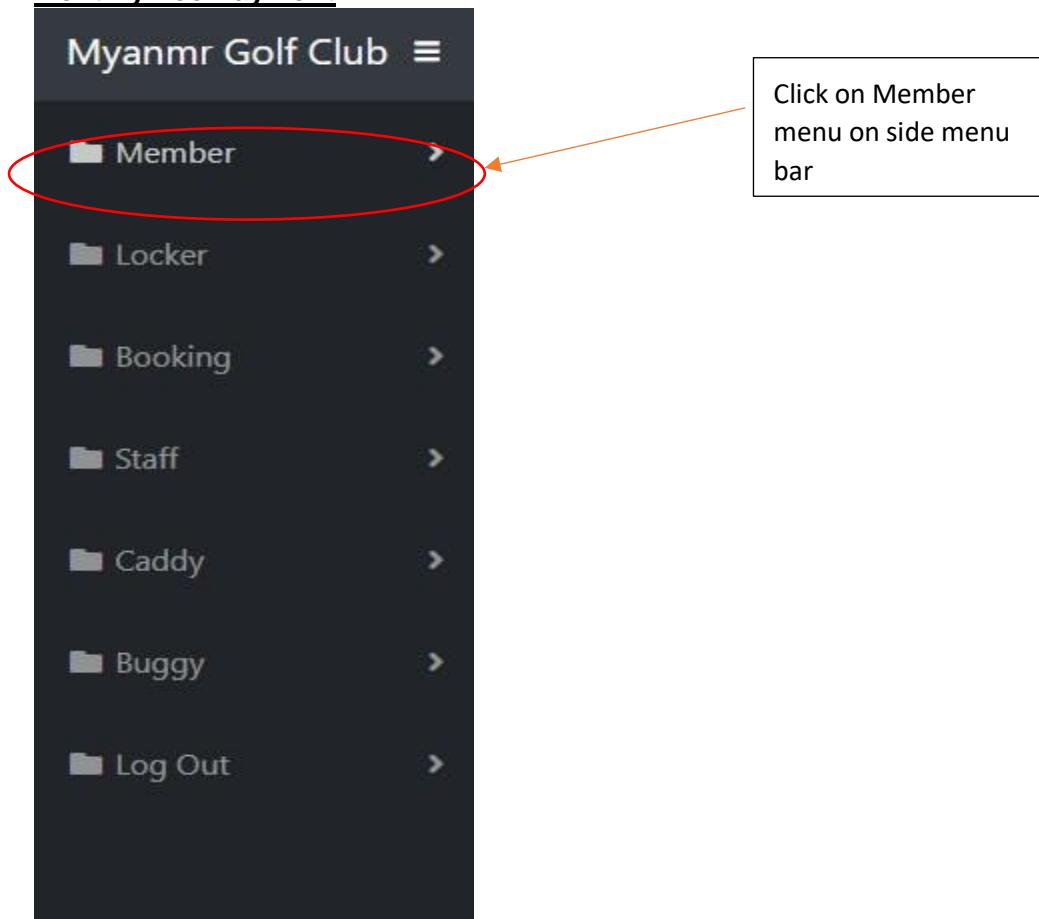
Booking successfully created

OK

7

1. Click Log in on home page
2. Type in user name, password and click log in
3. Click booking on menu bar
4. In booking choose date for tee off booking
5. Click on search
6. Click desire tee off time in search result book tee off time button
7. Booking success

Monthly Fee Payment



Choose Monthly Fee

Member List							Actions
Show 10 entries							Search:
Member No	Member Name	Member Type	Address	Phone	Email		
MGC-0001	Bo Bo	Life Member	Yangon	095141893	bobo.im2@gmail.com	Lockerlist	MonthlyFee Update
MGC-0002	Tun Tun	Child	Yangon	09999999	zawzaw@gmail.com	Lockerlist	MonthlyFee Update
MGC-0003	john	Life Member	Yangon	09312312	smith@email.com	Lockerlist	MonthlyFee Update
MGC-0004	Aung Phyoe	Life Member	Ygn	21321323	aungphyoe@gmail.com	Lockerlist	MonthlyFee Update

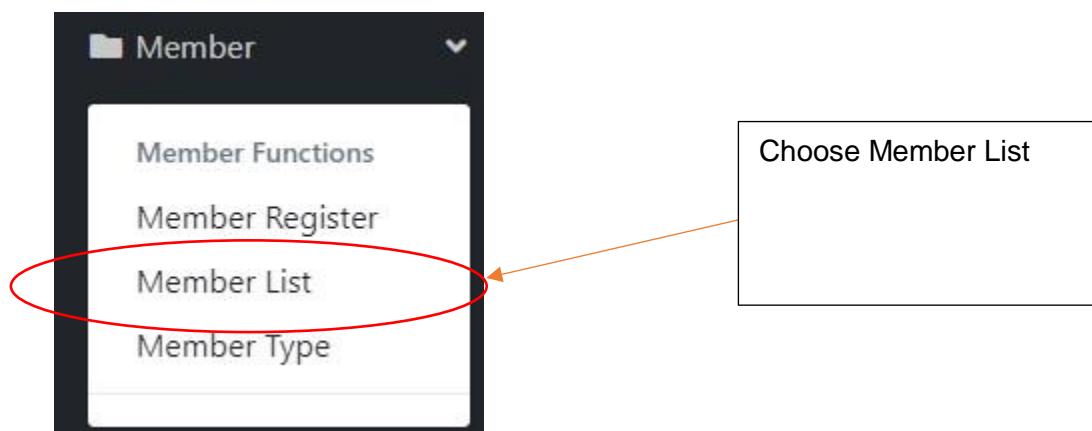
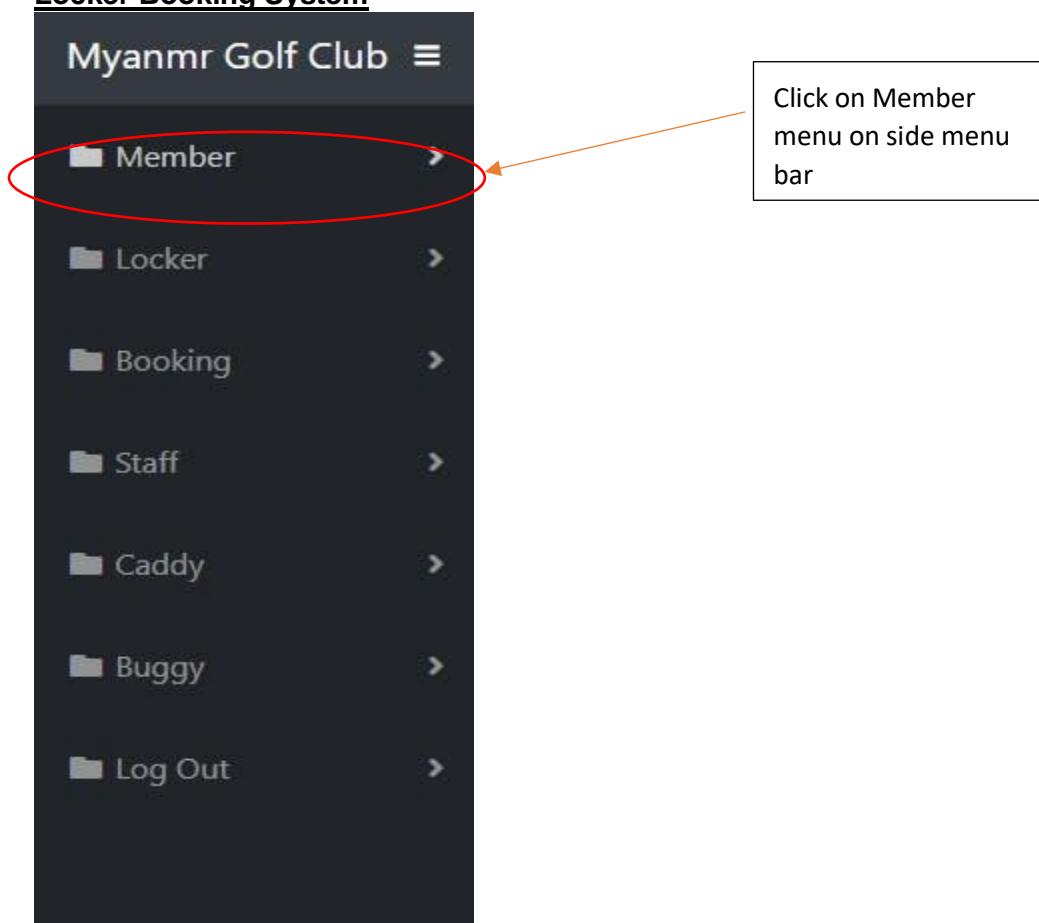
Showing 1 to 4 of 4 entries

Previous [1](#) Next

Monthly Fee Payment

Member No MGC-0001	Numbers of month 2	Type in number month want to pay and Paid Amount
Monthly Fee Paid Until 2019-09-29		
Amount To Pay 4000	Paid 5000	
Change 1000		
Confirm	After all field fill in click confirm	

Locker Booking System



Myanmar Golf Club Member, Booking and Playing Management System

Can quick search for data in all column BOBO

Member No	Member Name	Member Type	Address	Phone	Email	Actions
MGC-0001	Bo Bo	Life Member	Yangon	095141893	bobo.im2@gmail.com	Lockerlist MonthlyFee Update
MGC-0002	Tun Tun	Child	Yangon	09999999	zawzaw@gmail.com	Lockerlist MonthlyFee Update
MGC-0003	john	Life Member	Yangon	09312312	smith@email.com	Lockerlist MonthlyFee Update
MGC-0004	Aung Phyo	Life Member	Ygn	213213123	aungphyo@gmail.com	Lockerlist MonthlyFee Update

Showing 1 to 4 of 4 entries

Choose Locker List

Search:

Choose Book Locker

Search:

Locker No	Status	Actions
11	Available	Book Locker Delete Locker
12	Available	Book Locker Delete Locker
13	Booked	Book Locker Delete Locker

Showing 1 to 3 of 3 entries

Locker Booking

Choose number of want to get locker

Member No: MGC-0001

Locker ID: 11

Choose Amount Paid

Number of month: 2

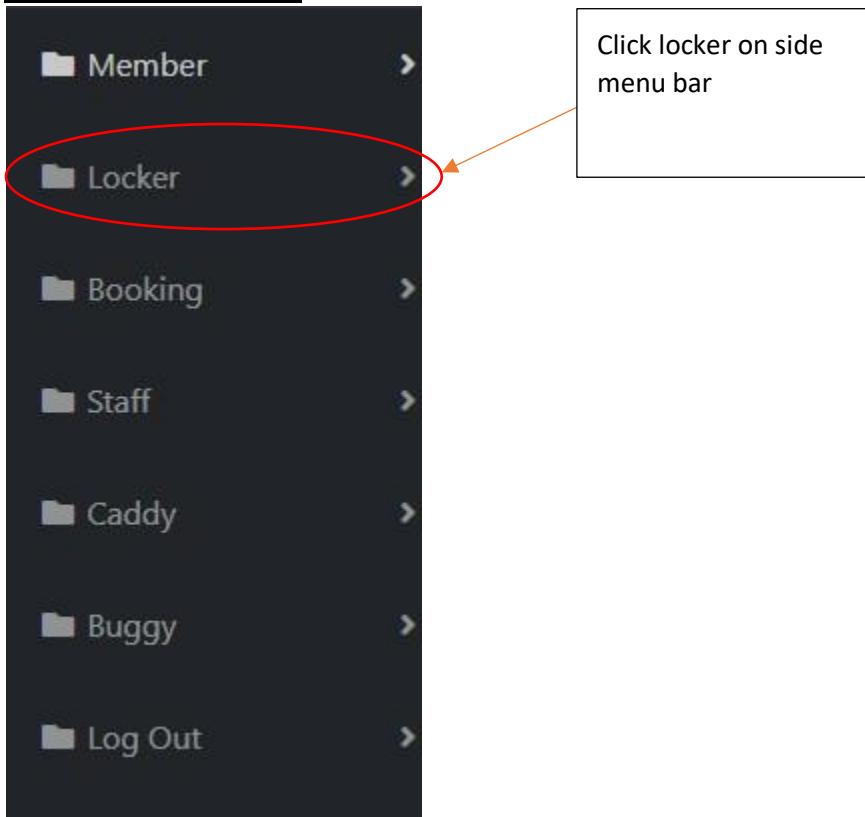
Amount to Pay: 6000

Paid: 7000

Change: 1000

Confirm

Click Confirm

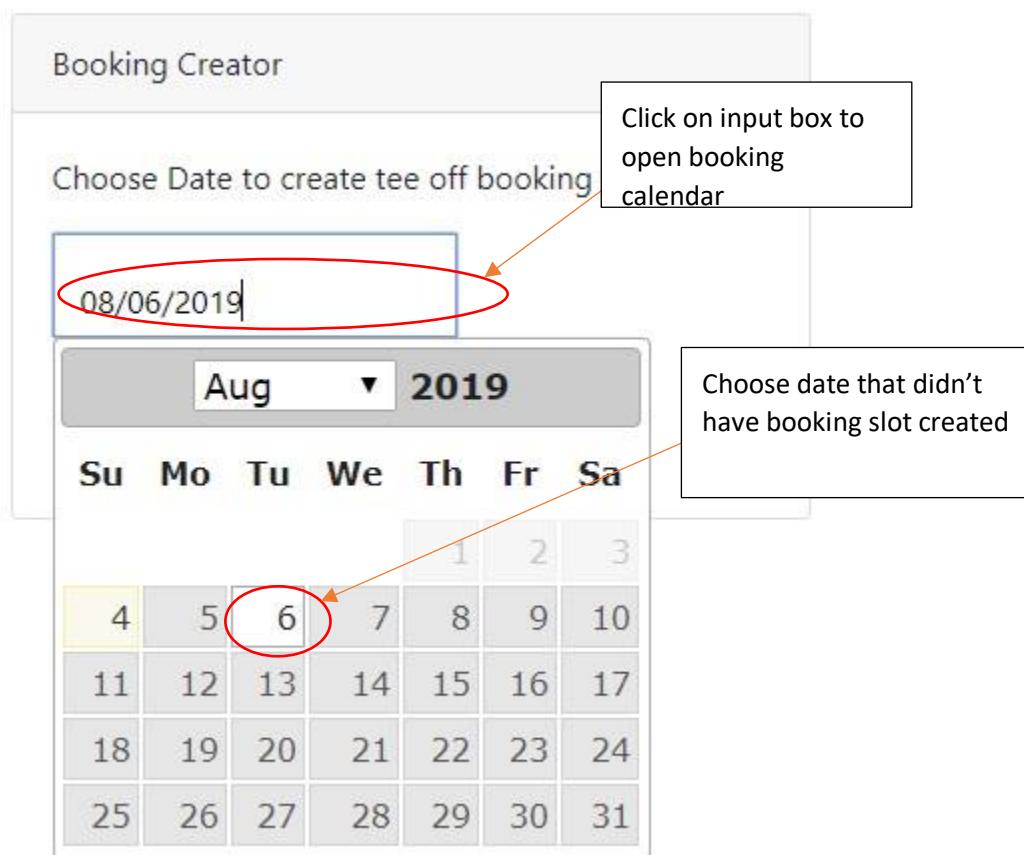
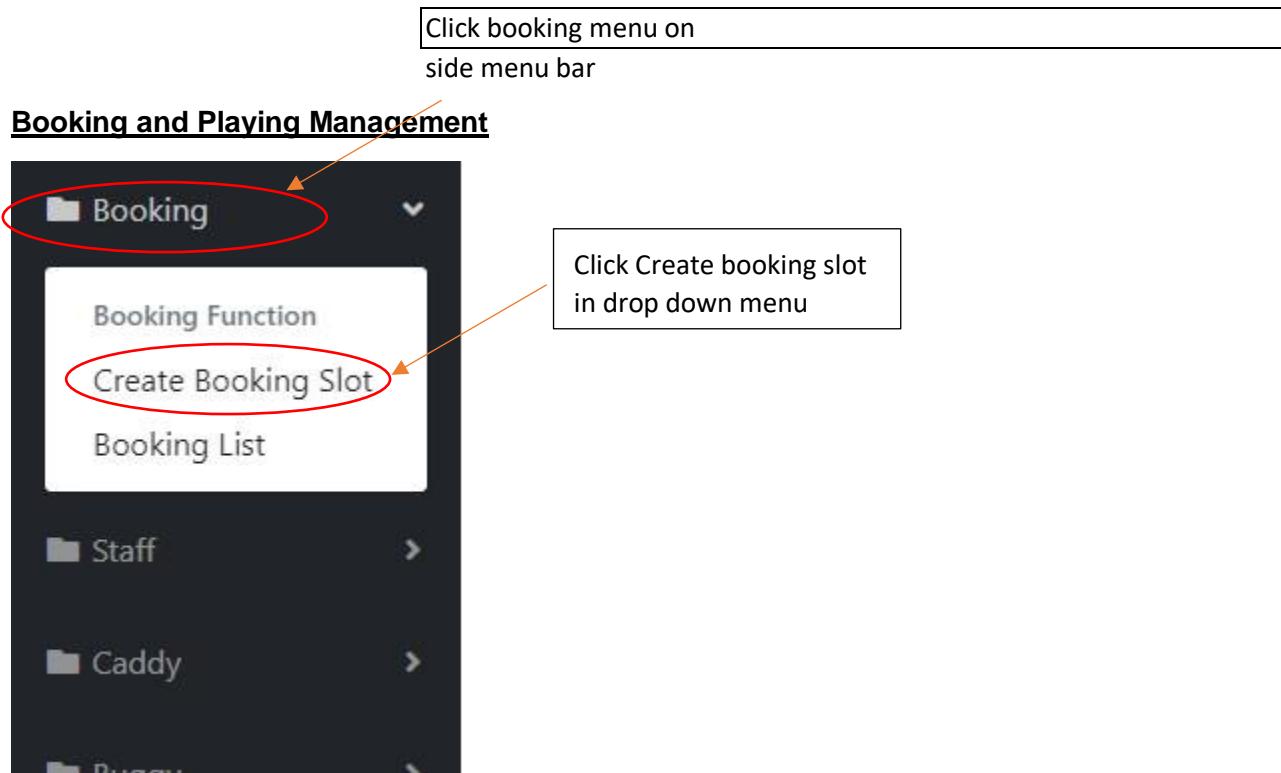
Change locker status

The screenshot shows the 'Locker List' page. The 'Locker List' option in the dropdown menu is highlighted with a red oval. A callout box with an orange arrow points to it with the text: "Choose locker list in drop down menu".

On the main page, the 'Actions' column for the row with Locker No 11 has a 'Change Status' button highlighted with a red oval. A callout box with an orange arrow points to it with the text: "Click on change status to change booked to available".

Locker No	Status	End Date	Actions
11	Available	2019-08-24	Change Status (highlighted with a red oval)
12	Available	0000-00-00	Change Status
13	Booked	2019-08-29	Change Status

Compare end date with today



Booking Creator

Choose Date to create tee off booking slot

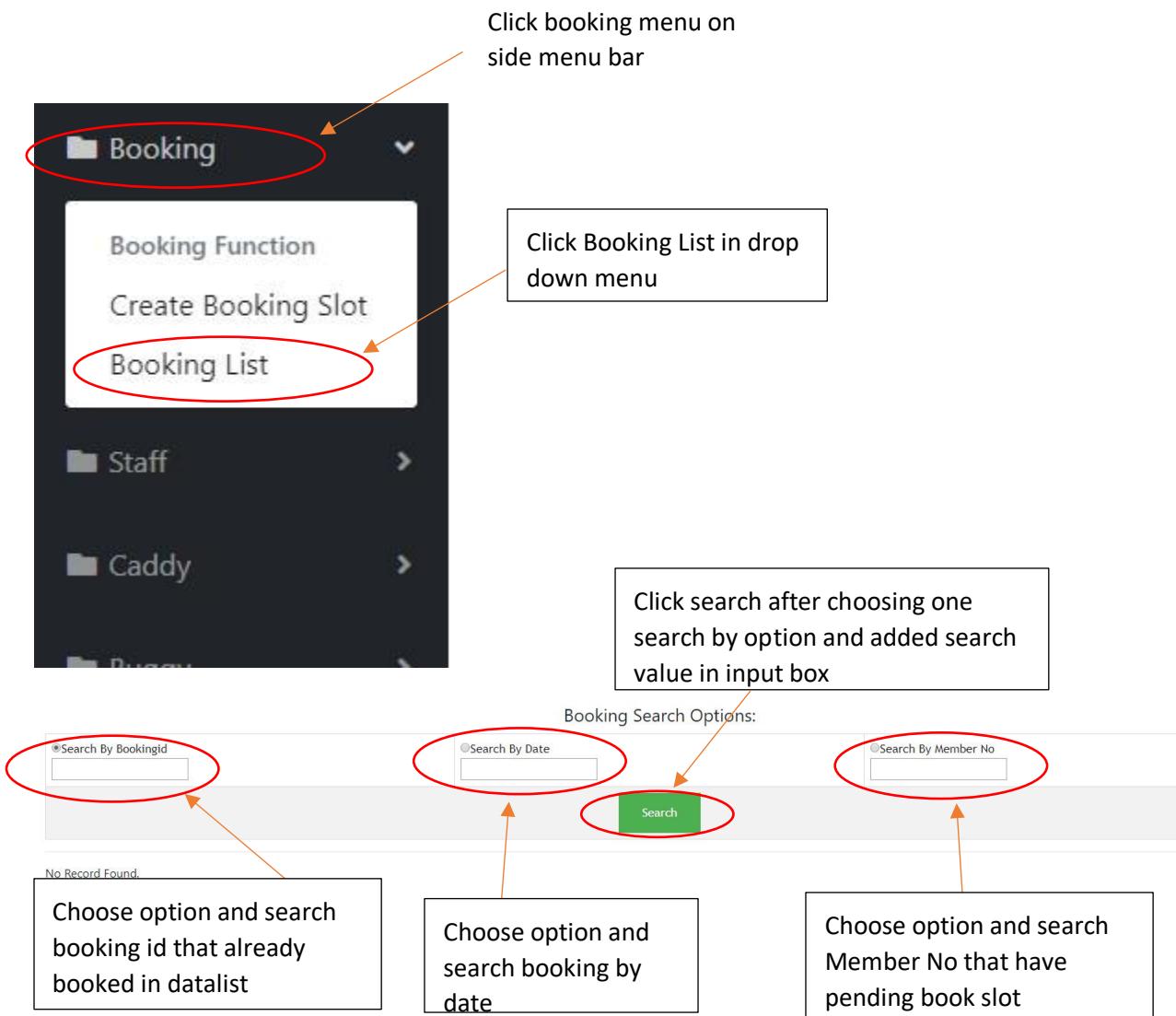
08/06/2019

Click Create

Create



The form consists of several input fields and buttons. At the top, there's a date input field containing '08/06/2019'. To its right is a button labeled 'Click Create'. Below these are two buttons: a green one labeled 'Create' which is circled in red, and a white one labeled 'Click Create'.



Booking List						
Show 10 entries						
BookingID	Member Number	Date	Time	Status	Action	
1831	MGC-0001	2019-08-04	7:00	Pending	Play/Cancel	

Showing 1 to 1 of 1 entries

Click on Play to go to playing form

Click on cancel to delete booking

Playing Payment

Choose member number from datalist to auto fill respective member name, type, greenfee

Booking ID 1831	Date 2019-08-04
Member Number	Member Name
Member Type	Green Fee
Caddy Number	Buggy Number
Booking Fee ▼	
Confirm Payment	Guest Player

Click confirm payment after all require input are fill to go payment detail form

Click on guest player button to change to guest payment form

Choose available caddy number from caddy list

Member Payment	
Member Name	Tun Tun
booking id	1831
green fee	4000
Caddy fee	2000
booking Fee	0
buggy Fee	25000
Total	31000
Paid	<input type="text" value="35000"/>
Change	<input type="text" value="4000"/>

Type in member paid amount

35000

4000

back

Confirm

Click back to go back to playing payment if need to do changes

Click confirm when all payment are confirm to finish payment

CHAPTER - 7

CHAPTER - 7

CONCLUSION

&

EVALUATION

7.1 Evaluation against Aim & Objectives

Objective 1

First objective for this project is about creating good project plan to control the overall development of this project, to have better risk management, efficient time frame for each phases of development etc.

It has been achieved because this project includes overall project plan (Gantt chart) at chapter 1. Also include MosCow prioritization to focus first on essential business requirement. It also has well plan timebox and risk management to cover all the risk that can happen during Myanmar golf club project development.

Objective 2

Second objective for this project is about Analyze business processes and functional requirements of Myanmar golf club to determine areas that computerize system can add improvements. It also been achieved because this project include requirement gathering about Myanmar golf club business process, issues of the business process and propose system scope to solve the issues. Moreover, also include MosCow prioritization to focus on business need and also include analysis of target user table to identify the end user.

Objective 3

Third objective for this project is design the project data structure, design the website for club members, and produce minimalist design admin site web application. It has been also achieved since this documentation include usecase for all timebox, initial class, detail class diagram and their definition etc.

Objective 4

Fourth objective for this project is code the analyze business process, functional requirement, design to produce easily useable and error free system. It is fulfilled because project system that completed has minimalist design, include all the require function, easy to use and free from error.

Objective 5

Fifth objective for this project is properly tested finish system to improve system quality and robustness and confirm all function work properly. It also been achieved because functional testing, usability testing etc are done at each timebox finish.

Objective 6

Sixth objective for this project is training staffs of Myanmar golf club properly so they can use new system easily and efficiently. It has been also achieved since this documentation include detail staff training plan and user manual at deployment chapter.

7.2 Evaluation against Similar System

Functional Comparison

Register System Comparison

Email

Enter the email address you wish to use to log in to HowDidiDo.

 Enter email (e.g. alex.smith@SomeClub.co.uk) confirm email

Password

Enter a secure password you wish to use to log in to HowDidiDo, the password must be at least 6 characters long and contain a number, an upper case character and a lower case character.

 enter a secure password confirm password

Next ▶

One of the registration steps of whitwood golf club

Member Register

Name	Member Type <input type="button" value="Select Member Type ▼"/>
Father Name	Nationality
Rank	Company/Department
NRC or Passport Number	Religion
Current Address	
Permanent Address	
<input checked="" type="radio"/> Male <input type="radio"/> Female	Date Of Birth <input type="text" value="mm/dd/yyyy"/>
Phone Number	Email
Handicap	<input type="button" value="Choose File"/> No file chosen
Proposer Member Name <input type="text"/>	Seconder Member Name <input type="text"/>
<input type="button" value="Register"/>	

Member Registration Form of my system

Is hard to compare since whitwood club website is online member registration for their website not club member registration and my system is for club member registration form that perform by staff offline. But overall whitwood club registration form contain multiple steps that can prevent error entry so is better.

Booking System Comparison

Tee Booking Progress

1 select day 2 select tee time 3 personal details 4 payment 5 confirmation

January 2019

Jan 2019 | Feb 2019 | Mar 2019 | Apr 2019 | May 2019 | Jun 2019 | Jul 2019 | Aug 2019 | Sep 2019 | Oct 2019 | Nov 2019 | Dec 2019 | >

BACK

The Table below gives an overview of tee times available over the month.
Each cell in the table represents one tee time.
To view tee times available for a different month, click on month above.

select the day you want to play by clicking the date in this column

	7	8	9	10	11	12	13	14	15	16
07 Mo										
08 Tu										
09 We										
10 Th										
11 Fr										
12 Sa										
13 Su										
14 Mo										
15 Tu										
16 We										
17 Th										
18 Fr										
19 Sa										
20 Su										
21 Mo										
22 Tu										
23 We										
24 Th										
25 Fr										
26 Sa										
27 Su										
28 Mo										
29 Tu										
30 We										
31 Th										

Booking Page of Whitwood Golf Club

Booking Search

Choose date to Book Tee Off

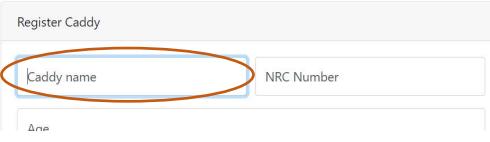
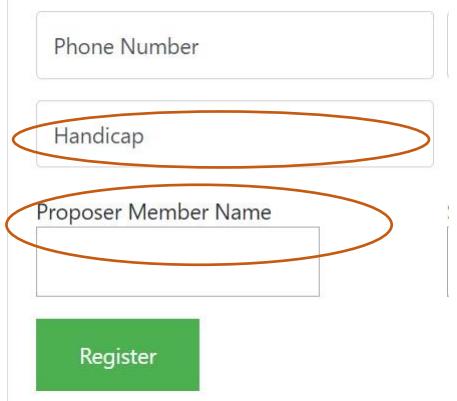
SEARCH

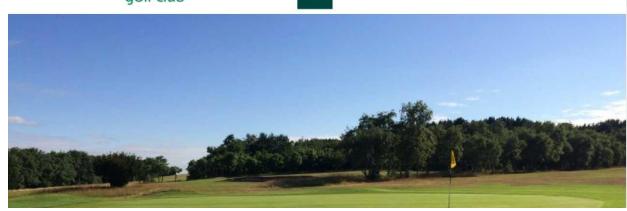
Date	Time	Status	Action
2019-08-04	7:00	Available	Book Teeoff Time
2019-08-04	7:08	Available	Book Teeoff Time
2019-08-04	7:16	Available	Book Teeoff Time
2019-08-04	7:24	Available	Book Teeoff Time
2019-08-04	7:32	Available	Book Teeoff Time
2019-08-04	7:40	Available	Book Teeoff Time
2019-08-04	7:48	Available	Book Teeoff Time
2019-08-04	7:56	Available	Book Teeoff Time
2019-08-04	8:04	Available	Book Teeoff Time
2019-08-04	8:12	Available	Book Teeoff Time
2019-08-04	8:20	Available	Book Teeoff Time
2019-08-04	8:28	Available	Book Teeoff Time
2019-08-04	8:36	Available	Book Teeoff Time
2019-08-04	8:44	Available	Book Teeoff Time
2019-08-04	8:52	Available	Book Teeoff Time
2019-08-04	9:00	Available	Book Teeoff Time
2019-08-04	9:08	Available	Book Teeoff Time
2019-08-04	9:16	Available	Book Teeoff Time
2019-08-04	9:24	Available	Book Teeoff Time
2019-08-04	9:32	Available	Book Teeoff Time
2019-08-04	9:40	Available	Book Teeoff Time
2019-08-04	9:48	Available	Book Teeoff Time
2019-08-04	9:56	Available	Book Teeoff Time
2019-08-04	10:04	Available	Book Teeoff Time
2019-08-04	10:12	Available	Book Teeoff Time

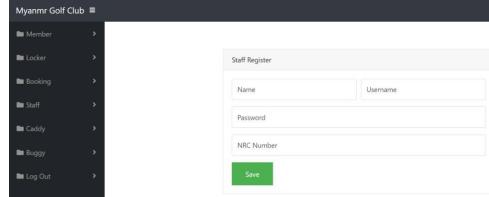
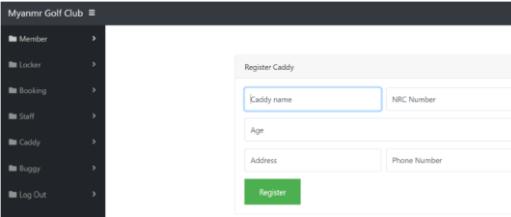
Booking Page of my system

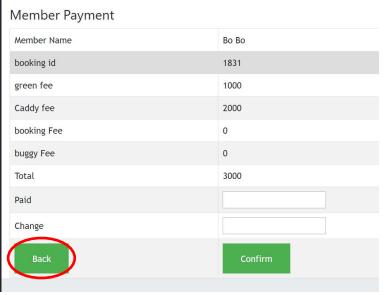
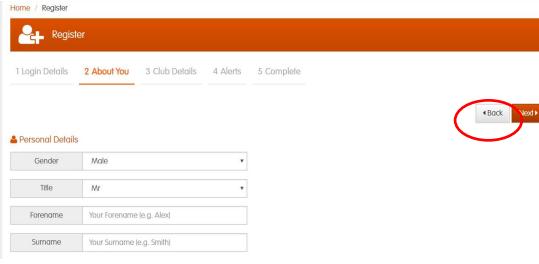
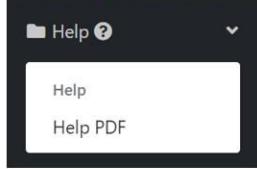
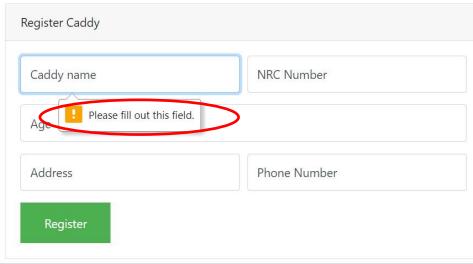
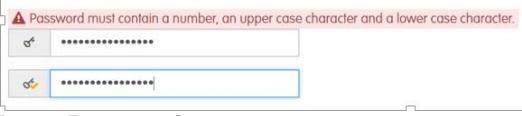
For booking system whitwood club booking system use multiple step but is UI seem poor and hard to choose while my system use choose date that member want to book then search for detail slot that available for search date to book tee off. Is simpler and easier to booked

Non-Functional Comparison

No	My System	Whitwood Golf Club
1	<p>Visibility of System Status</p>  <p>All form have selected text box become highlight so user can know which text box is currently selected easily.</p>	<p>Visibility of System Status</p>  <p>Whitwood golf club website highlight the menu that currently browsing to show system status</p>
2	<p>Match Between Real world and System</p>  <p>This project use words and phrase that use in real life at Myanmar golf club to implement so user can effectively use the new system</p>	<p>Didn't see that principle on Whitwood golf club website.</p>

3	<p>Aesthetic and minimalist design</p>  <p>Welcome to Myanmar golf club</p> <p>minimalist design</p> <p>Myanmar golf club have simple and minimalist design.</p>	 <p>Aesthetic and minimalist design</p> <p>Whitwood golf club also have simple and minimalist design but this website have better design than my system website.</p>
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4	 <p>Consistency and standard</p>  <p>All pages use same layout design, same font style and color scheme so end user can feel same way on all the pages. So is match with consistency and standard principle</p>	 <p>Consistency and standard</p>  <p>All pages use same layout design, same font style and color scheme so end user can feel same way on all the pages. So is match with consistency and standard principle</p>
---	---	---

5	<p>User Control and Freedom</p> <p>Allow user to go back to previous step</p>  <p>if some field is wrongly choose or inserted in previous step to redo their wrong. Thus allow user to have more freedom.</p>	 <p>User Control and Freedom</p> <p>Whitwood club website also have back feature that allow user to right their input from previous stage.</p>
6	<p>Help Features</p>  <ul style="list-style-type: none"> My system include help menu that allow user to download user manual. 	<p>Help Features</p> <p>Whitwoods golf club didn't have help features</p>
7	<p>Error Prevention</p>  <p>Include error prevention message like this to prevent user from error.</p>	 <p>Error Prevention</p> <p>Whitwood golf club have better error prevention since it didn't need to submit to know error.</p>

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Evaluation on Functional Comparison

Functionality	My System	Whitwoodgolf website
Registration	1 2 3 <u>4</u> 5	1 2 3 4 <u>5</u>
Booking	1 2 3 4 <u>5</u>	1 2 <u>3</u> 4 5

Legend

0 – 1 Very Poor | 2 Poor | 3 Moderate | 4 Good | 5 Excellent

Evaluation on Non-Functional Comparison

Criteria	My System	Whitwoodgolf website
Visibility of system status	1 2 3 <u>4</u> 5	1 2 3 4 <u>5</u>
Aesthetic and minimalist design	1 2 <u>3</u> 4 5	1 2 3 4 <u>5</u>
Error prevention	1 2 3 <u>4</u> 5	1 2 3 4 <u>5</u>
User control and freedom	1 2 3 4 <u>5</u>	1 2 3 4 <u>5</u>
Consistency and standard	1 2 3 4 <u>5</u>	1 2 3 4 <u>5</u>
Help Features	1 2 3 4 <u>5</u>	<u>1</u> 2 3 4 5
Match between system and real world	1 2 3 4 <u>5</u>	<u>1</u> 2 3 4 5

Legend

0 – 1 Very Poor | 2 Poor | 3 Moderate | 4 Good | 5 Excellent

2.4 Summary

Functional comparison summary

My website registration is offline member registration while whitwood website is online so is hard to compare. But whitwoodgolf website use step by steps registration so when register user make mistake at some step, they can go back to redo that step. It makes a lot easier to use.

For booking function my system is a lot better than whitwoodgolf website booking system page is a lot simpler thus make it easier for members of the Myanmar golf club to choose their desire tee off time.

Non-Functional comparison summary

For visibility of system status both my system and whitwoodgolf website have feature to show visibility of system status. But whitwoodgolf website have more distinct feature with dark green background highlight which make it more visible.

For aesthetic and minimalist design whitwoodgolf website have better design than Myanmar golf club website but for admin site management my web application is also aesthetic and minimalist design. So, if for website whitwood website is a lot better but if compare admin side is not much differ in my opinion.

For error prevention whitwoodgolf website also have better feature with showing error before user submit the data where my system only can validate error after submit so whitwoodgolf website is a lot better.

For user control and freedom criteria both my system and whitwoodgolf website a lot user to correct wrong input by allowing them to go back to earlier step so is same for both.

For consistency and standard both websites and application follow that principle and equal on that aspect.

For help features and match between system and real world whitwood golf website lack both of this features while my system follow that two principles.

7.3 Evaluation against Justification Made

Methodology

DSDM is chosen for this project.

Reason of choosing DSDM

Since project scope is not big and DSDM is suitable for smaller project. Moreover DSDM support iteration so easy to change things when needed. DSDM support timeboxing and with proper timebox management project can finish before end date.

Problem

Problem with this methodology is not used to tool of this methodology at start of timebox 1 like having problem how to produce proper timebox, how to MosCow etc.

Solving

Above problems are solve with further study of agile.

Lesson learns

Got more experience about how to develop project using DSDM, how to timebox properly, how to MosCow prioritization etc.

Language

Programming language used for this project is PHP.

Reason of choosing PHP

PHP is selected for this project because is more flexible to use with many databases, many operating system, can have better performance. Moreover, PHP has more clear error messages so can find error easily.

Problem

Some of the features needed for this project can't be implement using only PHP.

Solving

Most have been solved by using JavaScript and xml. JavaScript is used to auto calculate payment and change, implement time split function for booking slot creation, calendar script that make previous day unclick able etc. XML is used in payment form to auto fill other text boxes with data of that member when member no is chosen in one input box.

Lesson learns

Improve skill and knowledge about php, JavaScript, XML etc.

Database

Database use in this project is MySQL server.

Reason of choosing MySQL

MySQL is chosen because it is open source, work on a lot of different operating system, have better performance and work well with PHP.

Problem

There is no problem with MySQL throughout this project.

Lesson learns

Improve knowledge and skill about how to create database using MySQL, how to connect database with PHP etc.

7.4 Evaluation against Time Box Plan

Time Box 1: Member Management System

Timebox 1 is about Member Management System. It includes registration of member type, member, locker, monthly fee payment system and locker booking system. End date for timebox 1 is February 5 2019 and all plan function for time box 1 was finish with all the iteration at 30 Jan 2019 so end date was match with time box plan.

Problems

Problem with where to record monthly fee done for date. Later change back to put it in member table in database. There some problem with calculation of time in both monthly fee and locker booking. For locker list at first form have both lockerid, startdate enddate column showing but it has one problem that will not show newly added locker since is select statement use lockerid from both locker and lockerbooking database table. So only show locker that already exist in booklocker table.

Solve

Time calculation problem is technical problem so is solved later after I learn more about that. For locker list is fix by just select only locker table and use php condition to check whether locker is already book or not in book locker form.

Lesson Learn

From doing this time box I learn about usecase diagram, class diagram, how to use MoSCow priorities to set priorities for the project. Moreover, got more experience with testing and php language, MySQL.

Time Box 2: Tee off booking system and playing management system

Timebox 2 is about booking management system and playing management system. It includes creation of bookable tee off slot, staff registration system, staff and member login system, buggy and caddy management system, available caddy rooster list for every day and playing fee management system for member and guests. End date for timebox 2 is 16 July 2019 and all functional requirement needed for timebox 2 was finished within that time. Also, all iteration needed for that timebox is finished within plan timeframe.

Problems

One of the problems of time box 2 is about creating booking slot. Want to create time slot with 8 min interval after choosing date and submit action. But didn't know how to implement this with **PHP**. Another problem is whether member and guest playing payment to be done in same page or doing with different pages. Another problem is auto loading data to input boxes when one input box choose data without submit the form. This also can't be done or i don't have enough skill to implement this with PHP.

Solve

Creating booking slot with 8 min time gap problem is solved by written JavaScript function that can split time by 8 min within 2-time interval. Another problem is later solved by deciding to do two payment on two different pages. For auto loading data when one input box type in or choose input is solved by using XML.

Lesson Learn

By doing time box 2 improve knowledge and skill about how to use JavaScript to create function that can split time, how to use XML to auto load data without submitting the form etc.

7.5 Personal Evaluation

Methodologies

By doing this project I gain knowledge and experience about different methodologies that can be used for IT project. Especially learn more about **DSDM**. How to use DSDM to develop computing project, learn more about tools of DSDM such as timeboxing, **MosCow** etc. And gain more knowledge about how iteration is important.

Management

Improve knowledge and skill about how to draw Gantt chart using project management software. What steps are needed in managing IT project. How to make good risk management etc.

Technical

By doing this project I learn more and improve skill of using **PHP, HTML, CSS, Bootstrap, JavaScript, XML** etc. and how all the language can be applied to web application.

So overall this project helps a lot in improvement of skill needed for future computing project development.

7.6 Strength & Weakness

Project strength

- Easy to use
- Error prevention
- Include all functional requirements
- Simple and Minimalist design for admin site web application
- Time-Split function
- Easy to search and sort in a lot of pages with datalist, datatable etc.
- Auto load related data when input data in from one text box without submitting the form reduce the error if staff select manually.

Project weakness

- Improvement needed in design for club website
- Need More restriction needed in password for both member and staff register
- Need to add more web security
- Need to add daily and monthly report

7.7 Future Amendment

Design

For admin site web application, this admin dashboard style interface didn't need much improvement but if can add more graphic and graph to show some business process will be a lot better. For club website is still need a lot of design improvement since this project is more focus to finish all the functional requirement before end date so design is simple and minimalist. If club want to attract more guests to come need to make design improvement for club website.

Coding

For functionality, at booking creation system now need to do manually for day by day. If this can be done automatically at set time every day or every week it can be a lot better. Since this is student project this feature is too advance to implement. But it can be done using schedule script etc. So, for future amendment that can be implement to Myanmar Golf Club system to improve. Moreover, Daily Fee and Monthly Fee report search function can be added to have better report. This can be easily done since payment database table have all the columns needed to produce such report. I want to add this function in this project but is near end date and think can't finish it in time so is left out. Monthly member fee and locker booking fee are fix in this project cause Myanmar golf club manager said club did not change the price for 20 years already and will not change in the near future also. But if can add price table for monthly fee and locker fee and allow staff to update the fee may be needed in future too. And another system that can be implement is computerized tender system.

Security

Need to implement more web security feature to prevent sql injection, website spoofing etc.

7.8 Interview Scripts

Manual Member Registration Form of Myanmar golf club

MYANMAR GOLF CLUB
9th MILE, PYAY ROAD, YANGON. ☎ 661702, 665531, 652082
APPLICATION FOR MEMBERSHIP

Dated _____

Name of candidate in full _____ Son of _____

NRC/FRC. No or Passport No _____

Nationality _____ Date of Birth _____

Rank / Position _____

Department / Company _____

Permanent Address _____

Present Address _____

Previous Handicap & _____

Name of Golf Club _____

Religion _____

0. Phone No _____

Signature of applicant

We declare that the candidate is personally known to us and has not been previously proposed for membership in the club. We the proposer and seconder both will take full responsible for the candidate to comply with the rules and regulations of the club.

nature _____ Signature _____

me of Proposer _____ Name of Seconder _____

mber No. _____ Member No. _____

Manual Booking Form of Myanmar Golf Club

TIME	PLAYERS NAME	Booking Fees	Extra (3) Players
12:14			
12:22			
12:30			
12:38			
12:46			
12:54			
1:02			
1:10			
1:18			
1:26			

APPENDIX

Section A: Use Case Descriptions

Timebox 1: Member Management System Timebox

Use Case Name	Register Member
Actor	Club house staff
Flow of Event	To record new member detail, update existing member

Use Case Name	Manage Monthly Fee
Actor	Club house staff
Flow of Event	Record monthly fee payment according to how many months member paid and update the monthly fee valid until.

Use Case Name	Record Locker
Actor	Club House Staff
Flow of Event	Record new locker , Update , Delete Existing lockers

Use Case Name	Book Locker
Actor	Club House Staff
Flow of Event	Record member booking the locker and record payment and date locker is loan to that member.

Timebox 2: Booking and Playing Management System Timebox

Use Case Name	Book TeeoffTime
Actor	Club Member
Flow of Event	After log in club member can search tee off slot available by choosing date they want to play. Then book the available tee off time of that day by click on book tee off time.

Use Case Name	Manage Caddy
Actor	Club House Staff
Flow of Event	Staff register caddy to caddy table. And caddies that come to course to work everyday are recorded into caddy list table and use that list in playing form by senior or by name if playing golfer want.

Use Case Name	Manage Buggy
Actor	Club House Staff
Flow of Event	Register buggy to table. Update status of buggy after return from playing loan.

Use Case Name	Manage Playing
----------------------	----------------

Actor	Club House Staff
Flow of Event	Manage playing getting member or guest detail, greenfee, caddynumber, caddyfee, buggy number, buggy fee etc. from table and transport to payment detail to confirm

Use Case Name	Record Payment
Actor	Club House Staff
Flow of Event	Record the confirm payment detail to payment detail when all input send from playing management form for member and guest is confirm

Section B: Detailed Class Definitions

Timebox 1: Member Management System Timebox

Class Name	Member
Attribute	MemberNo, MemberType, MemberName, Password, Fathername, NRC, Nationality, DOB, Gender, Rank, Department, Permanent_Address, Present_Address, Handicap, Religion, MonthlyFeePaidUntil, PhoneNo, Email, ProposerMemberNo, SeconderMemberNo, Image
Operation	Record(), Update(), AutoID()
Description	Record Member detail into database table when click on save.

Class Name	Locker
Attribute	LockerID, lockernumber, status, enddate
Operation	Record(), Delete(), Update status()
Description	Record locker into database table when click on save.

Class Name	Locker Booking
Attribute	BookingID, MemberNo, LockerID, StartDate, EndDate, Amount
Operation	Record(), Update locker status()
Description	Record locker that book by member into database table when click on save.

Class Name	Monthly Fee Payment
Attribute	PaymentID, MemberNo, Amount, PaymentDate
Operation	Record(), Update Monthlyfeepaiduntil()

Description	Record monthly fee payment into database table and update monthly fee paid until column in member table when click on save.
-------------	---

Timebox 2: Booking and Playing Management System Timebox

Class Name	Guests
Attributes	Guestid, Name, Address, phonenumber
Operation	Record ()
Description	Record guest information that come to club for play

Class Name	Member
Attribute	MemberNo, MemberType, MemberName, Password, Fathername, NRC, Nationality, DOB, Gender, Rank, Department, Permanent_Address, Present_Address, Handicap, Religion, MonthlyFeePaidUntil, PhoneNo, Email, ProposerMemberNo, SeconderMemberNo, Image
Operation	Record(), Update(), AutoID ()
Description	Record Member detail into database table when click on save.

Class Name	staff
Attributes	Staffed, staffname, username, password
Operation	Record (), Update()
Description	Record staff log in info

Class Name	caddy
-------------------	-------

Attributes	caddyid, caddyname, age, address, phonenumbers, nrcno
Operation	Record (), changestatus ()
Description	Record caddy of the club

Class Name	caddylist
Attributes	Roosterid, caddyid, date, status
Operation	Record (), changestatus ()
Description	Record caddies list that available for today

Class Name	buggy
Attributes	buggyid, buggynumber, status
Operation	Record (), changestatus ()
Description	Record buggy of the club

Class Name	bookteeoffslot
Attributes	Booksoltid, MemberNo, bookingid, status, date, time
Operation	Record (), changestatus (), Cancelbooking()
Description	Record booked tee off slot that have been booked by club member

Class Name	playingpayment
Attributes	Paymentid, MemberNo, staffid, bookingid, caddyid, buggyid, playertype, greenfee, bookingfee, buggyfee, caddyfee, grandtotal, date
Operation	Record ()
Description	Record payment for all playing related fee of members and guests

Section C: Coding

Form	Function	Purpose
MemberRegister, staffregister, caddyregister, Buggyregister, MemberType	Register ()	To save the data from the forms into the database. When register button is clicked the input data are assigned into variables and then using Sql insert statements, inserting is made.
Member Register, GuestPayment	AutoID()	To assign unique auto id with end user choice prefix when register.
Bookingcreator	Timefunction()	To split time with 8 minutes gap between time frame
Bookingcreator, Bookinglistforadmin, booking(member)	Calendar()	To have unique calendar that make previous day unclick able
playing	Member_XML()	To auto load related member data into their assign text box without submitting the form when member number is choose.
Memberupdate, profileupdate, buggylist, lockerlist, Memberpayment, Guestpayment, booking, MemberType	Update()	To update respective data when update button is clicked
Lockerlist, bookinglistforadmin, MemberType	Delete()	To delete or cancel when delete cancel button is clicked

Lockerlist, bookinglistforadmin, memberlist, membertype, caddylist, buggylist	Search()	To search with related data on that form when search is clicked after input search parameter
---	----------	--

Section D: Test Scripts

Test Scripts for timebox 1

Test scripts for member type form

Unit Test 1		Test Case : 1.2	Designed by: Bo Bo	
DataSource: MemberType Form		Objective: To test Member Type Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
1.2	Testing membertype registration form	Type life member in Member Type input box and leave Green Fee input box blank and try to Save the data	Please Fill out this field message pop up	See Fig.1.2

Register Member Type

Member Type	Green Fee
<input type="text" value="Life Member"/>	<input type="text"/>
Save	! Please fill out this field.

Fig-1.2

Unit Test 1		Test Case : 1.3	Designed by: Bo Bo	
DataSource: MemberType Form		Objective: To test MemberType Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
1.3	Testing MemberType registration form	Type in member type that is already exist in database to Member Type input box and try to Save the data	Show MemberType already exist alert	Show in before and after testing figure

Before Testing

Register Member Type

Member Type	Green Fee
Life Member	1000
Save	

After Testing

localhost:70 says

Member Type Already Exists

OK

Unit Test 1		Test Case : 1.4	Designed by: Bo Bo	
DataSource: MemberType Form		Objective: To test MemberType Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
1.4	Testing MemberType registration form	Type in new member type that does not exist in database to Member Type input box and try to Save the data	Show Member Type Save Successful alert	See before testing and after testing

Before Testing

Register Member Type

Member Type	Green Fee
Guest	20000
Save	

After Testing

localhost:70 says
Member Type Save Sucessful

OK

Test Script for Member Register Form

Unit Test 2		Test Case : 2.2	Designed by: Bo Bo	
DataSource: Member Register Form		Objective: To test Member Registration Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
2.2	Testing Member registration form	Leave blank to some input boxes and click register	Show Please Fill out this field alert	See fig 2.1 to 2.9

Father Name

Rank Please fill out this field.

Fig-2.1

Nationality

Comp Please fill out this field.

Fig-2.2

Rank

NRC Please fill out this field.

Fig-2.3

A screenshot of a web-based form. At the top is a blue header bar. Below it, there are two input fields. The first field, labeled "Company/Department", contains placeholder text and has a light blue border. The second field, labeled "Religi", is partially visible and has a red border. A red callout bubble with an exclamation mark and the text "Please fill out this field." points to the "Religi" field.

Fig-2.4

A screenshot of a web-based form. At the top is a blue header bar. Below it, there are two input fields. The first field, labeled "NRC or Passport Number", contains placeholder text and has a light blue border. The second field, labeled "Curre", is partially visible and has a red border. A red callout bubble with an exclamation mark and the text "Please fill out this field." points to the "Curre" field.

Fig-2.5

A screenshot of a web-based form. At the top is a blue header bar. Below it, there are two input fields. The first field, labeled "Religion", contains placeholder text and has a light blue border. The second field, labeled "Current Address", is partially visible and has a red border. A red callout bubble with an exclamation mark and the text "Please fill out this field." points to the "Current Address" field.

Fig-2.6

A screenshot of a web-based form. At the top is a blue header bar. Below it, there are two input fields. The first field, labeled "Current Address", contains placeholder text and has a light blue border. The second field, labeled "Permanent Address", is partially visible and has a red border. A red callout bubble with an exclamation mark and the text "Please fill out this field." points to the "Permanent Address" field.

Fig-2.7

Permanent Address

Male Female

 Please fill out this field.

Date Of Birth mm/dd/yyyy

Fig-2.8

Date Of Birth mm/dd/yyyy 

Email  Please fill out this field.

Fig-2.9

Unit Test 2		Test Case : 2.3	Designed by: Bo Bo	
DataSource: Member Register Form		Objective: To test Member Registration Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
2.3	Testing Member registration form	Fill in already exist NRC or Passport No to NRCorPassport No input box and fill in all other field then try to save.	Show NRC or Passport no already exist alert box	See Fig.2.10 and 2.11

Before Testing

The screenshot shows a 'Member Register' form with the following fields filled in:

- Name: abc
- Member Type: Female
- Father Name: a
- Nationality: abc
- Rank: aaa
- Company/Department: a
- NRC or Passport Number: 12/pbd(n)029622
- Religion: Buddhist
- Current Address: a
- Permanent Address: 21312
- Gender: Male (radio button selected)
- Date Of Birth: 08/19/2019
- Phone Number: 09999
- Email: abc@gmail.com
- Handicap: 0
- Choose File: phish.jpg
- Proposer Member Name: MGC-0001|Bo Bo
- Seconder Member Name: MGC-0003|john
- Register button

Figure-2.9

After Testing

localhost:70 says

NRC or Passport Number Already Exists

OK

Figure-2.10

Unit Test 2	Test Case : 2.4	Designed by: Bo Bo
--------------------	------------------------	---------------------------

DataSource: Member Register Form		Objective: To test Member Registration Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
2.4	Testing Member registration form	Fill in all the require field and fill email input with nonemail format	Please include @ in email address message show	See Fig.2.11and 2.12

Before Testing

Fig-2.11

After Testing

Fig-2.12

Unit Test 2	Test Case : 2.7	Designed by: Bo Bo
-------------	-----------------	--------------------

DataSource: Member Register Form		Objective: To test Member Registration Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
2.5	Testing Member registration form	Fill in all the require field and try to click save	Show member register successful alert	See Fig.2.13 and 2.14

Before Testing

Member Register

Name xxx	Member Type <input type="button" value="Female"/>
Father Name aung aung	Nationality Myanmar
Rank director	Company/Department abc
NRC or Passport Number 12/12345612312	Religion Buddhist
Current Address Ygn	
Permanent Address Yangon	
<input checked="" type="radio"/> Male <input type="radio"/> Female	Date Of Birth <input type="text" value="08/06/2019"/>
Phone Number 09999	Email 123@gmail.com
Handicap 1	<input type="button" value="Choose File"/> _worm.PNG
Proposer Member Name <input type="text" value="MGC-0004 Aung Phyc"/>	Seconder Member Name <input type="text" value="MGC-0002 Tun Tun"/>
<input type="button" value="Register"/>	

Figure-2.13

After Testing

localhost:70 says

Member Register Sucessfull

OK

Figure-2.14

Test scripts for Locker Register Form

Unit Test 3		Test Case : 3.2	Designed by: Bo Bo	
DataSource: Locker Register Form		Objective: To test Locker Registration Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
3.2	Testing Locker Registration Form	Fill in already exist Locker Number in locker number field and click on save	Show Locker already exist alert	See Fig.3.3 and 3.4

Locker Register

Locker Number
2

Save

Figure-3.3



Figure-3.4

Unit Test 3		Test Case : 3.3	Designed by: Bo Bo	
DataSource: Locker Register Form		Objective: To test Locker Registration Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
3.3	Testing Locker Registration Form	Fill in new Locker Number in locker number field and click on save	Show Locker register successful alert	See Fig.3.5 and 3.6

Locker Register

Locker Number
6

Save

Figure-3.5

localhost:70 says

Locker Number Save Sucessfull

OK

Figure-3.6

Test scripts for Member List Form

Unit Test 4		Test Case : 4.2	Designed by: Bo Bo	
DataSource: Member List Form		Objective: To test Member List Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results

4.2	Testing Member List Form	Click on Locker List	Show Locker List form	See Fig.4.3 and 4.4
-----	--------------------------	----------------------	-----------------------	---------------------

Member List						
Show 10 entries Search:						
Member No	Member Name	Member Type	Address	Phone	Email	Actions
MGC-0001	Bo Bo	Life Member	Yangon	095141893	bobo.im2@gmail.com	Lockerlist MonthlyFee Update
MGC-0002	Tun Tun	Child	Yangon	09999999	zawzaw@gmail.com	Lockerlist MonthlyFee Update
MGC-0003	john	Life Member	Yangon	09312312	smith@email.com	Lockerlist MonthlyFee Update

Showing 1 to 3 of 3 entries

Previous 1 Next

Figure-4.3

Locker List			
Show 10 entries Search:			
Locker No	Status	Actions	
11	Available	Book Locker Delete Locker	
12	Available	Book Locker Delete Locker	
13	Booked	Book Locker Delete Locker	

Showing 1 to 3 of 3 entries

Previous 1 Next

Figure-4.4

Unit Test 4		Test Case : 4.3	Designed by: Bo Bo	
DataSource: Member List Form		Objective: To test Member List Form	Tester: Bo Bo	
Test Case	Description	Test Procedure		Expected Result
4.3	Testing Member List Form	Click on Monthly Fee		Show Monthly Fee form
				See Fig.4.5 and 4.6

Member List						
Show 10 entries Search:						
Member No	Member Name	Member Type	Address	Phone	Email	Actions
MGC-0001	Bo Bo	Life Member	Yangon	095141893	bobo.im2@gmail.com	Lockerlist MonthlyFee Update
MGC-0002	Tun Tun	Child	Yangon	09999999	zawzaw@gmail.com	Lockerlist MonthlyFee Update
MGC-0003	john	Life Member	Yangon	09312312	smith@email.com	Lockerlist MonthlyFee Update

Showing 1 to 3 of 3 entries

Previous 1 Next

Figure-4.5

Monthly Fee Payment

Member No MGC-0001	Numbers of month
Monthly Fee Paid Until 2019-09-29	
Amount To Pay	Paid
Change	
Confirm	

Figure-4.6

Test scripts for Member Update Form

Unit Test 2		Test Case : 5.2	Designed by: Bo Bo	
DataSource: Member Update Form		Objective: To test Member Update Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
5.2	Testing Member update form	Leave blank to some input boxes and click register	Show Please Fill out this field alert	See fig 5.3 to 5.11

Father Name	
Rank	 Please fill out this field.

Fig-5.3

A screenshot of a user interface showing a form field for "Nationality". The field is empty and has a blue border. Below it, a tooltip-style message box is displayed, containing an orange exclamation mark icon and the text "Please fill out this field.".

Fig-5.4

A screenshot of a user interface showing a form field for "Rank". The field is empty and has a blue border. Below it, a tooltip-style message box is displayed, containing an orange exclamation mark icon and the text "Please fill out this field.".

Fig-5.5

A screenshot of a user interface showing a form field for "Company/Department". The field is empty and has a blue border. Below it, a tooltip-style message box is displayed, containing an orange exclamation mark icon and the text "Please fill out this field.".

Fig-5.6

A screenshot of a user interface showing a form field for "NRC or Passport Number". The field is empty and has a blue border. Below it, a tooltip-style message box is displayed, containing an orange exclamation mark icon and the text "Please fill out this field.".

Fig-5.7

Religion

 Please fill out this field.

Fig-5.8

Current Address

Permanent Address  Please fill out this field.

Fig-5.9

Permanent Address

Male Female  Please fill out this field.

Date Of Birth mm/dd/yyyy

Fig-5.10

Date Of Birth 

Email  Please fill out this field.

Fig-5.11

Test scripts for Book Locker Form

Unit Test 6		Test Case : 6.2	Designed by: Bo Bo	
DataSource: BookLocker Form		Objective: To test BookLocker Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
6.2	Testing BookLocker Form	Choose the member that didn't have locker booked from member list and click on locker list then book locker that already booked by other member by click on save button	Show locker already booked alert	See Fig 6.3 and 6.4

Locker Booking

Member No MGC-0001	Locker ID 11
Number of month 2	
Amount to Pay 6000	Paid 10000
Change 4000	
Confirm	

Figure-6.3

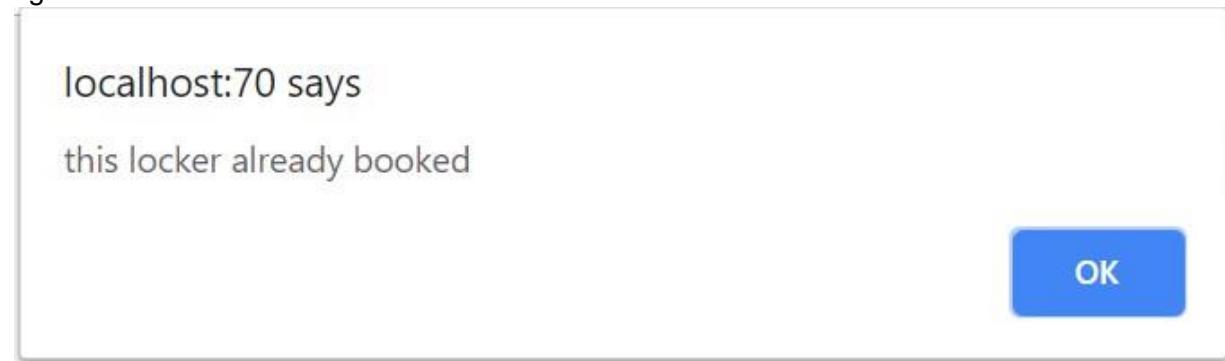


Figure-6.4

Unit Test 6		Test Case : 6.3	Designed by: Bo Bo	
DataSource: BookLocker Form		Objective: To test BookLocker Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
6.3	Testing BookLocker Form	Choose the member that didn't have locker booked from member list and click on locker list then book the locker which is free.	Show Payment Recorded alert.	See Fig 6.4 and 6.5

Locker Booking

Member No MGC-0001	Locker ID 11
Number of month 2	
Amount to Pay 6000	Paid 10000
Change 4000	
Confirm	

Figure-6.4

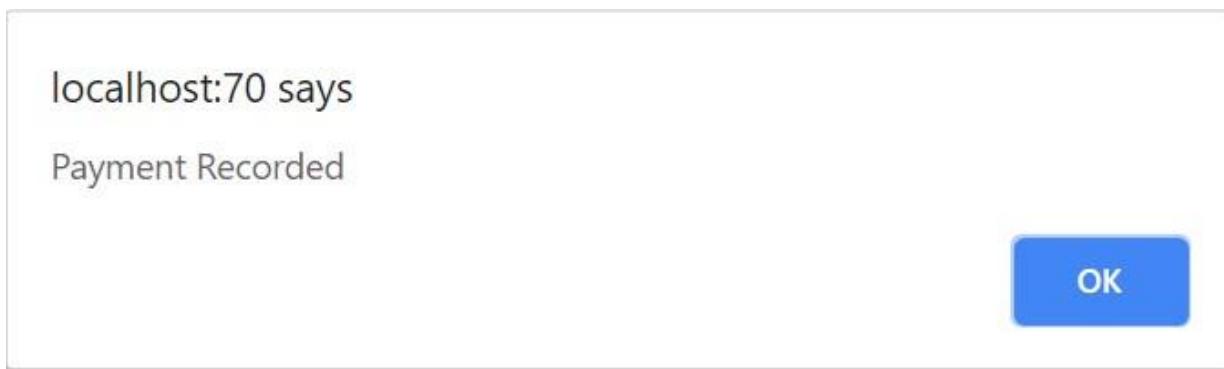


Figure-6.5

Unit Test 6		Test Case : 6.4	Designed by: Bo Bo	
DataSource: BookLocker Form		Objective: To test BookLocker Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
6.3	Testing BookLocker Form	Choose month and type in paid amount	amount to pay auto calculate after month is choose and change auto calculate after paid is type in	See Fig 6.6 and 6.7

The screenshot shows a 'Locker Booking' form. It includes fields for Member No (MGC-0002), Locker ID (13), Number of month (empty), Amount to Pay (empty), Paid (empty), Change (empty), and a green 'Confirm' button.

Figure-6.6

The screenshot shows the same 'Locker Booking' form after entering data. The 'Amount to Pay' field contains '9000', the 'Paid' field contains '10000', and the 'Change' field contains '1000'. The 'Confirm' button is visible at the bottom.

Figure-6.7

Test scripts for Monthly Fee Payment Form

Unit Test 7		Test Case : 7.2	Designed by: Bo Bo	
DataSource: Monthly Fee Payment Form		Objective: To test Monthly Fee Payment Form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
7.2	Testing Monthly Fee Payment Form	Choose number of month want to paid for member fee and click on save button	Show Payment Recorded alert.	See Fig 7.3 and 7.4

Monthly Fee Payment

Member No MGC-0001	Numbers of month 3
Monthly Fee Paid Until 2019-09-29	
Amount To Pay 6000	Paid 7000
Change 1000	
Confirm	

Figure-7.3

localhost:70 says

Payment Recorded

OK

Figure-7.4

Test script for timebox 2**Test scripts for Staff Register Form**

Unit Test 1		Test Case: Staff Register	Designed by: Bo Bo	
Data Source: staff register form		Objective: To test the staff register entry	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
1.2	Test username,password,nrc number text box accept blank or not	Save button is clicked with Username text box or password text box or nrc number text box is blank	Show 'Please fill out this field' message.	See Fig.1.3,1.4,1.5

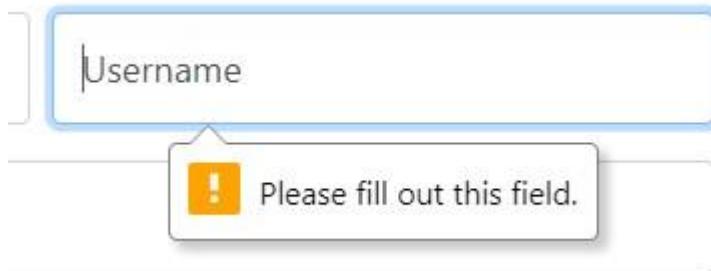


Fig-1.3



Fig-1.4

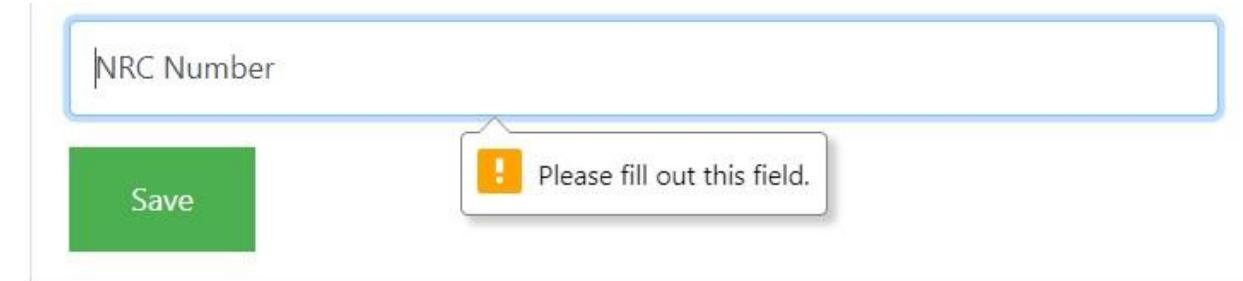


Fig-1.5

Unit Test 1		Test Case: Staff Register	Designed by: Bo Bo	
Data Source: staff register form		Objective: To test the staff register entry	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
1.3	Test register staff with already exist user name	Trying to register staff with already exist user name. Type in admin1 is username text box and click save.	Show UserName or Nrc Number Already Used" Message	See Fig.1.6

Before Testing

Staff Register

Name abc	Username admin1
Password *****	
NRC Number 12/pbd(n)01112	
<input type="button" value="Save"/>	

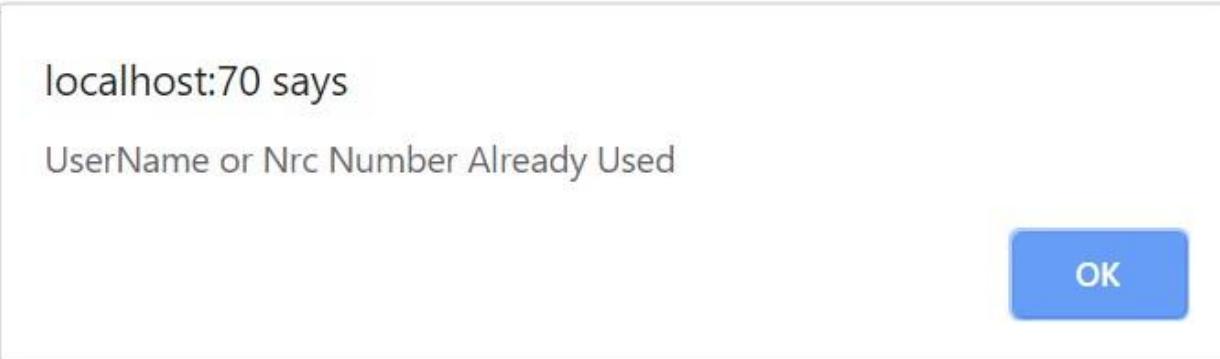
After Testing

Fig-1.6

Unit Test 1		Test Case: Staff Register	Designed by: Bo Bo	
Data Source: staff register form		Objective: To test the staff register entry	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
1.4	Test register staff with already exist NRC number	Trying to register staff with already exist NRC number. Type in 12/pbd(n)0111 in NRC number text box and click save	Show UserName or Nrc Number Already Used" Message	See Fig.1.7

Before Testing

Staff Register

Name abc	Username admin123
Password •••	
NRC Number 12/pbd(n)0111	
Save	

After Testing

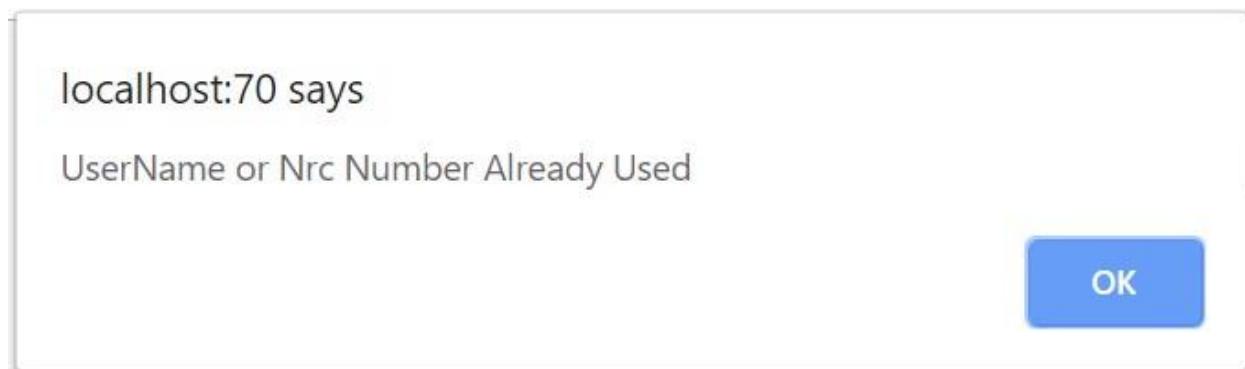


Fig-1.7

Unit Test 1		Test Case: Staff Register	Designed by: Bo Bo	
Data Source: staff register form		Objective: To test the staff register entry	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
1.5	Test register staff with all text box fill with new username and nrc number	Trying to register staff with all text box fill with new username and nrc number. Type in admin123 for username and 12/pbd(n)01111123 for NRC number	Show Staff Register successful message	See Fig.1.8

Before Testing

Staff Register

Name abc	Username admin123
Password ***	
NRC Number 12/pbd(n)01111123	
<input type="button" value="Save"/>	



Fig-1.8

Test scripts for Staff Login Form

Unit Test 2		Test Case: Staff Login	Designed by: Bo Bo	
Data Source: staff log in form		Objective: To test the staff log in	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
2.2	Test staff login accept incorrect username or password	Log in button is clicked with incorrect username or password	Show 'Invalid Username or password' Message	See Fig.2.3and 2.4

The screenshot shows a login interface titled "Login". It features two input fields: "UserName" containing "adminnn" and "Password" containing four asterisks ("****"). Below the password field is a green rectangular button labeled "Login".

Fig.2.3

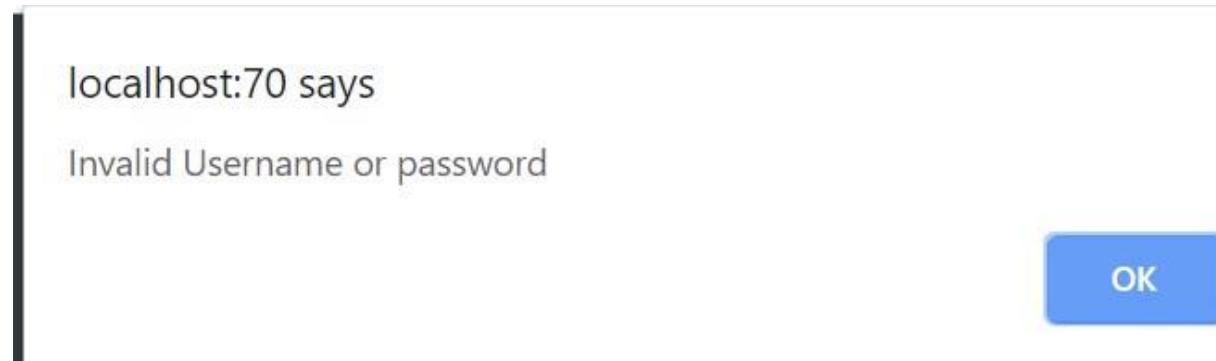


Fig.2.4

Unit Test 2		Test Case: Staff Login	Designed by: Bo Bo	
Data Source: staff log in form		Objective: To test the staff log in	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
2.3	Test can login with correct username or password or not	Log in button is clicked with correct username or password	Show 'login success Message	See Fig.2.5and 2.6

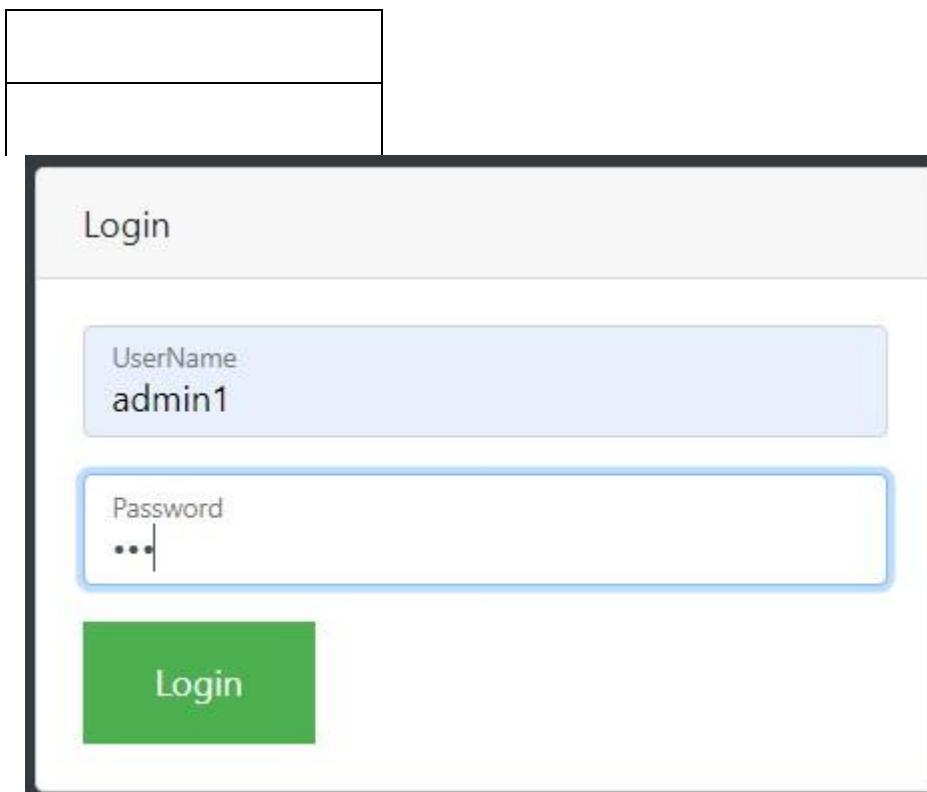


Fig.2.5

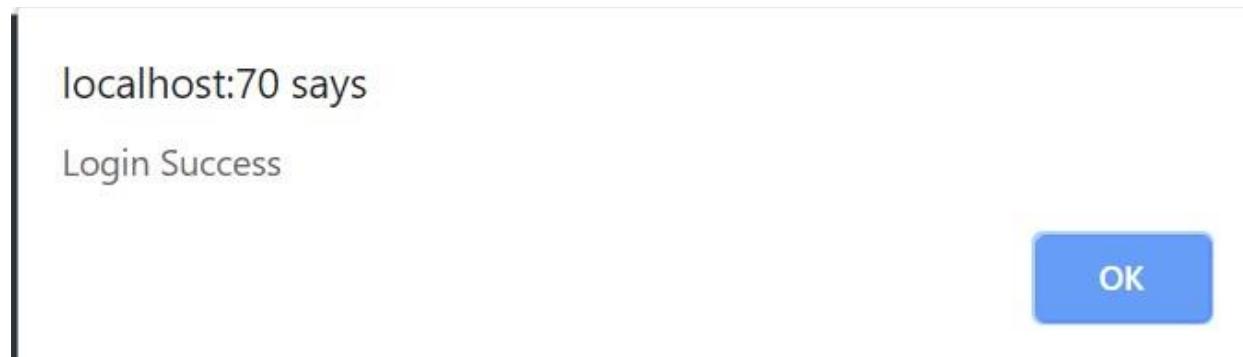


Fig.2.6

Test scripts for Member Login Form

Unit Test 3		Test Case: Member Login	Designed by: Bo Bo	
Data Source: Member log in form		Objective: To test the Member log in form entry	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results

3.2	Test member log in accept incorrect username or password or not	Log in button is clicked with incorrect username or password	Show 'invalid username or password' Message	See Fig.3.3 and 3.4
-----	---	--	---	---------------------

Member login

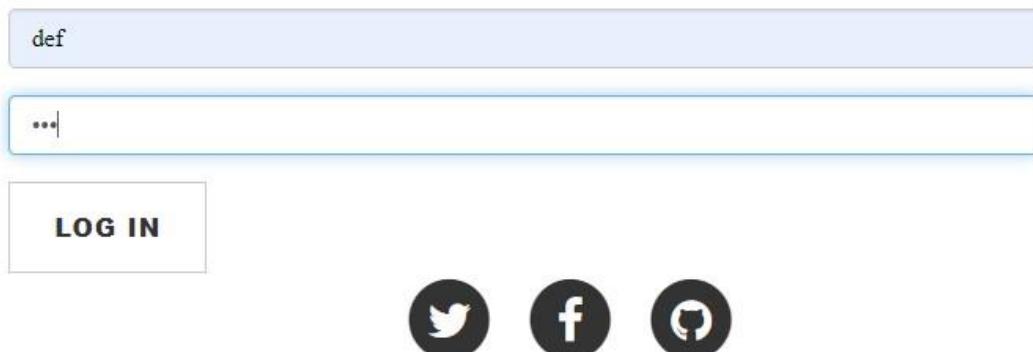


Fig.3.3

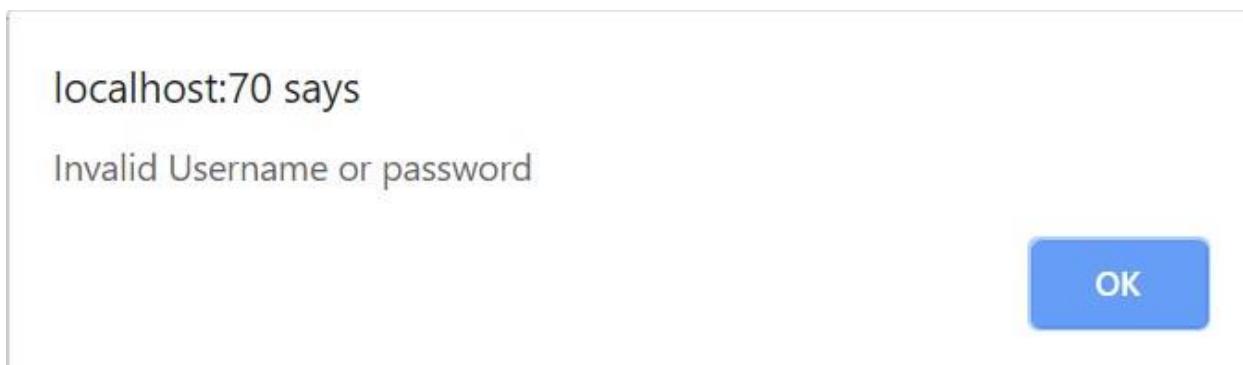


Fig.3.4

Test Case: Member Login

Designed by: Bo Bo

Unit Test 3	Objective: To test the Member log in form entry	Tester: Bo Bo		
Data Source: Member log in form				
Test Case	Description	Test Procedure	Expected Result	Actual Results
3.3	Test member can log in with valid username or password or not	Log in button is clicked with valid username or password	Show 'invalid username or password' Message	See Fig.3.5 and 3.6

Member login

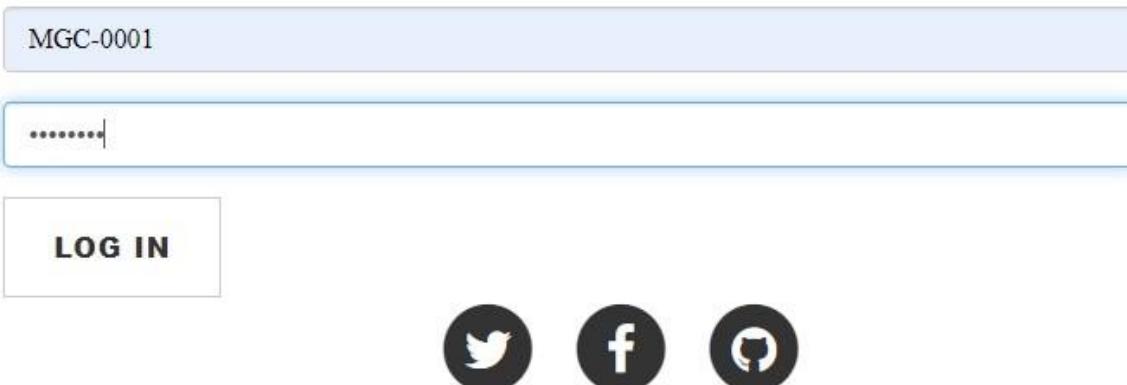


Fig.3.5

localhost:70 says
Login Success

OK

Fig.3.6

Test scripts for bookingcreator

Unit Test 4		Test Case: Booking Creator	Designed by: Bo Bo	
Data Source:	Booking Creator Form	Objective: To test the Booking Create function	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
4.2	Test can create booking for date that already have created tee off slot	Click on Choose Date input to choose date that already have booking slot created.	'Booking already created for chosen date' message is shown	See Fig.4.2 and 4.3

The screenshot shows a user interface for a 'Booking Creator'. At the top, it says 'Booking Creator'. Below that, there is a label 'Choose Date to create tee off booking slot'. Underneath this label is a light blue rectangular input field containing the date '08/04/2019'. At the bottom of the interface is a large green button with the word 'Create' in white text.

Fig.4.2

localhost:70 says

Booking already created for chosen date

OK

		Fig.4.3
--	--	---------

Unit Test 4		Test Case: Booking Creator	Designed by: Bo Bo	
Data Source:	Description:	Objective: To test the Booking Create function	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
4.3	Test can create booking slot for date that didn't have booking slot created	Click on Choose Date input to choose date that didn't have booking slot created	'Booking successfully created message is shown	See Fig.4.4 and 4.5

Booking Creator

Choose Date to create tee off booking slot

Create

Fig.4.4

localhost:70 says
Booking sucessfully created

OK

Fig.4.5

Test scripts for**bookinglistforadmin Form**

Unit Test 5		Test Case: Booking list for admin	Designed by: Bo Bo	
Data Source: Booking list for admin Form		Objective: To test the Booking list search function	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
5.2	Test admin booking search function using date	Choose date that want to search in search by date input and click on search	Detail about booking member book in search date is show up in datatable	See Fig.5.3and Fig 5.4

Before Testing

Booking Search Options:

Search By Bookingid

Search By Date

Search By Member No

No Record Found.

Fig.5.3

Test scripts forAfter Testing

Bo Bo

Booking Search Options:

<input checked="" type="radio"/> Search By Bookingid <input type="text"/>	<input type="radio"/> Search By Date <input type="text"/>	<input type="radio"/> Search By Member No <input type="text"/>
Search		

Booking List

Show 10 entries						Search: <input type="text"/>
BookingID	Member Number	Date	Time	Status	Action	
1831	MGC-0001	2019-08-04	7:00	Pending	Play Cancel	

Showing 1 to 1 of 1 entries

Previous **1** Next

Fig-5.4

Unit Test 5**Test Case:** Booking list for admin**Designed by:** Bo Bo**Data Source:** Booking list for admin Form**Objective:** To test the Booking list search function**Tester:** Bo Bo

Test Case	Description	Test Procedure	Expected Result	Actual Results
5.3	Test admin booking search function using member no	Choose Member No that want to search in search by member No input and click on search	Detail about booking that member no book will be show in datatable	See Fig.5.5and Fig 5.6

Before Testing

Booking Search Options:

<input type="radio"/> Search By Bookingid <input type="text"/>	<input type="radio"/> Search By Date <input type="text"/>	<input checked="" type="radio"/> Search By Member No <input type="text" value="MGC-0001"/>
Search		

Fig.5.5

After Testing

Booking Search Options:

<input type="radio"/> Search By Bookingid <input type="text"/>	<input type="radio"/> Search By Date <input type="text"/>	<input type="radio"/> Search By Member No <input type="text" value="MGC-0001"/>
<input type="button" value="Search"/>		

Booking List

Show 10 entries							Search:	
BookingID	Member Number	Date	Time	Status	Action			
1166	MGC-0001	2019-07-23	7:48	Pending	Play Cancel			
1527	MGC-0001	2019-07-24	7:08	Pending	Play Cancel			
1770	MGC-0001	2019-08-02	7:00	Pending	Play Cancel			
1831	MGC-0001	2019-08-04	7:00	Pending	Play Cancel			

Showing 1 to 4 of 4 entries

Previous 1 Next

Fig-5.6

Caddy Register Form

Unit Test 7		Test Case: Caddy Register Form	Designed by:	
Data Source: Caddy Register Form		Objective: To test the Caddy Register form		Tester: Bo Bo
Test Case	Description	Test Procedure		Expected Result Actual Results
7.2	Test can register with already exist nrc number in caddy register form	Fill all the input box and type in already exist nrc no in database to Nrc number input box and click register	Caddy already exists message box show	See Fig 7.6 and 7.7

Test scripts for

Before Testing

Register Caddy

Caddy name abc	NRC Number 12/zxc(N)00000700
Age 32	
Address ygn	Phone Number 0999999999

Register

Fig-7.6

After Testing

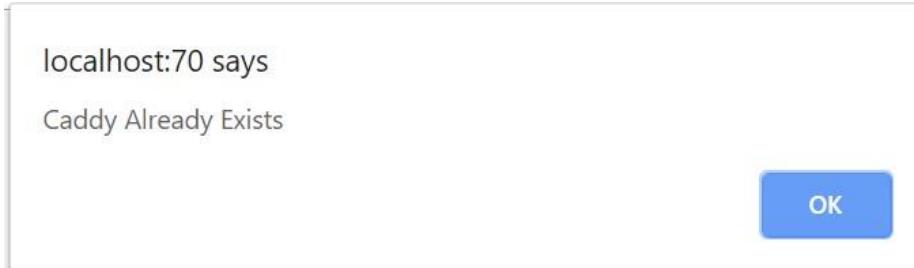


Fig-7.7

Unit Test 7		Test Case: Caddy Register Form	Designed by: Bo Bo	
Data Source: Caddy Register Form		Objective: To test the Caddy Register form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
7.3	Test can register caddy with new nrc number and all text boxes fill	Fill all the input box and type in new nrc to Nrc number input box and click register	Caddy Register successful message box show	See Fig 7.8 and 7.9

Before Testing

Register Caddy

Caddy name tun zaw	NRC Number 12/zxc(N)00000701
Age 32	
Address ygn	Phone Number 093123125
<input type="button" value="Register"/>	

Fig-7.8

Test scripts for

	Bo Bo
--	-------

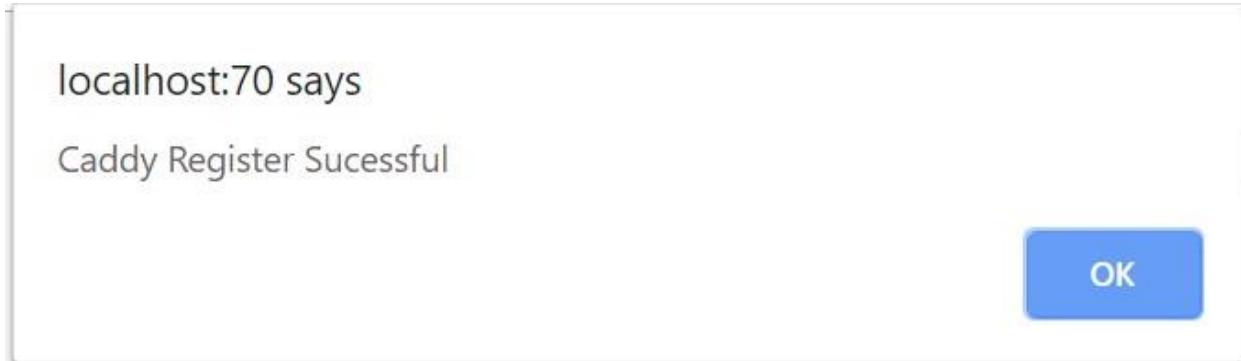
After Testing

Fig-7.9

Caddy List Form

Unit Test 8		Test Case: Caddy list	Designed by:	
Data Source: Caddy list Form		Objective: To test the Caddy list function	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
8.2	Test caddy can added if already available in list	Choose caddylist that already available in caddy list table and click add	Show caddy still available in list message	See Fig 8.3 and 8.4

Before Testing

Caddy Rooster	
Caddy ID	
<input type="text" value="2"/> ▼	
Add	

	Designed by: Bo Bo
	Tester: Bo Bo

Fig-8.3

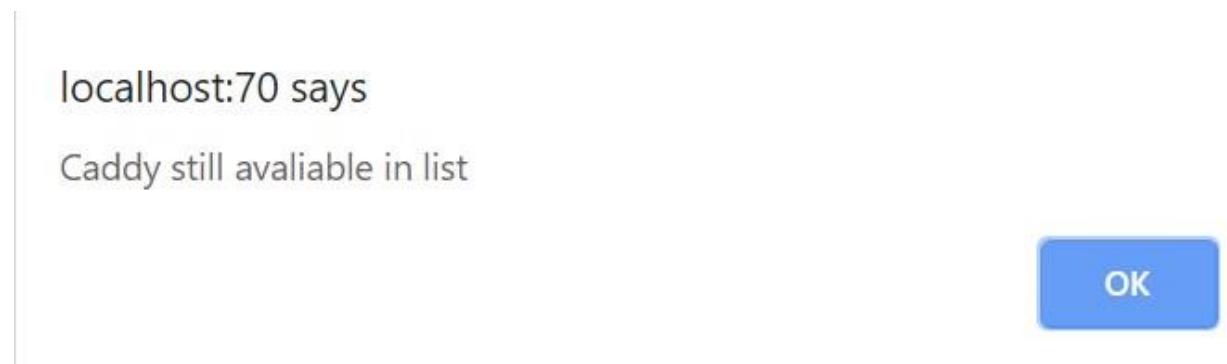
After Testing

Fig-8.4

Unit Test 8		Test Case: Caddy list		
Data Source: Caddy list Form		Objective: To test the Caddy list function	Expected Result	Actual Results
Test Case	Description	Test Procedure		
8.3	Test caddy can add if not available in list	Choose caddylist that unavailable in caddy list table and click add	Show caddy added to list message	See Fig 8.5 and 8.6

Test scripts for

	Bo Bo
--	-------

Before Testing

Caddy Rooster

Caddy ID

1 ▼

Add

Fig-8.5

After Testing

localhost:70 says

Caddy added to list

OK

Fig-8.6

Test scripts for

	Designed by: Bo Bo
--	---------------------------

Tester: Bo Bo**Buggy Register Form**

Unit Test 9		Test Case: Buggy Register		
Data Source:	Objective:			
Test Case	Description	Test Procedure	Expected Result	Actual Results
9.2	Test buggy register accept already exist buggy number or not	Buggy number input box is fill with already existing buggy number in database and click on save	Buggy number already exists message is show	See Fig 9.3 and 9.4

Before Testing

Buggy Register

Buggy Number
1

Save

Fig-9.3

After Testing

localhost:70 says

buggynumber already Exists

OK

Fig-9.4

Unit Test 9		Test Case: Buggy Register		
Data Source:	Objective:			
Test Case	Description	Test Procedure	Expected Result	Actual Results
9.3	Test buggy can register with new buggy number	Buggy number input box is fill with new buggy number in database and click on save	Buggy register successful message is show	See Fig 9.5 and 9.6

Before Testing

Buggy Register

Buggy Number
4

Save

Fig-9.5

After Testing

Fig-9.6

	Designed by: Bo Bo
	Tester: Bo Bo

Test scripts for Member Profile Update Form

Unit Test 11		Test Case: Member Profile Update	Designed by: Bo Bo	
Data Source: Member Profile Update		Objective: To member profile update form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
11.2	Test profile update form accept blank or null in text boxes	Leave blank for password or company or rank or email or religion or handicap or phone number text boxes and click on update	Please fill out this field message is show	See Fig 11.3, 11.4, 11.5, 11.6, 11.7, 11.8, 11.9

The screenshot shows a form with several input fields. The 'Member Name' field contains 'Tun Tun'. The 'Password' field has an asterisk (*) and is highlighted in blue. The 'Member Type' field has a dropdown menu with 'Select Member Type'. The 'Father Name' field has a dropdown menu with '...'. The 'NRC/Passport Number' field contains a long string of numbers. The 'Date Of Birth' field is empty and has a yellow exclamation mark icon with the error message 'Please fill out this field.' A date '2019-08-13' is visible in the background of the field.

Fig-11.3

The screenshot shows a form with several input fields. The 'Company/Department' field has a dropdown menu with 'Company/Department'. The 'Email' field has a yellow exclamation mark icon with the error message 'Please fill out this field.' and contains the email address 'zawzaw@email.com'.

Fig-11.4

Rank/Position	Email
<input type="text" value="Rank/Position"/>	<input type="text" value="zawzaw@email.com"/>
Religion	Handicap
<input type="text" value="Buddhist"/>  Please fill out this field.	<input type="text" value="0"/>

Fig-11.5

Email
<input type="text" value="Email"/>  Please fill out this field.
Handica
<input type="text" value="n"/>  Please fill out this field.

Fig-11.6

Religion	
Phone N	 Please fill out this field.
09312312	
Handicap	0
Permanent Address	
Yangon	

Fig-11.7

Handicap	
Handicap	
Permanent Address	 Please fill out this field.
Yangon	

Fig-11.8

Phone Number	
Phone Number	
Current Address	 Please fill out this field.
Yangon	

Fig-11.9

Designed by: Bo Bo

Tester: Bo Bo

Unit Test 11		Test Case: Member Profile Update		
Data Source: Member Profile Update		Objective: To member profile update form		
Test Case	Description	Test Procedure	Expected Result	Actual Results
11.3	Test profile update form accept non email format	All input boxes fill in and email input is fill with non-email format input and click update	Please include @ in email address message is show	See Fig 11.10 and 11.11

Before Testing

Profile Update

Member Name	Password
Tun Tun	123
Member Type	Date Of Birth
Select Member Type	2019-08-13
Father Name	NRC/Passport Number
Zaw Zaw	12/phd(u)0296222222
Nationality	Company/Department
Myanmar	abc
Rank Position	Email
director	zww
Religion	Handicap
Buddhist	0
Phone Number	Permanent Address
09999999	Yangon
Current Address	Seconder Member Number
Yangon	MGC-0001
Proposer Member Number	
MGC-0001	
<input type="button" value="Update"/>	

Fig-11.10

Designed by: Bo Bo

Tester: Bo Bo

After Testing

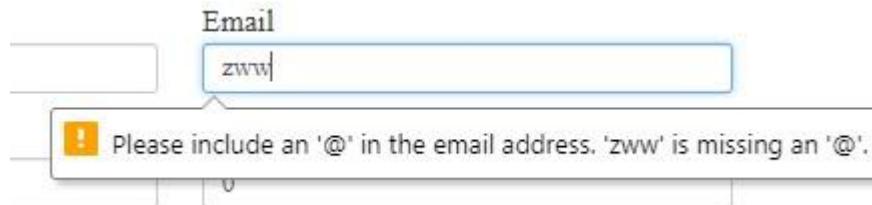


Fig-11.11

Unit Test 11		Test Case: Member Profile Update		
Data Source: Member Profile Update		Objective: To member profile update form		
Test Case	Description	Test Procedure	Expected Result	Actual Results
11.4	Test profile can update after all must fill text boxes fill	All input boxes fill in and new password is type in then click update	Member Update successful message box is show	See Fig 11.12 and 11.13

Designed by: Bo Bo

Tester: Bo Bo

Before Testing

Profile Update

Member Name	Member Type	>Password
Tun Tun	Select Member Type	1234567
Father Name	Nationality	Date Of Birth
Zaw Zaw	Myanmar	2019-08-13
Rank Position	Company/Department	NRC/Passport Number
director	abc	12/pbd(n)02962222222
Religion	Email	Handicap
Buddhist	zww	0
Phone Number	Permanent Address	Proposer Member Number
09999999	Yangon	MGC-0001
Current Address	Seconder Member Number	
Yangon	MGC-0001	
Proposer Member Number		
MGC-0001		
Update		

Fig-11.12

After Testing

localhost:70 says

Member Update Sucessful

OK

Fig-11.13

Test scripts for booking (Member) Form

Unit Test 12	Test Case: Tee off time booking
Data Source: booking list form	Objective: To test booking form(Member)

Designed by: Bo Bo

Tester: Bo Bo

Test Case	Description	Test Procedure	Expected Result	Actual Results
12.2	Test booking search function in booking (user) form	Click on choose date to book tee off input box and choose date then click on search	Booking available for that day show up in data table	See Fig 12.3 and 12.4

Before Testing

Booking Search

Choose date to Book Tee Off **SEARCH**

My Booking

Booking ID	Date	Time	Status

No Record Found.

Fig-12.3

After Testing

Booking Slot List

Date	Time	Status	Action
2019-08-04	7:08	Available	Book Teeoff Time
2019-08-04	7:16	Available	Book Teeoff Time
2019-08-04	7:24	Available	Book Teeoff Time
2019-08-04	7:32	Available	Book Teeoff Time
2019-08-04	7:40	Available	Book Teeoff Time
2019-08-04	7:48	Available	Book Teeoff Time
2019-08-04	7:56	Available	Book Teeoff Time
2019-08-04	8:04	Available	Book Teeoff Time
2019-08-04	8:12	Available	Book Teeoff Time
2019-08-04	8:20	Available	Book Teeoff Time
2019-08-04	8:28	Available	Book Teeoff Time

Designed by: Bo Bo

Tester: Bo Bo

Fig-12.4

Unit Test 12		Test Case: Tee off time booking		
Data Source: booking list form		Objective: To test booking form(Member)		
Test Case	Description	Test Procedure	Expected Result	Actual Results
12.3	Test can book slot or not	Click on book teeoff time button	Booking successfully created message show	See Fig 12.5and 12.6

Before Testing

Booking Slot List

Date	Time	Status	Action
2019-08-04	7:08	Available	Book Teeoff Time
2019-08-04	7:16	Available	Book Teeoff Time
2019-08-04	7:24	Available	Book Teeoff Time
2019-08-04	7:32	Available	Book Teeoff Time
2019-08-04	7:40	Available	Book Teeoff Time
2019-08-04	7:48	Available	Book Teeoff Time
2019-08-04	7:56	Available	Book Teeoff Time
2019-08-04	8:04	Available	Book Teeoff Time
2019-08-04	8:12	Available	Book Teeoff Time
2019-08-04	8:20	Available	Book Teeoff Time
2019-08-04	8:28	Available	Book Teeoff Time

Fig-12.5

Designed by: Bo Bo

Tester: Bo Bo

After Testing

localhost:70 says

Booking successfully created

OK

Fig-12.6

Unit Test 12		Test Case: Tee off time booking	Designed by: Bo Bo	
Data Source: booking list form		Objective: To test booking form(Member)	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
12.4	Test booking(user) form show already booked slot info or not	Click on booking in menu bar to see already booking slot info is show in my booking table or not	Booking detail show in my booking	See Fig 12.7

My Booking

Booking ID	Date	Time	Status
1832	2019-08-04	7:08	Pending

Fig-12.7

	Test Case:	Designed by: Bo Bo
		Tester:
Expected		

Unit Test 12Tee off time
booking**Data Source:** booking form(Member)**Objective:** To test booking Bo Bo list form

Test Case	Description	Test Procedure	Actual Results	
			Result	
12.5	Test can book with already book slot for that day	Click on book teeoff time button with already book tee off slot for that day	Member Already Book tee off slot for this day message is show	See Fig 12.8and 12.9

Before Testing

My Booking				
Booking ID	Date	Time	Status	
1832	2019-08-04	7:08	Pending	

Booking Slot List				
Date	Time	Status	Action	
2019-08-04	7:16	Available	Book Teeoff Time	
2019-08-04	7:24	Available	Book Teeoff Time	
2019-08-04	7:32	Available	Book Teeoff Time	
2019-08-04	7:40	Available	Book Teeoff Time	
2019-08-04	7:48	Available	Book Teeoff Time	
2019-08-04	7:56	Available	Book Teeoff Time	
2019-08-04	8:04	Available	Book Teeoff Time	
2019-08-04	8:12	Available	Book Teeoff Time	

Fig-12.8

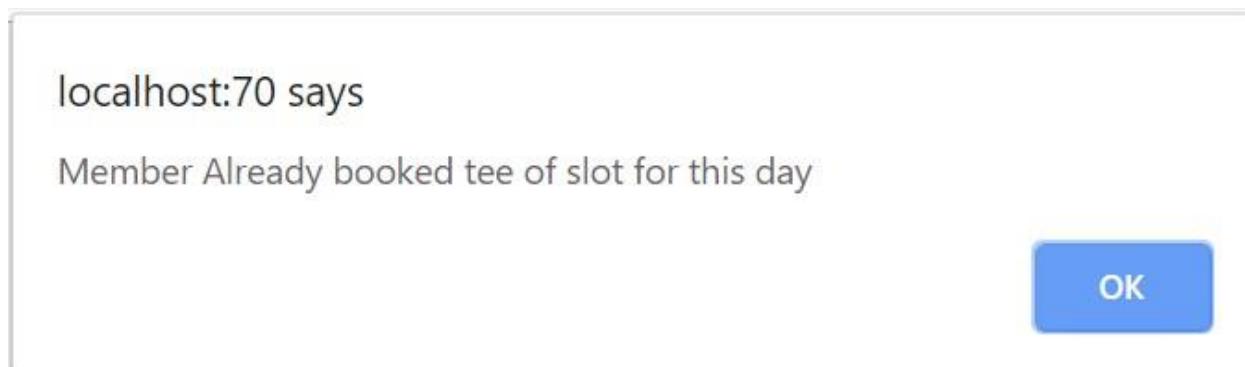
After Testing

Fig-12.9

Test scripts for Member Playing Form

Unit Test 13		Test Case: Member Playing Form	Designed by: Bo Bo	
Data Source: Member Playing form		Objective: To test member playing form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
13.2	Test when member no choose other related text box auto fill with data or not in playing payment form	Choose Member Number in member Number datalist input	Member Name, Member Type , GreenFee auto loaded according to member number chosen	See Fig 13.3and 13.4

Before Testing

The screenshot shows a "Playing Payment" form. At the top left, it says "Playing Payment". Below that, there are two input fields: "Booking ID" (containing "1832") and "Date" (containing "2019-08-04"). The form is divided into several sections with labels and input fields:

- Member Number:** An input field.
- Member Name:** An input field.
- Member Type:** An input field.
- Green Fee:** An input field.
- Caddy Number:** An input field.
- Buggy Number:** An input field.
- Booking Fee:** A dropdown menu.
- Buttons:** Two buttons at the bottom: "Confirm Payment" (green) and "Guest Player" (green).

Fig-13.3

	Test Case:	Designed by: Bo Bo
		Tester:
Expected		

After Testing

Playing Payment

Booking ID 1832	Date 2019-08-04
Member Number MGC-0002	Member Name Tun Tun
Member Type Child	Green Fee 4000
Caddy Number	Buggy Number
Booking Fee	
<input type="button" value="Confirm Payment"/>	<input type="button" value="Guest Player"/>

Fig-13.4

Unit Test 13	Test Case: Member Playing Form	Designed by: Bo Bo
Member	Objective playing form	Tester: Bo Bo
Description Test Procedure		Expected

Data Source: : To test member

Playing form

Test Case			Result	Actual Results
13.3	Test accept caddy number input blank or not playing payment form	Leave caddy number blank and click on Confirm Payment	Please fill out this field message show up	See Fig 13.5and 13.6

Before Testing

Fig-13.5

After Testing

Fig-13.6

Unit Test 13	Test Case: Member Playing Form	Designed by: Bo Bo
Data Source: Member Playing form	Objective playing form	Tester: Bo Bo
Test	Description	Test Procedure

Expected

: To test member

Case			Result	Actual Results
13.4	Test payment detail form load after all field fill	All the require input box are fill and click on confirm payment	Member payment form with detail payment and total amount to pay calculated loaded	See Fig 13.7and 13.8

Before Testing

Playing Payment

Booking ID 1832	Date 2019-08-04
Member Number MGC-0002	Member Name Tun Tun
Member Type Child	Green Fee 4000
Caddy Number 2 - caddy2	Buggy Number
Booking Fee ▼	
Confirm Payment	Guest Player

Fig-13.7

Unit Test 13	Test Case: Member Playing Form	Designed by: Bo Bo
Data Source: Member Playing form	Objective playing form	Tester: Bo Bo

Test	Description	Test Procedure	Expected
------	-------------	----------------	----------

After Testing

Member Payment

Member Name	Tun Tun
booking id	1832
green fee	4000
Caddy fee	2000
booking Fee	0
buggy Fee	0
Total	6000
Paid	<input type="text"/>
Change	<input type="text"/>
back	Confirm

Fig-13.8

: To test member

Case			Result	Actual Results
13.5	Test auto calculate function work or not in member payment detail	Type in amount in paid input box	Change amount is auto calculated and show in Change input box	See Fig 13.9and 13.10

Before Testing

Member Payment

Member Name	Tun Tun
booking id	1832
green fee	4000
Caddy fee	2000
booking Fee	0
buggy Fee	0
Total	6000
Paid	<input type="text"/>
Change	<input type="text"/>
back	Confirm

Unit Test 13	Test Case: Member Playing Form	Designed by: Bo Bo
Data Source: Member Playing form	Objective playing form	Tester: Bo Bo
Test	Description	Test Procedure

Fig-13.9

After Testing

Member Payment

Member Name	Tun Tun
booking id	1832
green fee	4000
Caddy fee	2000
booking Fee	0
buggy Fee	0
Total	6000
Paid	10000
Change	4000
back	Confirm

Fig-13.10

: To test member

Case			Result	Actual Results
13.6	Test back on payment detail can go back to playing payment or not	Click back on member payment form	Playing payment for load with booking id and today date	See Fig 13.11and 13.12

Unit Test 13	Test Case: Member Playing Form	Designed by: Bo Bo
Data Source: Member Playing form	Objective playing form	Tester: Bo Bo

Test	Description	Test Procedure	Expected
------	-------------	----------------	----------

Before Testing

Member Payment

Member Name	Tun Tun
booking Id	1832
green fee	4000
Caddy fee	2000
booking Fee	0
buggy Fee	0
Total	6000
Paid	<input type="text"/>
Change	<input type="text"/>
back	Confirm

Fig-13.11

After Testing

Playing Payment

Booking ID 1832	Date 2019-08-04
Member Number	Member Name
<input type="text"/>	<input type="text"/>
Member Type	Green Fee
<input type="text"/>	<input type="text"/>
Caddy Number	Buggy Number
<input type="text"/>	<input type="text"/>
Booking Fee	<input type="text"/>
Confirm Payment	Guest Player

Fig-13.12

Unit Test 13		Designed by: Bo Bo
Data Source: Member Playing form		Tester: Bo Bo

Test Description

Test Case: Member Playing Form**Objective:** To test member playing form

Case		Test Procedure	Expected Result	Actual Results
13.7	Test payment detail form accept blank paid input or not	Click confirm on member payment form without adding value in paid input	Please fill out this field message is show	See Fig 13.13and 13.14

Before Testing

Member Payment

Member Name	Tun Tun
booking id	1832
green fee	4000
Caddy fee	2000
booking Fee	0
buggy Fee	0
Total	6000
Paid	<input type="text"/>
Change	<input type="text"/>
back	Confirm

Fig-13.13

After Testing

Member Payment

Member Name	Tun Tun
booking id	1832
green fee	4000
Caddy fee	2000
booking Fee	0
buggy Fee	0
Total	6000
Paid	<input type="text"/>
Change	! Please fill out this field.
<button>back</button>	<button>Confirm</button>

Fig-13.14

Unit Test 13		Test Case: Member Playing Form	Designed by: Bo Bo	
Data Source: Member Playing form		Objective: To test member playing form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
13.8	Test confirm payment in member payment detail	Click confirm on member payment form after fill in all input boxes.	Payment Success message is show and caddyid this member choose become unavailable in caddylist table	See Fig 13.15,13.16,13.17and13.18

Before Testing

Member Payment	
Member Name	Tun Tun
booking id	1832
green fee	4000
Caddy fee	2000
booking Fee	0
buggy Fee	0
Total	6000
Paid	10000
Change	4000
<input type="button" value="back"/>	<input type="button" value="Confirm"/>

Fig-13.15

After Testing

localhost:70 says

Payment Success

Fig-13.16

Before Testing



Fig-13.17

After Testing

 Edit  Copy  Delete 21 2 2019-08-04 Unavailable

Fig-13.18

Test scripts for Guest Playing Form

Unit Test 14		Test Case: Guest Playing Form	Designed by: Bo Bo	
Data Source: Guest Playing form		Objective: To test Guest playing form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
14.2	Test guest payment form accept blank input boxes	Leave blank for Guest name, phone number, Address, Caddy Number input boxes and click on Confirm Payment	Please Fill out this field message is show	See Fig 14.3 to 14.6

Guest Name

Address  Please fill out this field.

Fig-14.3

Phone Number

 Please fill out this field.

Fig-14.4

Address

Member Type  Please fill out this field.

Fig-14.5

Caddy Number

Book  Please fill out this field.

Fig-14.6

Unit Test 14		Test Case: Guest Playing Form	Designed by: Bo Bo	
Data Source: Guest Playing form		Objective: To test Guest playing form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
14.3	Test change to member payment work or not	Click on Member in Guest playing payment form	Member payment form loaded with booking id and today date already fill up	See Fig 14.7and 14.8

Before Testing

Guest Payment

Booking ID: 1832 Date: 2019-08-04

Guest Name Phone Number

Address

Member Type: Guest Green Fee: 30000

Caddy Number Buggy Number

Booking Fee

Confirm Payment Member

Fig-14.7

After Testing

Playing Payment

Booking ID: 1832 Date: 2019-08-04

Member Number Member Name

Member Type Green Fee

Caddy Number Buggy Number

Booking Fee

Confirm Payment Guest Player

Fig-14.8

Unit Test 14		Test Case: Guest Playing Form	Designed by: Bo Bo	
Data Source: Guest Playing form		Objective: To test Guest playing form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
14.4	Test confirm payment after all box fill	Click on Confirm Payment after all the require input fill in	Guest Payment detail page show with all detail payment and total calculated amount	See Fig 14.9and 14.10

Before Testing

Guest Payment

Booking ID 1832	Date 2019-08-04
Guest Name Zaw Zaw	Phone Number 0123123123
Address Ygn	
Member Type Guest	Green Fee 30000
Caddy Number 1 - caddy1	Buggy Number 3
2000	
Confirm Payment	Member

Fig-14.9

After Testing

Guest Payment

Guest Name	Zaw Zaw
booking id	1832
green fee	30000
Caddy fee	2000
booking Fee	2000
buggy Fee	25000
Total	59000
Paid	<input type="text"/>
Change	<input type="text"/>
back	Confirm

Fig-14.10

Unit Test 14		Test Case: Guest Playing Form	Designed by: Bo Bo	
Data Source: Guest Playing detail form		Objective: To test Guest playing form	Tester: Bo Bo	
Test Case	Description	Test Procedure	Expected Result	Actual Results
14.5	Test can record payment after all input fill in guest payment detail	Click confirm on guest payment form after fill in all input boxes.	Payment Success message is show and caddyid, buggyid this guest choose become unavailable in caddylist and buggy table	See Fig 14.11 to

Before Testing

Guest Payment

Guest Name	Zaw Zaw
booking id	1832
green fee	30000
Caddy fee	2000
booking Fee	2000
buggy Fee	25000
Total	59000
Paid	60000
Change	1000
back	Confirm

Fig-14.11

After Testing

localhost:70 says

Payment Success

OK

Fig-14.12

Before Testing

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Edit	<input type="checkbox"/>	Copy	<input type="checkbox"/>	Delete	21	2	2019-08-04	Unavailable
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Edit	<input type="checkbox"/>	Copy	<input type="checkbox"/>	Delete	22	1	2019-08-04	Available

Fig-14.13

After Testing

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Edit	<input type="checkbox"/>	Copy	<input type="checkbox"/>	Delete	21	2	2019-08-04	Unavailable
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Edit	<input type="checkbox"/>	Copy	<input type="checkbox"/>	Delete	22	1	2019-08-04	Unavailable

Fig-14.14

Before Testing

<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	buggyid	buggynumber	status					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Edit	<input type="checkbox"/>	Copy	<input type="checkbox"/>	Delete	1	1	Available
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Edit	<input type="checkbox"/>	Copy	<input type="checkbox"/>	Delete	2	2	Available
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Edit	<input type="checkbox"/>	Copy	<input type="checkbox"/>	Delete	3	3	Available
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Edit	<input type="checkbox"/>	Copy	<input type="checkbox"/>	Delete	4	4	Available

Check all With selected: Edit Copy Delete Export

Fig-14.15

After Testing

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Edit	<input type="checkbox"/>	Copy	<input type="checkbox"/>	Delete	3	3	Unavailable
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Edit	<input type="checkbox"/>	Copy	<input type="checkbox"/>	Delete	4	4	Available

Fig-14.16

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