**Project Test Plan:**

Hotel Reservation Program

**Group 8:**

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**Revision History**

| **Date** | **Description** | **Author** |
| --- | --- | --- |
| 11/14/2023 | First Draft Created | Megan Moore |
| 11/19/2023 | Added the more test cases and added the requirement numbers to the test plan table | Mario Bethancourt |
| 11/21/2023 | Final Revisions | Mario and Jules |
| 11/26/2023 | Updated document based on feedback | Mario Bethancourt |
| 11/09/2023 | Made final updates | Mario Bethancourt |

**Test Plan Purpose:**

The test plan for the Hotel Reservation System outlines the strategy and approach for each case number. Each test case contains an example scenario in a user inputting information and using the system and the expected outcome from the application. The importance of the test case plane is to ensure the deliverability of a reliable and functional Hotel Reservations System. Below is the test case table that will be used as a guide for the testing team, providing a roadmap to validate the system meets its requirements.

**Test Plan Scope:**

The test plan scope provides clarity to the testing team and the program’s stakeholders about what will be tested and what will not be tested. The following items will be tested in the Hotel Reservation System:

* Features and Functionality: User login and creation. Reservation creation and modification. Hotel room availability and pricing calculations.
* User Interfaces: A graphical user interface (GUI) which is a digital interface that contains graphical components such as icons, buttons, and menus. The GUI will be used and tested on its user-friendly mobility.
* Security: Define the scope of security testing, covering aspects like data encryption, user authentication, authorization, and protection against common security threats.
* Performance: Test the hotel reservation system’s performance aspects, such as input error handling.

**Test Plan Objectives:**

The Hotel Reservation System’s testing features and items are listed below:

* Reservation creation and modification.
* Availability and pricing calculations.
* Integration with external systems (if any).
* User registration and login.
* Room availability and booking.
* Cancellation and modification of reservations.

**Test Plan Deliverables:**

The Hotel Reservation System test deliverables contain a detailed test table with assigned test case numbers. Each test case contains the description, expected result, actual result and pass or fail. Screenshots of the Hotel Reservation System in operation of the test will also be provided as reference.

| **Test Case Number** | **Requirement Number** | **Test Description** | **Expected**  **result** | **Actual**  **result** | **Pass/**  **Fail** |
| --- | --- | --- | --- | --- | --- |
| 1 | 1, 7 | The user when starting the program will login to the Hotel Reservation system, in the main menu. After clicking a button named “Log in” they will use their username and password to log in.  **Example:**  Username: “JohnDoe12”  Password: “10Hnd03l@”  If the user leaves the username or login blank or incorrect they won’t be logged in. | The Hotel Reservation system will validate the user’s credentials and allow the user to make reservations. If the user leaves their username or password blank or wrong they won’t be logged in. |  |  |
| 2 | 1, 2 | The user will click the “create account” button from the main menu, after that they will be prompted to create a login account to the Hotel Reservation system. They will be asked to write using their personal information, this is their name, last name, phone number, address(street number, and street name), email, state, city, and Zip Code. They will be asked to write their username and password.  **Example of personal information:** “Name: John”, “Last name: Doe”, “Phone number: 1234567890”, “Street number: 12345, Street name: Main st, Email: [johnD@gmail.com](mailto:johnD@gmail.com), State: MD, City: Rockville, Zip Code: 12345”. **Example of username and password:** “Username: JohnDoe12”  “Password: 10Hnd03l@” | The Hotel Reservation system will validate the user’s input and store it in the user’s information database for future use. The hotel reservation system will continue to the booking site. |  |  |
| 3 | 3 | The users from the main menu, will be able to click the “view reservations” button and search for available or reserved hotel rooms. The program will show room types, and price details to the user. They don’t need to log in if they just want to view available reservations. **Example of what will be displayed to the user:**  Room 101 - Available - Price: $120.0 per night  Room 102 - Available - Price: $150.0 per night  Room 103 - Available - Price: $190.0 per night  Room 104 - Available - Price: $220.0 per night  Room 201 - Available - Price: $120.0 per night  Room 202 - Available - Price: $150.0 per night  Room 203 - Available - Price: $190.0 per night  Room 204 - Available - Price: $220.0 per night  Room 301 - Available - Price: $120.0 per night  Room 302 - Available - Price: $150.0 per night  Room 303 - Available - Price: $190.0 per night  Room 304 - Available - Price: $220.0 per night  Pricing logic: rooms ending in 1 (101, 201, and 301)are priced at $120.0 and are single queen size bed rooms.  rooms ending in 2 (102, 202, and 302) are priced at $150.0 and are double queen size bed rooms.  rooms ending in 3 (103, 203, and 303) are priced at $190.0 and are deluxe rooms with one king size bed.  rooms ending in 4 (104, 204, and 304) are priced at $220.0 and are suite rooms with two king size beds. | Hotel reservation systems allow the user to view reservations that are available or reserved after they click the view reservations buttons. |  |  |
| 4 | 4, 5, 9, 10 | Users after they are logged in, will be able to reserve rooms after clicking the “make reservation” button from the main menu. There will be a list of reservations available and the user can reserve them and type their check in and check out date and number of people.  **Example:**  Room 101 - Available  Room 102 - Reserved  Room 103 - Available  Then, the program will ask which reservation the user wants when the user clicks the “Reserve” button. They will have the choice of picking their desired room by clicking the room they want by room number. For example the user can click on room “101” to reserve it. The user will be able to reserve as many rooms as they want as long as they are available.  After the user picks their room they will be able to write the check in date and check out date in mm-dd-yyyy format. **Example:** “Check in: 11-20-2023” “Check out: 12-01-2023”. When they make another reservation they will be asked to write the check in/out date again. After that, the user input how many people will stay, with a minimum of 1 person, and a maximum of 10. | Hotel reservation system will book a hotel room based on their room number and display a confirmation message. The user will be able to write a check in and check out date for each reservation. The user will be able to input how many people will stay. |  |  |
| 5 | 4, 9 | If the user inputs invalid information, the program will prompt the user to correct their information. So when the user tries to reserve an already reserved room they will be asked to try again. **Example:**  Room 101 - Available  Room 102 - Reserved  Room 103 - Available  User selects: “102” when reserving this room. The program display a message saying that this room is reserved, pick another one” | Hotel system will display an error message and prompt the user to fix their mistake. |  |  |
| 6 | 7 | Users will be able to log out of the system after they are finished making their reservation or viewing their account. When the user is logged in, from the main menu they will click the “logout” button, then the program will display: “You are logged out”, the user will need to log back in if they want to reserve a room or view information again. | Hotel system will display a confirmation message of properly logged out of the system. |  |  |
| 7 | 12 | When the user is logged in, they will be able to delete a reservation. After the user is logged in and has made a reservation, from the main menu they will click the “View Account” button, this will take them to another screen displaying their reserved rooms if they have any. From the view account screen they can click the “delete reservation” button and type which reservation they want to remove. They will do it by writing the room’s number. **Example:**  Assuming the user reserved room 102 then they will be asked:  “Enter reservation to delete:” the user types: “102”. A message displays confirmation that the reservation is deleted. | Hotel system will allow users to login by validating credentials and will display present bookings. The system will complete the cancellation process and display confirmation if the user decided to delete a reservation. |  |  |
| 8 | 11 | Users will update reservation details, such as their personal information or reservation. When the user is logged in and made an account, from the main menu they will click the “View Account” button, this will take them to another screen displaying their personal information that they provided. (The user can use their ID provided to them to access this part of the program). On this screen there will be another button called “update information”, when the user clicks it, they will be taken to another screen similar to the create account screen but this only is for updating their information. **Example of information they can update assuming they have something different than the example:**  “Name: John”, “Last name: Doe”, “Phone number: 1234567890”, “Street number: 12345, Street name: Main st, Email: johnD@gmail.com, State: MD, City: Rockville, Zip Code: 12345”. **Example of username and password:** “Username: JohnDoe12”  “Password: 10Hnd03l@”. | The system should successfully update the user’s information. The user should receive a confirmation message. |  |  |
| 9 | 6, 10 | The program will generate a bill for the user for an existing reservation. When the user is logged in and makes a reservation, a payment total will be displayed in the view account screen. To access this screen, from the main menu the user needs to click the view account, if they are logged in their payment information will be displayed. **Example of how it will look or similar to how it’s envisioned to look:**  Room 101 - Reserved - $120.0 per night  Check-in Date: 12-12-2023  Check-out Date: 12-20-2023  Room 102 - Reserved - $150.0 per night  Check-in Date: 12-13-2023  Check-out Date: 12-29-2023  Total Reservation Price Per Night: $270.0. | The system should generate a bill for the specified reservation, displaying the relevant charges and details. |  |  |
| 10 | 5, 10 | The user checks in for a reservation. From the main menu screen if the user is logged in, they can click the Check “In/Out” button, this will take them to another screen. If they are not logged in, the program will ask the user to log in first. If the user is logged in they will be able to click the “check in” button and they will be given an ID that they can use in the hotel or quick access to their account in the hotel program. When the reservation is made an ID made from random numbers and a letter will be provided. **Example:** “Your ID: U123” | The system should update the reservation status to "checked in," and the user should see the updated reservation details in their account information. |  |  |
| 11 | 5 | The user checks out of their reservation. From the main menu screen if the user is logged in, they can click the Check “In/Out” button, this will take them to another screen. If they are not logged in, the program will ask the user to log in first. If the user is logged in they will be able to click the “Check Out” button and then their room will be available again to reserve. | The system should update the reservation status to "checked out". |  |  |
| 12 | 1, 2 | User attempts to make an account without providing personal information. If the user inputs invalid information, the program will prompt the user to correct their information. So from the main menu, the user can click the “create account” button. When the user tries to create an account, from the create account screen, and they input information that is invalid they will be asked to fix it.  Criteria for personal information:  Name: at least one character.  Last Name: at least one character.  Phone: at least 10 numbers.  Address: at least 10 characters and numbers.  Username: at least 6 characters, or numbers, or special characters.  Password: at least 8 characters, or numbers, or special characters.  **Examples of valid personal information:** “Name: John”, “Last name: Doe”, “Phone number: 1234567890”, “Street number: 12345, Street name: Main st, Email: johnD@gmail.com, State: MD, City: Rockville, Zip Code: 12345”. **Example of username and password:** “Username: JohnDoe12  **Examples of invalid personal information:** “Name: ”(left blank), “Last name: ”(left blank), “Phone number: 123”, “Address: ” (Left blank), “email: ”(left blank), “Street name: “, “ Street number: ”, “State: “, “City: “, “Zip Code: “. **Example of invalid usernames and passwords:** “Username: bob”  “Password: 1” | The system should display an error message indicating that all required personal information must be provided for a successful account creation. The program will display what needs to be fixed:  Name: at least one character.  Last Name: at least one character.  Phone: at least 10 numbers.  Address: at least 10 characters and numbers.  Email: at least 1 character and maximum of 50 characters.  Street Name: minimum of 1 character and a maximum of 25 characters.  Street Number: minimum of 1 digit and maximum of 10 digits.  City: minimum of 4 characters and maximum of 30.  State:only 2 characters.  Zip Code: minimum of 5 digits and a maximum of 9 digits.  Username: at least 6 characters, or numbers, or special characters.  Password: at least 8 characters, or numbers, or special characters. |  |  |