IT PAT

Phase 1: Specifications Document

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Table of Contents

1.1 Problem Summary

Background

After its recent rebranding and transition, Sunset Oasis Casino has come under new management. After its grand opening in 1998, the casino hadn't seen many updates, prompting the decision to refresh its image. As part of this evolution, the casino opted to redefine its partnerships, leading to the separation from several service providers due to changing policies. One of these providers was DataHarbor Technologies, the creator of our previous admin software. My role is to introduce a new, tailored software solution that perfectly aligns with the casino's evolving needs.

Purpose of Project

The company's rebranding has caused them to cut ties with a number of service providers including DataHarbor Technologies, the company that provided the previous admin software. This has resulted in them needing new admin software to track all essential happenings in the casino.

Summary of Functions

- View data on Patrons, Events and Visits
- Interact with Patrons, Events and Visits tables
  - Add Patrons, Events, Visits data
  - Edit Patrons, Events, Visits data
  - Delete/Disable Patrons, Events, Visits data
- Search and organize records / data for Patrons, Events, Visits
- View statistics and reports for Patrons, Events, Visits

The primary function is to log visits (add to the visits table)

The software will provide a GUI which interacts with the tables using SQL to add, edit and delete records and data pertaining to its related event/patron/visit. Additionally, reports will be made using SQL to show data in an organized format and give admin users a better understanding of statistics.

Users

The software will be exclusively used by the admin team at Sunset Oasis Casino. They are classified as higher management.

This will be a predefined table in the database with usernames and passwords set by the organization.

The request is that this feature be implemented later in development. Currently, the system will run using a predefined table in the database without being accessed from the application.

1.2 Motivation and Research

Similar Software 1: Red Tiger Admin Software

Research

The figure shows the Red Tiger casino admin software. Described by its website as a clean and intuitive interface that makes for easy navigation of the granular detail required by casino managers for day-to-day operations. Its functions include monitoring, managing and reporting.

Figure 1: Red Tiger Admin Software
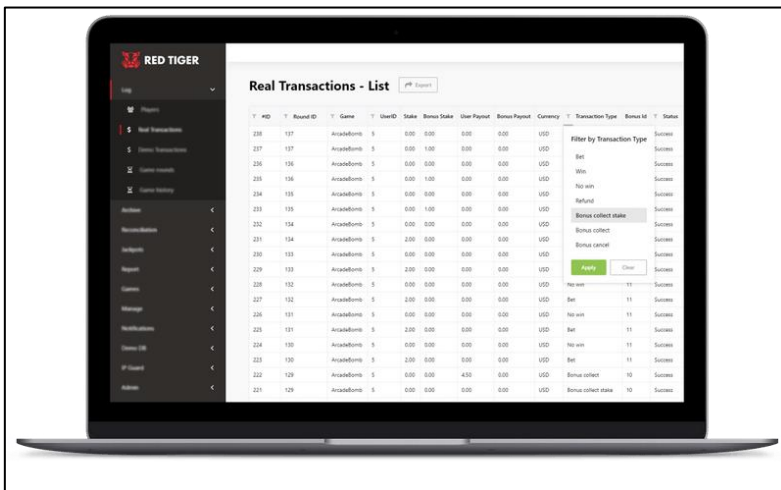
Motivation

Issues and points of note

Complexity – Excessive number of fields

The software has an excessive number of fields making the GUI look cluttered and overwhelming. The number of fields cause the software to look overly complex and could impede general use and efficiency.

I intend to only make use of the highly necessary fields to ensure ease when analysing data.

Limited Navigation Functionality

The GUI notably lacks any navigation functionality such as first, previous, next, and last buttons that would greatly assist in navigation.

This is something I intend to include in my software for ease of navigation and efficient general use.

Limited GUI Layout – Minimal guidance on GUI itself

The GUI has minimal guidance, there are no panes highlighting important data or reflecting what has been selected in the table. The GUI itself is simply a table. This doesn't aid in simplifying and streamlining interactions with the database. It simply provides a second user interface. This inability to make interactions with the database easier are a crucial downfall.

I intend to include panes that clearly detail all information currently being viewed. This will ensure that users are abundantly aware of the data they are viewing, and prevent confusion when data is being manually analysed.

Similar Software 2: BetForge Casino Admin Software

Research

The figure shows the BetForge casino admin software from TurboMates Software. This software is a casino admin that focuses on management and tracking of players and their actions on the casino. The figure below shows their guest/player information table

Figure 2: BetForge Casino Admin Software

Motivation

Issues and points of note

Inaccurate Naming

The 'Name' field stores data relating to players and not the actual player names. Inaccurate field names could lead to problems when analysing data and players. The 'Name' field should instead be called 'Status' or 'Position' which is more in line with the data that it holds.

I intend to name all fields accurately so that users are fully aware of what each field related to. This will precent confusion and allow for better analysing.

Limited GUI Layout – Minimal guidance on GUI itself

The GUI has minimal guidance, there are no panes highlighting important data or reflecting what has been selected in the table. The GUI itself is simply a table. This doesn't aid in simplifying and streamlining interactions with the database. It simply provides a second user interface. This inability to make interactions with the database easier are a crucial downfall.
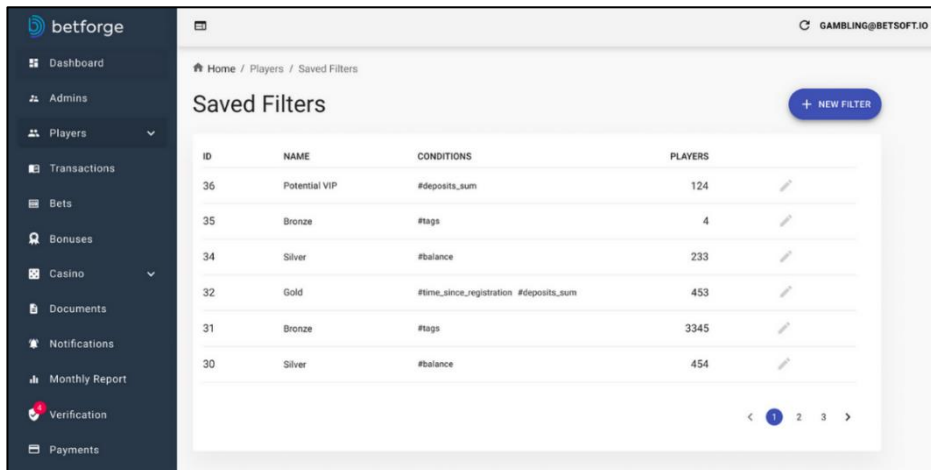
I intend to include panes that clearly detail all information currently being viewed. This will ensure that users are abundantly aware of the data they are viewing, and prevent confusion when data is being manually analysed.

Data spread across multiple locations:

The most notable drawback is the lack of information on one screen. The page numbers in the bottom right corner indicate that information on users is stored across multiple table screens making navigation and manual analysing difficult to carry out.

I intend to make the entire table accessible from a single screen; however, to prevent confusion I will make only a portion of the records visible by default. The remainder of the table will be accessible by scrolling down or making use of the search tools

Similar Software 3: InTarget casino admin (CRM) software:

Research

The figure shown below is a screengrab of InTarget's casino admin software (CRM). IT handles the management of all happening in the casino with a focus on keeping track of guests, their details and their actions in the casino.

Figure 3: InTarget casino admin (CRM) software
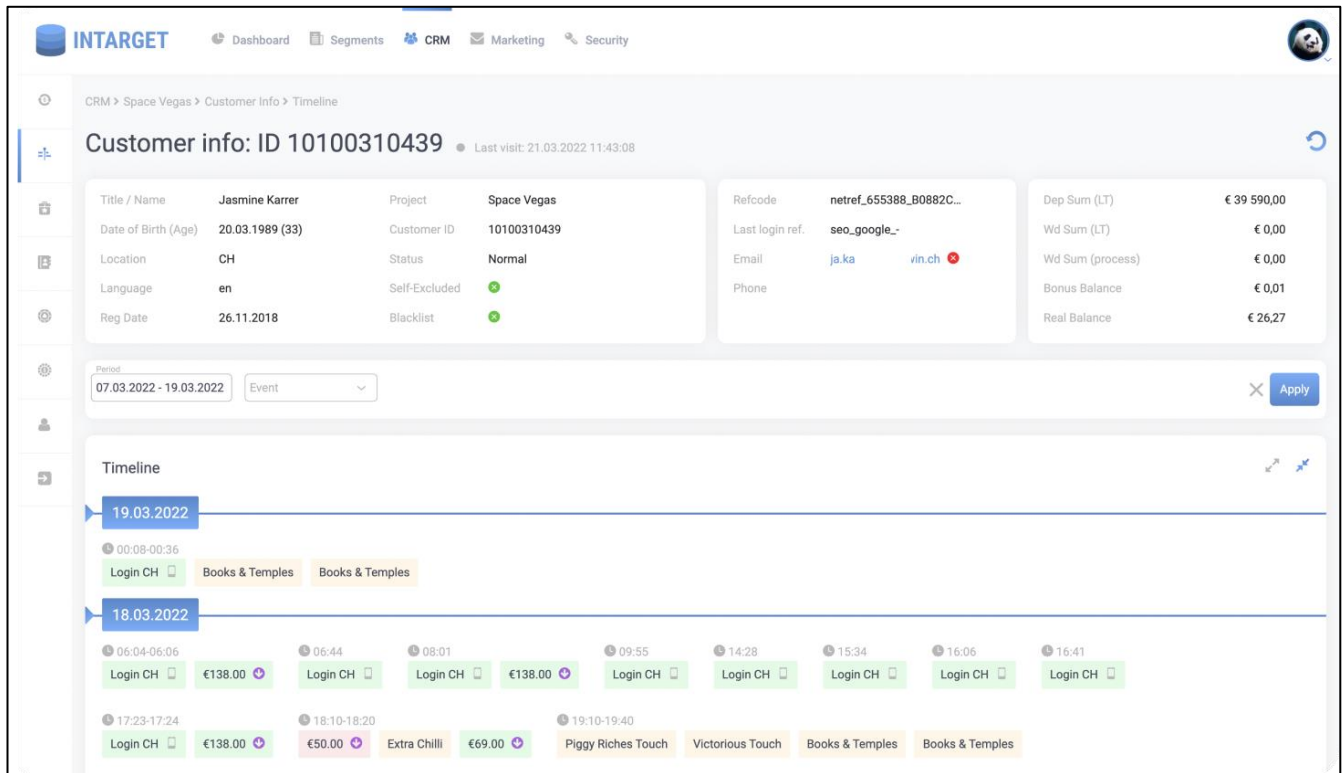
Motivation

Issues and points of note

Complexity

The software has an excessive number of fields yet minimal headings making the GUI look cluttered and overwhelming. The number of fields cause the software to look overly complex and could impede general use and efficiency.

I intend to limit the number of fields to only the absolutely necessary, additionally I intend to make use of headings to clearly label all important data and ensure ease when manually analysing data.

Limited Navigation functionality

The GUI notably lacks any navigation functionality such as first, previous, next, and last buttons that would greatly assist in navigation.

This is something I intend to include in my software for ease of navigation and efficient general use.

1.3 Program Functions

The following bullet points list/detail what functions each part of the program should be able to perform. Important aspects/functions of each screen have been underlined.

SplashScreen Functions

- Play loading GIF
- Loading bar progresses until completion
- Percentage in label increases with loading bar until completion
  - <u>Automatically navigates to LoginFrame upon completion</u>

LoginFrame functions

- Enter username
- Enter password
  - Show and hide password
- Verify username and password
  - Display error messages if incorrect details methods
  - <u>Navigate to WelcomeFrame to welcome user if correct</u>
- Navigate to HelpFrame
  - View relevant help text file
  - Print relevant help text file
  - Play help video
- Navigate to Logout Frame

WelcomeFrame

- Display welcome message
- Display the user's name and surname
- Close
  - <u>Navigate to MainMenuFrame</u>

MainMenuFrame functions

- Navigate to EventsTable
- Navigate to PatronsTable
- Navigate to VisitsTable
- Navigate to Reports Frame
- Navigate to Help Screen
  - View the relevant text file
  - Print the relevant text file
  - Play help video
- Navigate back to LoginFrame

EventTable functions

- View records
- Navigate through table records using first, previous, next, last buttons
- Search records using radio buttons and search text field
- Add Events
  - Auto set next primary key (EventID)
- Edit Events
- Delete Events
- Navigate to Help Screen
  - View relevant text file
  - Print relevant text file
  - Play help video
- Navigate back to Main Menu

PatronsTable functions

- View records
- Navigate through table records using first, previous, next, last buttons
- Search records using radio buttons and search text field
- Add Patrons
  - Auto set next primary key (PatronID)
- Edit Patrons
- Delete Patrons
- Navigate to Help Screen
  - View relevant text file
  - Print relevant text file
  - Play help video
- Navigate back to Main Menu

VisitsTable functions

- View records
- Navigate through table records using first, previous, next, last buttons
- Search records using radio buttons and search text field
- Add Visits
  - Auto set next primary key (VisitNo)
- Edit Visits
- Delete Visits
- Navigate to Help Screen
  - View relevant text file
  - Print relevant text file

o   Play help video
- Navigate back to Main Menu

ReportsFrame functions

- Perform queries
    - **Highest Spender**: Returns the patron that has spend the most overall across all time at the casino.
        - Display on text area
    - **Most Visits**: The patron that had made the most visits to the casino across all time.
        - Display on text area
    - **Patron card types**: Lists the number of patrons per each card type.
        - Display on text area
        - Display pie chart
    - **Gender**: Lists the number of male and female patrons
        - Display on text area
        - Display pie chart
    - **Event Locations**: Returns the number of events at each location. Also lists each event and its location.
        - Display on text area
        - Display pie chart
    - **High-Capacity Events**: returns the number of events that more than 1000 patrons capacity and those that have less than 1000 patrons capacity. Also lists each event as a high capacity or low-capacity event.
        - Display on text area
        - Display pie chart
- Clear text area of all text
- Navigate to HelpFrame
    - View relevant text file
    - Print relevant text file
    - Play help video
- Navigate back to MainMenuFrame

LogoutFrame

- Display logout confirmation message
- Exit application
- Navigate back to LoginFrame

HelpFrame

- Display relevant help text file depending on the frame the called the HelpFrame
  - Display in the text area
- Print relevant help text file
- Play the relevant help video

1.4 User Interface

SplashFrame

The SplashFrame is the first frame that appears once the application is run. It is a boot up screen with a progress bar and loading GIF showing the application starting up.

SplashFrame components

- Layered Pane – Background
- Label - Loading GIF
- Label - Percent loaded
- Label - Company name
- Progress bar - Loading progress

NO	COMPONENT	INPUT	EVENT
0	Frame		
1	Layered pane		
2	Label		Plays the loading GIF
3	Progress bar		Loads until completion
4	Label		Increases percentage from 0 to 100
5	Label		

LoginFrame

The LoginFrame screen contains a textbox for username and password in order to identify and login the user using the system.

LoginFrame components

- **Level 1: Layered Pane – Background**
  - Label - Title of screen (Admin Login)
  - Button - Help button in top right
  - Button - Exit button for closing application (leads to LogoutFrame)
  - Button - Login button (leads WelcomeFrame and then to MainMenuFrame)
    - **Level 2: Layered Pane - pane for the username and password**
      - Label - Username label
      - Text Field - Entry for username
      - Label - Password label
      - Text Field - Entry for password
      - Checkbox - show password checkbox

NO	COMPONENT	INPUT	EVENT
0	Frame		
1	Layered pane		
2	Label		
3	Button	Mouse	Brings up the Help Frame
4	Label		
5	Layered pane		
6	Label		
7	Label		
8	Text field	Keyboard	
9	Text field	Keyboard	
10	Check box	Mouse	Shows/Hides password
11	Button	Mouse	Leads up the Exit Frame to confirm closing the application
12	Button	Mouse	Logs user in if credentials are valid - Leads to Welcome Frame

WelcomeFrame

The WelcomeFrame is a small, simple screen that greets users by their name when they login

WelcomeFrame components

- Layered Pane – Background
- Label - Screen heading (welcome message)
- Label - Username (changes depending on user)
- Button - Close screen that closes this frame and leads to the MainMenuFrame

NO	COMPONENT	INPUT	EVENT
0	Frame		
1	Layered pane		
2	Label		
3	Label		
4	Button	Mouse	Closes the Welcome Frame and leads to the Main Menu

MainMenuFrame

The MainMenuFrame is the main menu frame that has buttons corresponding to all 3 tables, namely VisitsTable, EventsTable and PatronsTable as well as the ReportsFrame

MainMenuFrame components

- Layered Pane – Background
    - Label - Screen heading/title (Main Menu Frame)
    - Button - Help button on top right
    - Button - VisitsTable
    - Button - EventsTable
    - Button - PatronsTable
    - Button - ReportsFrame
    - Button - Logout button

NO	COMPONENT	INPUT	EVENT
0	Frame		
1	Layered pane		
2	Label		
3	Button	Mouse	Brings up the Help Frame
4	Button	Mouse	Leads to the Visits Table Frame
5	Button	Mouse	Leads to the Events Table Frame
6	Button	Mouse	Leads to the Patrons Table Frame
7	Button	Mouse	Leads to the Reports Frame
8	Button	Mouse	Leads to the Admin Login Frame

PatronsTable

The PatronsTable is the screen that houses the PatronsTable and all its associated function buttons such as add, edit, delete and search.

PatronsTable components

- **Level 1: Layered Pane – Background**
    - Label - Heading/Title label (Visits Table)
    - Button - Help button in top right
    - Button - Back button (leads back to LoginFrame)

- **Level 2: Layered Pane - Navigation (contains JTable)**
    - JTable - PatronsTable
    - Button - First record
    - Button - Previous record
    - Button - Next record
    - Button - Last record

- **Level 2: Layered Pane - Details**
    - Label - PatronID
    - Text Field - PatronID
    - Label - PatronName
    - Text Field - PatronName
    - Label - Surname
    - Text Field - Surname
    - Label - Gender
    - Combo Box - Gender
    - Label - DateOfBirth
    - JDateChooser- DateOfBirth
    - Label - HomeAddress
    - Text Field - HomeAdress
    - Label - Status
    - Combo Box - Status
    - Label - Registration Deadline

- DateChooser - Registration Deadline

- **Level 2: Layered Pane – Data Handling**
  - **Level 3: Layered Pane - Options**
    - Button - Add (allows data to be entered into the details pane for the add function)
    - Button - Edit (allows data to be edited in the details pane for the edit function)
    - Button - Delete (deletes the currently selected record)

  - **Level 3: Layered Pane - Save Options**
    - Button - Save new (saves data entered in the details pane by calling the SQL method)
    - Button - Save edit (saves the data entered in the details pane by calling the SQL method)
    - Button - Cancel (makes the details pane inaccessible and removes all data entered/edited)

- **Level 2: Layered Pane - Search**
  - Radio Button - All (shows all records)
  - Radio Button - PatronID (deactivates all other radio buttons and enables the text field for entry of a PatronID)
  - Radio Button - FirstNam (deactivates all other radio buttons and enables the text field for entry of a FirstName)
  - Radio Button - CardLevel (deactivates all other radio buttons and enables the text field for entry of a CardLevel)
  - Radio Button – Gender (deactivates all other radio buttons and enables the text field for entry of a CardLevel)

NO	COMPONENT	INPUT	EVENT
0	Frame		
1	Layered pane		
2	Label		
3	Button	Mouse	Brings up the Help Frame
4	Label		
5	Layered pane		
6	Table		
7	Button	Mouse	Navigates to and displays the first record in the table
8	Button	Mouse	Navigates to and displays the next record in the table
9	Button	Mouse	Navigates to and displays the previous record in the table
10	Button	Mouse	Navigates to and displays the last record in the table
11	Label		

NO	COMPONENT	INPUT	EVENT
12	Layered pane		
13	Label		
14	Label		
15	Label		
16	Label		
17	Label		
18	Text field	Keyboard	
19	Check box	Mouse	Enables / Disables primary key field for manual editing
20	Text field	Keyboard	
21	Text field	Keyboard	
22	Combo box	Mouse	
23	Date chooser	Mouse / Keyboard	
24	Label		
25	Label		
26	Label		
27	Label		
28	Text field	Keyboard	
29	Text field	Keyboard	
30	Combo box	Mouse	
31	Date chooser	Mouse / Keyboard	
32	Label		
33	Layered pane		
34	Radio button	Mouse	Disables search text field and button & displays all records in table
35	Radio button	Mouse	Enables search text field and button
36	Radio button	Mouse	Enables search text field and button
37	Radio button	Mouse	Enables search text field and button
38	Radio button	Mouse	Enables search text field and button
39	Text field	Keyboard	
40	Button	Mouse	Searches/sorts the table records according to the radio button selected and data entered
41	Label		
42	Layered pane		

NO	COMPONENT	INPUT	EVENT
43	Label		
44	Label		
45	Layered pane		
46	Layered pane		
47	Button	Mouse	Activates and clears relevant data entry fields
48	Button	Mouse	Activates and inputs current data into relevant data entry fields
49	Button	Mouse	Clears data and deactivates data entry fields - displays current data
50	Button	Mouse	Executes SQL to add a new record to the table using entered data
51	Button	Mouse	Executes SQL to edit a record in the table using the edited data
52	Button	Mouse	Executes SQL to delete a record in the table
53	Button	Mouse	Leads to the Main Menu Frame

EventsTable

The VisitsTable is the screen that houses the VisitsTable and all its associated function buttons such as add, edit, delete and search.

EventsTable components

- **Level 1: Layered Pane - Cover whole screen to provide a border**
    - Label - Heading/Title label (Visits Table)
    - Button - Help button in top right
    - Button - Back button (leads back to LoginFrame)

- **Level 2: Layered Pane - Navigation (contains JTable)**
    - JTable - EventsTable
    - Button - First record
    - Button - Previous record
    - Button - Next record
    - Button - Last record

- **Level 2: Layered Pane - Details**
    - Label - EventID
    - Text Field - EventID
    - Label - EventName
    - Text Field - EventName
    - Label - StartDate
    - Date Chooser - StartDate
    - Label - EndDate
    - Date Chooser - EndDate
    - Label - Capacity
    - Text Field - Capacity
    - Label - Location
    - Combo Box - Location
    - Label - Status
    - Combo Box - Status
    - Label - Registration Deadline

- o   DateChooser - Registration Deadline

- **Level 2: Layered Pane – Data Handling**
  - o   **Level 3: Layered Pane - Options**
    - ▪   Button - Add (allows data to be entered into the details pane for the add function)
    - ▪   Button - Edit (allows data to be edited in the details pane for the edit function)
    - ▪   Button - Delete (deletes the currently selected record)

  - o   **Level 3: Layered Pane - Save Options**
    - ▪   Button - Save new (saves data entered in the details pane by calling the SQL method)
    - ▪   Button - Save edit (saves the data entered in the details pane by calling the SQL method)
    - ▪   Button - Cancel (makes the details pane inaccessible and removes all data entered/edited)

- **Level 2: Layered Pane - Search**
  - o   Radio Button - All (shows all records)
  - o   Radio Button - EventID (deactivates all other radio buttons and enables the text field for entry of a EventNo)
  - o   Radio Button - EventName (deactivates all other radio buttons and enables the text field for entry of a EventName)
  - o   Radio Button - Location (deactivates all other radio buttons and enables the text field for entry of a Location)
  - o   Radio Button – Status (deactivates all other radio buttons and enables the text field for entry of a Status)

NO	COMPONENT	INPUT	EVENT
0	Frame		
1	Layered pane		
2	Label		
3	Button	Mouse	Brings up the Help Frame
4	Label		
5	Layered pane		
6	Table		
7	Button	Mouse	Navigates to and displays the first record in the table
8	Button	Mouse	Navigates to and displays the next record in the table
9	Button	Mouse	Navigates to and displays the previous record in the table
10	Button	Mouse	Navigates to and displays the last record in the table
11	Label		

NO	COMPONENT	INPUT	EVENT
12	Layered pane		
13	Label		
14	Label		
15	Label		
16	Label		
17	Label		
18	Text field	Keyboard	
19	Check box	Mouse	Enables / Disables primary key field for manual editing
20	Text field	Keyboard	
21	Text field	Keyboard	
22	Combo box	Mouse	
23	Date chooser	Mouse / Keyboard	
24	Label		
25	Label		
26	Label		
27	Label		
28	Text field	Keyboard	
29	Text field	Keyboard	
30	Combo box	Mouse	
31	Date chooser	Mouse / Keyboard	
32	Label		
33	Layered pane		
34	Radio button	Mouse	Disables search text field and button & displays all records in table
35	Radio button	Mouse	Enables search text field and button
36	Radio button	Mouse	Enables search text field and button
37	Radio button	Mouse	Enables search text field and button
38	Radio button	Mouse	Enables search text field and button
39	Text field	Keyboard	
40	Button	Mouse	Searches/sorts the table records according to the radio button selected and data entered
41	Label		
42	Layered pane		

NO	COMPONENT	INPUT	EVENT
43	Label		
44	Label		
45	Layered pane		
46	Layered pane		
47	Button	Mouse	Activates and clears relevant data entry fields
48	Button	Mouse	Activates and inputs current data into relevant data entry fields
49	Button	Mouse	Clears data and deactivates data entry fields - displays current data
50	Button	Mouse	Executes SQL to add a new record to the table using entered data
51	Button	Mouse	Executes SQL to edit a record in the table using the edited data
52	Button	Mouse	Executes SQL to delete a record in the table
53	Button	Mouse	Leads to the Main Menu Frame

VisitsTable

The VisitsTable is the screen that houses the VisitsTable and all its associated function buttons such as add, edit, delete and search.

VisitsTable components

- **Level 1: Layered Pane - Cover whole screen to provide a border**
    - Label - Heading/Title label (Visits Table)
    - Button - Help button in top right
    - Button - Back button (leads back to LoginFrame)

- **Level 2: Layered Pane - Navigation (contains JTable)**
    - JTable - VisitsTable
    - Button - First record
    - Button - Previous record
    - Button - Next record
    - Button - Last record

- **Level 2: Layered Pane - Details**
    - Label - VisitNo
    - Text Field - VisitNo
    - Label - EventID
    - Text Field - EventID
    - Label - PatronID
    - Text Field - PatronID
    - Label - AmountSpent
    - Text Field - AmountSpent
    - Label - Username
    - Text Field - Username
    - Label - DateOfVisit
    - Date Chooser - DateOfVisit

- **Level 2: Layered Pane – Data Handling**
    - **Level 3: Layered Pane - Options**

- ▪ Button - Add (allows data to be entered into the details pane for the add function)
- ▪ Button - Edit (allows data to be edited in the details pane for the edit function)
- ▪ Button - Delete (deletes the currently selected record)

- o **Level 3: Layered Pane - Save Options**
  - ▪ Button - Save new (saves data entered in the details pane by calling the SQL method)
  - ▪ Button - Save edit (saves the data entered in the details pane by calling the SQL method)
  - ▪ Button - Cancel (makes the details pane inaccessible and removes all data entered/edited)

- **Level 2: Layered Pane - Search**
  - o Radio Button - All (shows all records)
  - o Radio Button - VisitNo (deactivates all other radio buttons and enables the text field for entry of a VisitNo)
  - o Radio Button - PatronID (deactivates all other radio buttons and enables the text field for entry of a PatronID)
  - o Radio Button - EventID (deactivates all other radio buttons and enables the text field for entry of a EventID)

ReportsFrame

The ReportsFrame is the screen used for displaying all queries and statistics.

ReportsFrame components

- **Level 1: Layered Pane – Background**
  - o Label - Heading/Title label (Visits Table)
  - o Button - Help button in top right
  - o Button - Back button (leads back to LoginFrame)
  - o Button - Clear Text Area

- **Level 2: Layered Pane - Output Pane (contains Text Area)**
  - o Text Area - Display all queries when called

- **Level 2: Layered Pane - Queries (Contains buttons for each query)**
  - o Button - Highest Spender

- o Button - Most Visits
- o Button - Patron Card Types
- o Button - Gender
- o Button - Event Location
- o Button - High-Capacity Events

NO	COMPONENT	INPUT	EVENT
0	Frame		
1	Layered pane		
2	Label		
3	Button	Mouse	Brings up the Help Frame
4	Label		
5	Layered pane		
6	Table		
7	Button	Mouse	Navigates to and displays the first record in the table
8	Button	Mouse	Navigates to and displays the next record in the table
9	Button	Mouse	Navigates to and displays the previous record in the table
10	Button	Mouse	Navigates to and displays the last record in the table
11	Label		
12	Layered pane		
13	Label		
14	Label		
15	Label		
16	Label		
17	Label		
18	Label		
19	Text field	Keyboard	
20	Check box	Mouse	Enables / Disables primary key field for manual editing
21	Combo box	Mouse	
22	Combo box	Mouse	
23	Text field	Keyboard	
24	Combo box	Mouse	
25	Date chooser	Mouse / Keyboard	

NO	COMPONENT	INPUT	EVENT
26	Label		
27	Layered pane		
28	Radio button	Mouse	Disables search text field and button & displays all records in table
29	Radio button	Mouse	Enables search text field and button
30	Radio button	Mouse	Enables search text field and button
31	Radio button	Mouse	Enables search text field and button
32	Radio button	Mouse	Enables search text field and button
33	Text field	Keyboard	
34	Button	Mouse	Searches/sorts the table records according to the radio button selected and data entered
35	Label		
36	Layered pane		
37	Label		
38	Label		
39	Layered pane		
40	Layered pane		
41	Button	Mouse	Activates and clears relevant data entry fields
42	Button	Mouse	Activates and inputs current data into relevant data entry fields
43	Button	Mouse	Clears data and deactivates data entry fields - displays current data
44	Button	Mouse	Executes SQL to add a new record to the table using entered data
45	Button	Mouse	Executes SQL to edit a record in the table using the edited data
46	Button	Mouse	Executes SQL to delete a record in the table
47	Button	Mouse	Leads to the Main Menu Frame

HelpFrame

The HelpFrame can be accessed from any other frame in the program. Its function is to provide help by displaying help text files in the text area or playing the appropriate help video.

HelpFrame components

- Layered Pane – Background
  - Label – Heading
  - Button – Help
  - Button – Close
  - Button – Prints the contents of the text area
  - Text Area – Displays the help text from the help text files

NO	COMPONENT	INPUT	EVENT
0	Frame		
1	Layered pane		
2	Label		
3	Button	Mouse	Brings up the Help Frame
4	Text area		
5	Button	Mouse	Starts the printing process - brings up the printing configurations to begin printing
6	Button	Mouse	Closes the Help Frame

ExitFrame

The ExitFrame is a simple frame pulled up after clicking on the logout button on the LoginFrame. It asks the user to confirm that they want to log out.

ExitFrame components

- Layered Pane – Background
  - Label – Title(You are about to exit)
  - Label – Confirmation message(Are you sure you want to exit
  - Button – Exit(closes application)
  - Button – Return(goes back to LoginFrame)

NO	COMPONENT	INPUT	EVENT
0	Frame (not visible)		
1	Layered pane		
2	Label		
3	Label		
4	Button	Mouse	Leads to the Admin Login Frame
5	Button	Mouse	Closes the application

1.5 Specification of Help

Tool Tip Text

Each button will feature tooltip text that appears when the user hovers over it. This informative text will guide the user on the button's purpose and the functions it performs.

Help Screen

The Help Screen will include a Text Area for displaying relevant text files based on the screen from which the user accessed the help screen and a video button that pulls up the relevant help video.

For example: if the user accessed the Help Screen from the Visits Table Screen. The corresponding text file (VisitsTable.txt) that contains instructions on how to navigate and use the Visits Table will be pulled up and displayed in the Text Area.

The two main components of the Help Screen
- Text Area to display relevant text file
- Video button to pull up relevant help video

1.6 Permanent Data Storage

Patrons Table

Patrons Table is a table that is used to store all patrons that have visited the casino and all their relevant corresponding data such as their personal information, card level and their join date.

Patron Table fields:

- **PatronID**: Primary key of the Patron Table used to identify each patron
  - String
- **FirstName**: First name of each patron
  - String
- **Surname**: Surname of each patron
  - String
- **Gender**: Male, Female or Other
  - Combo Box
- **DateOfBirth**: The patron's date of birth
  - Date Chooser
- **HomeAddress**: Patron's place of residence
  - String
- **EmailAddress**: Patron's email address
  - String
- **CardLevel**: The patron's card level (signifies their ranking and spending habits)
  - Combo Box
- **JoinDate**: Date the patron joined the casino database
  - Date Chooser

Events Table

Events Table is a table used to store all events and their associated data such as the event name, start and end date and location.

Event Table fields:

- **EventID**: Primary key of the Events Table field used to identify each event
  - String
- **EventName**: Name of each event
  - String
- **StartDate**: Date the event starts
  - Date/Time
- **EndDate**: Date the event ends
  - Date/Time
- **Location**: Physical or Online
  - Combo Box
- **Capacity**: the number of patrons that can attend the event
  - Integer
- **Status**: Either scheduled and Cancelled
  - Combo Box
- **RegistrationDeadline**: the latest date that a patron may register for the event
  - Date/Time

Visits Table

Visits Table is a table that is used to document all the visits each patron makes to the casino. It will include relevant information relating to the visit such as the PatronID (primary key of the patrons table used to identify each patron) and other information such as amount spent, the date and any other important information relating the visit.

Visits Table fields:

- **VisitNo**: Primary key of Visits Table used to identify each visit (autonumber)
  - Auto-number
- **EventID**: Primary key of Events Table used to identify each event
  - String
- **PatronID**: Primary key of Patrons Table used to identify each patron
  - String
- **Username**: Primary key of Users Table used to identify which admin logged the visit
  - String
- **AmountSpent**: Currency value showing the amount spent in rands
  - Double
- **DateOfVisit**: The date of which the visits occurred
  - Date/Timebreak:

1.7 Hardware and Software

User requirement

Hardware requirements (RAM, CPU, Storage)

CPU: Intel I3 10th gen or Ryzen equivalent
RAM: 4GB DDR3
Storage: 128GB HDD or SSD
1024 x 1080 resolution monitor
Keyboard and Mouse/Trackpad

Software requirements

Java Runtime Environment 8
MS Access 2010 or later versions
Windows 10 (Not MacOS)

Developer requirements

Hardware requirements

CPU: Inter I5 10th gen or Ryzen equivalent
RAM: 8GB DDR4 3200MHz
Storage: 128GB SSD preferred (HDD usable)
1920 x 1080 resolution monitor
Keyboard and Mouse

Software requirements

Java Development Kit 8 (automatically containing JRE)
Netbeans IDE 8.2
MS Access 2010 or later versions
Windows 10 or higher (Not MacOS)
Video editing software (Canva recommended)

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Appendices