

The Commons Beach Club Database Management System Requirements Document

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Objective

Business Purpose

As the Commons Beach Club (CBC) has increased the number of active memberships within the organization, the ability to work efficiently, methodically, and organized has decreased. The current system to store user information is chaotic, complex, and ineffective. Creating a new membership system would replace the current system's features while aiding in its data storage and retrieval time complexity, lack of features, and overall user interface. Currently, the CBC does not have any tools to analyze membership statistics that would allow them to understand things like peak business hours, parking limitations, and beach space. The overall objective goal of this system is to make it easier on the employees and members by creating a database that allows for real-time statistical analysis.

Business Overview

The CC at The Brooks is a member-owned club of 2,300+ families that focuses on member satisfaction and customer service. The Commons Beach Club is a sub-section of The CC located on Little Hickory Island, Bonita Springs, FL.

The system currently in use by the CBC allows employees to check in members, and charge member accounts for things like snacks, reservations, and guest fees. The management team can print out a list of all members who checked in and at what time they checked in within only a twenty-four-hour window.

The proposed system would take the outdated look and feel of the current system and generate higher quality, easy to understand user interfaces for employees and management to complete the following tasks:

- Member Check-in, and quick charge for guest fees
- Member charge for snacks or drinks
- Member charge for reservations with an email that is pushed to the corresponding member email with the date and time of their reservation
- The database will hold a range of statistics that will be used for statistical analysis tools, for example, things like peak hours, days, weeks, or months.
- The database will have an API allowing the CC website to get a live estimation of current members on location & estimated parking.

The system will be deemed completed by the BOT after it has been shown to be a more effective version than the current system.

Success metrics

use your Goals from Activity 6.2.3.2.

Goal	Metric
A self-explanatory UI for employees to check-in members, charge their accounts and make reservations with their information stored in the database.	Using study groups with different employees to see how the general employee population feels about the user interface. (over 65%)
Statistical analysis, allowing management to see collected membership data in an easy-to-understand interface.	Using study groups with management to see how the management feels about the user interface. (over 65%)
Public statistical projections for members to understand if the beach is at capacity or near capacity on the CBC website.	A physical estimation will be taken in comparison to the systems estimation to see if it carries a relatively high accuracy.

Assumptions

- Employees will check in members using this system
- Members must be checked in on arrival to ensure their party allowed
- Management will use the daily check-in data to determine how many employees to schedule

- The data will be sent to their webserver to reflect current activity updated every minute.
- The database will be used to charge members for services at the beach club (Snacks / Reservation)



Requirements

User Stories

Key	Summary	P
CCM-31	As a Club Manager, I want access to monthly check in analytics and data so that scheduling can be made more accurately based on statistical analysis	✓
CCM-30	As a Club Employee, I want to make reservations for members so that there are no conflicts of events	⬆
CCM-29	As a Club Manager, I want a statistical guess on available parking during the day based on member checked in rates so that members can have an idea of the capacity	✓
CCM-28	As a Club Manager, I want the daily log of all members checked in so there is a log for any necessary reason to show proof of visitation	⬆
CCM-27	As a Club Manager, I want to see an estimation of how many employees should be on schedule based on statistical check ins so that there is enough staff during business operation	✓
CCM-26	As a Club Employee, I want to charge members through the database so that members have access to goods and services that are tracked	⬆
CCM-25	As a Board Member I want access to quarterly statistics so that the board can see how many members are active	⬆
CCM-24	As a Club Employee, I want access to membership status so that members can know if their membership is active	⬆
CCM-23	As a Club Employee, I want to check-in members and guests so that I can verify their membership is active	⬆
CCM-22	As a Club Employee, I want to search members from the database so that I can supply information on who is checked in	⬆
10 issues		

Requirements

Key	Summary	P
CCM-74	The user interface shall use the same font across all text to ensure it stays uniform	✓
CCM-73	The system shall have a set of error messages if an action fails or cannot be completed	⬆
CCM-72	The system shall not use any audio queues as it will be used outdoors	✓
CCM-71	Employees will use Member ID cards as a proof of identification	⬆
CCM-70	A photo of the member pops up during check in for an employee to objectively validate their person	⬆
CCM-69	Member numbers shall be six digits long with a number between zero and nine for each digit.	⬆
CCM-68	Immediate family to the member shall have a sub-member ID with a dash and letter following the ID number (123456-A)	⬆
CCM-67	The interface shall share the same color schematics to keep the software uniform	⬆
CCM-66	The system shall require a username and password for admin functionality to be accessed	⬆
CCM-65	The system shall display dates in the format mm/dd/yyyy	⬆
CCM-59	The system shall remove unavailable dates from the reservation list	⬆
CCM-58	The system shall give an estimation of the capacity for the club website	✓
CCM-57	The system shall retrieve member data in less than a minute	⬆
CCM-56	The system shall provide available reservation dates	⬆
CCM-55	The system shall provide all members checked in during operation hours	⬆
CCM-54	The system shall search members by ID, First name, or Last name	⬆

CCM-53	The system shall store a physical copy on the device	^
CCM-52	The system shall handle one hundred thousand individual member tuples	^
CCM-51	The system shall provide statistics of peak member check-in hours	=
CCM-50	The system shall send a conformation email to the member when a reservation is booked	v

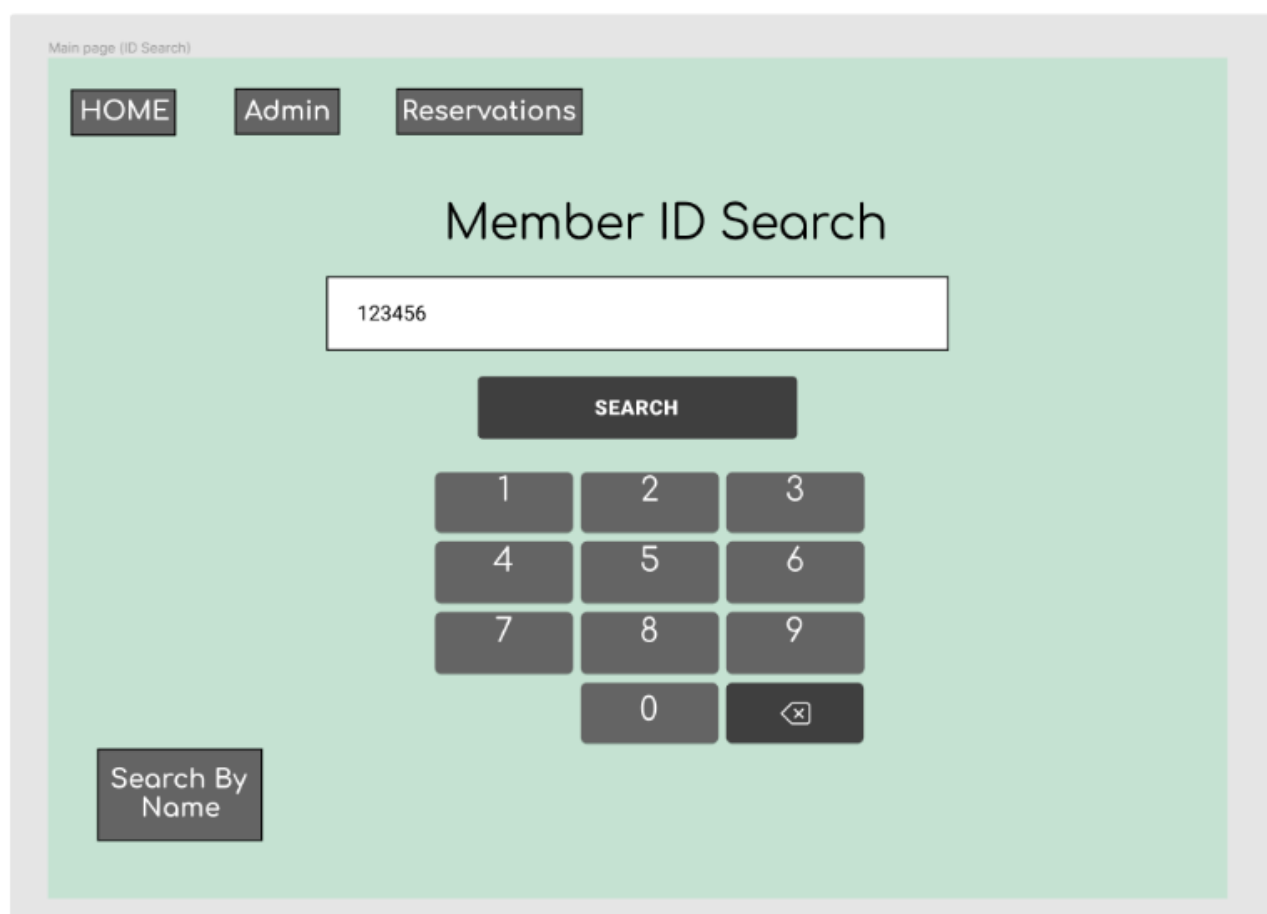
20 issues

 User interaction and design

The Mockup created for the software can be found [here](#).

Below are screenshots from each individual page of the mockup.

Main Page:



Main page (ID Search)

HOME Admin Reservations

Member ID Search

123456

SEARCH

1	2	3
4	5	6
7	8	9
0	< x	

Search By Name

Main Page (Extended):

Main page (Name Search)

HOME Admin Reservations

Member Name Search

John Doe

SEARCH

q w e r t y u i o p
a s d f g h j k l
↑ z x c v b n m ↵

Search By
ID Number

Admin Login:

Admin login

HOME

Admin Log in

Username

.....

LOG IN

q

w

e

r

t

y

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i

o

p

a

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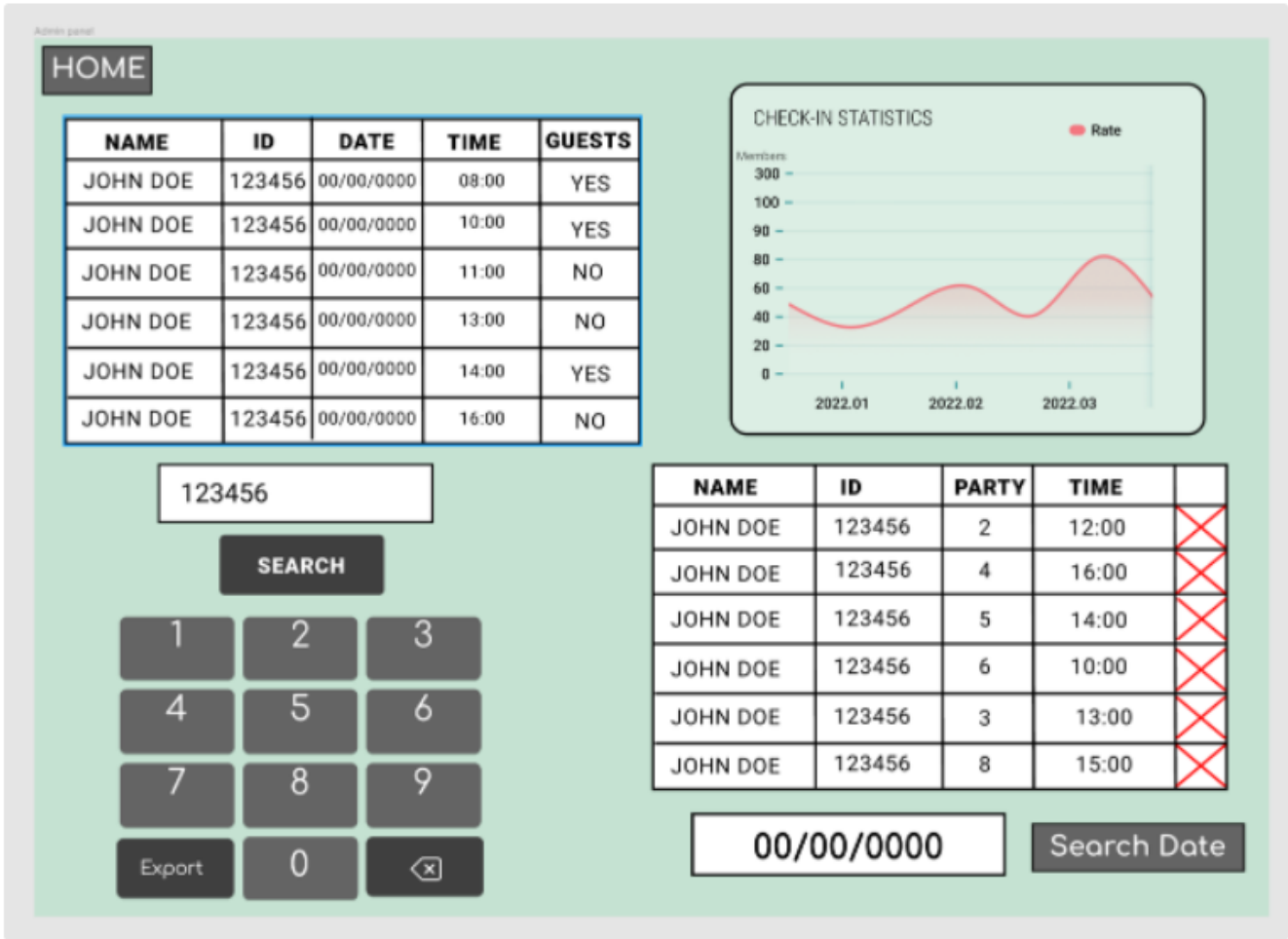
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⬅ⓧ

Admin Dashboard:



Reservation:

Reservations

HOME

Date

00/00/0000

ID

123456

Party Size

12

Time

12:00

1

2

3

4

5

6

7

8

9

ENTER

0

<|>

CONFIRM

BENCH

Tbl 3 = 4 PPL

Tbl 4 = 6

Tbl 2 = 6 PPL

Tbl 1 = 4 PPL

Pav 1 - Tables & Chairs

Table 6 = 8 PPL

Table 5 = 8 PPL

Table 4 = 8 PPL

Table 3 = 8 PPL

Table 2 = 8 PPL

Table 1 = 8 PPL

Pav 2 - Picnic Tables

Pav 3
Tables &
Chairs

RT1

RT2

RT3

HT1

HT2

HT3

HT4

HT5

Pav 4
Tables &
Chairs

TM 2 = 6 PPL

TM 1 = 4 PPL

TM 2 = 6 PPL

TM 1 = 4 PPL

Tbl 3 = 4 PPL

Tbl 4 = 6 PPL

Tbl 3 = 4 PPL

Tbl 4 = 6 PPL


BENCH

Check-in:

Check-in

HOME

ID	Name	Relation	Status
123456	John Doe	Member Holder	Active
123456-A	Jane Doe	Wife	Active
123456-B	Mike Doe	Brother	Active
123456-C	Sam Doe	Daughter	Active
123456-D	Joe Doe	Son	Active



John Doe

Guests

+ 0 - 6 -

Check-in

? Open Questions

add things you still need to decide or research in the Question column. You can leave the Answer cells empty for now.

Question	Answer
How will new employees learn the system and its functionality?	
What would happen if the internet went offline at the beach club?	
How will bugs be fixed?	

! Out of Scope

The solution will not overcomplicate things for members themselves and will rely 100% on the employees to use the system itself. The target demographic of members is an age group that will not be technologically skilled so it is highly important that nothing is put on the members to allow them access to the club and its services. The solution should be simple and not over-engineered as the Board has placed a budget limitation for the software. Member information will not be edited within the CBCDMS as it will be up to the new member center to insert new memberships and changes to the data from the membership center. The software should not have any physical components as the whole purpose is to digitize the processes used by the club.