



CLINICLA MANAGEMENT SYSTEM

Test case Report

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Test Cases for Admin Mode Functionalities:

Test Case ID	Functionality	Scenario	Steps	Expected Outcome	Actual Outcome	Pass/Fail
TC-1	Add New Patient	Successful addition of a new patient record.	1. Enter valid details for a new patient. 2. Ensure the patient ID is unique. 3. Verify patient record is added to the system.	Confirmation message: "Patient record added successfully."	Confirmation message: "Patient record added successfully."	Pass
TC-2	Maximum Patients Limit	Attempt to add a patient when maximum patients (MAX_PATIENTS) are already added.	1. Add MAX_PATIENTS patients initially. 2. Try to add one more patient.	Error message: "Maximum number of patients reached."	Error message: "Maximum number of patients reached."	Pass
TC-3	Duplicate Patient ID	Attempt to add a patient with an ID that already exists in the system.	1. Add a patient with a specific ID. 2. Try to add another patient with the same ID.	Error message: "Error: Patient ID already exists. Cannot add patient."	Error message: "Error: Patient ID already exists. Cannot add patient."	Pass
TC-4	Edit Patient Record	Successfully edit an existing patient's record.	1. Enter valid patient ID to edit. 2. Provide new details for the patient. 3. Verify changes are updated in the system.	Confirmation message: "Patient record updated successfully."	Confirmation message: "Patient record updated successfully."	Pass

TC-5	Patient ID Not Found	Attempt to edit a patient record with an ID that does not exist in the system	1. Enter an invalid patient ID to edit.	Error message: "Patient with ID <ID> not found."	Error message: "Patient with ID <ID> not found."	Pass
TC-6	Reserve Slot	Successfully reserve a slot for a patient.	1. Enter valid patient ID to reserve slot. 2. Choose an available slot. 3. Verify slot is reserved for the patient.	Confirmation message: "Slot reserved successfully."	Confirmation message: "Slot reserved successfully."	Pass
TC-7	Patient Already Reserved	Attempt to reserve a slot for a patient who already has a reserved slot.	1. Reserve a slot for a patient. 2. Try to reserve another slot for the same patient.	Error message: "Patient already has a reserved slot."	Error message: "Patient already has a reserved slot."	Pass
TC-8	Invalid Slot Choice	Attempt to reserve a slot with an invalid slot number (out of range or already reserved).	1. Enter valid patient ID to reserve slot. 2. Choose an invalid slot number. 3. Verify error message.	Error message: "Invalid slot choice."	Error message: "Invalid slot choice."	Pass
TC-9	Cancel Reservation	Successfully cancel a reservation for a patient.	1. Enter valid patient ID to cancel reservation.	Confirmation message: "Reservation cancelled for patient <name> in slot <time>."	Confirmation message: "Reservation cancelled for patient <name> in slot <time>."	Pass

			2. Verify reservation is cancelled and slot becomes available.			
TC-10	No Reservation to Cancel	Attempt to cancel a reservation for a patient who does not have any reservations.	1. Enter valid patient ID to cancel reservation. 2. Verify patient has no reservations to cancel.	Error message: "Patient with ID <ID> does not have any reservations to cancel."	Error message: "Patient with ID <ID> does not have any reservations to cancel."	Pass
TC-11	View Requests	Display all requests and reservations for patients.	1. View all requests and reservations currently in the system.	Display all patient requests and reservations in a formatted list.	Display all patient requests and reservations in a formatted list.	Pass
TC-12	Invalid Admin Choice	Enter a non-integer value as the admin password.	1. Enter a non-integer value when prompted for the admin password.	Error message: "Invalid input. Please enter a valid password (integer)."	Error message: "Invalid input. Please enter a valid password (integer)."	Pass
TC-13	Invalid Password Input	Enter a non-integer value as the admin password.	1. Enter a non-integer value when prompted for the admin password.	Error message: "Invalid input. Please enter a valid password (integer)."	Error message: "Invalid input. Please enter a valid password (integer)."	Pass
TC-14	Maximum Password Attempts	Exceed the maximum number of attempts to	1. Enter incorrect admin password three times consecutively.	Error message: "Maximum password attempts	Error message: "Maximum password attempts	Pass

		enter the correct admin password.		reached. Exiting admin mode."	reached. Exiting admin mode."	
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Test Cases for User Mode Functionalities:

Test Case ID	Functionality	Scenario	Steps	Expected Outcome	Actual Outcome	Pass/Fail
TC-1	View Patient Record	Successfully view the record of an existing patient.	1. Enter a valid patient ID that exists in the system. 2. Verify that patient details are displayed correctly.	Display patient's ID, name, age, gender, and reservation details if any.	Display patient's ID, name, age, gender, and reservation details if any.	Pass
TC-2	View Patient Record	Attempt to view the record of a non-existing patient.	1. Enter a patient ID that does not exist in the system. 2. Verify the error message displayed.	Error message: "Patient with ID <ID> not found."	Error message: "Patient with ID <ID> not found."	Pass
TC-3	View Today's Reservations	Successfully view today's reservations when some patients have reserved slots.	1. Ensure some patients have reservations. 2. Run viewTodayReservations. 3. Verify that reserved slots are listed.	Display all patients with reserved slots and their reservation times.	Display all patients with reserved slots and their reservation times.	Pass
TC-4	View Today's Reservations	No reservations are present.	1. Ensure no patients have reservations. 2. Run viewTodayReservations. 3. Verify that the appropriate message is displayed.	Message: "No reservation today yet."	Message: "No reservation today yet."	Pass
TC-5	Request to Reserve	Successfully request to reserve a slot when the number of requests is	1. Enter valid patient details. 2. Provide a reservation slot. 3. Verify the request is added to the system.	Confirmation message: "Request submitted successfully."	Confirmation message: "Request submitted successfully."	Pass

		below the maximum limit.				
TC-6	Request to Reserve	Attempt to request a reservation when the maximum number of requests is reached.	1. Fill the requests list to MAX_REQUESTS. 2. Try to add one more request. 3. Verify the error message.	Error message: "Maximum number of requests reached."	Error message: "Maximum number of requests reached."	Pass
TC-7	Duplicate Request ID	Attempt to submit a request with an ID that already exists.	1. Submit a request with a specific ID. 2. Try to submit another request with the same ID. 3. Verify the error message.	Error message: "Error: Request ID already exists. Cannot add request."	Error message: "Error: Request ID already exists. Cannot add request."	Pass
TC-8	Invalid Input for Choice	Enter a non-integer value when selecting a menu option.	1. Enter a non-integer value when prompted for the menu choice. 2. Verify the error message.	Error message: "Invalid input. Please enter a valid choice (integer)."	Error message: "Invalid input. Please enter a valid choice (integer)."	Pass
TC-9	Logout from User Mode	Successfully log out of user mode	1. Choose the logout option from the menu. 2. Verify that user mode ends and the system returns to the main menu.	Message: "Logging out of user mode."	Message: "Logging out of user mode."	Pass
TC-10	Invalid Reservation Slot	Attempt to submit a request with an	1. Enter valid patient details. 2. Provide an invalid reservation slot.	Error message: "Invalid reservation slot."	Error message: "Invalid	Pass

		invalid or non-existent reservation slot.	3. Verify the error message.		reservation slot."	
TC-11	Multiple Inputs Handling	Handling multiple inputs for different functionalities in a single user session.	1. Navigate through multiple menu options. 2. Verify that the system correctly handles each input and provides appropriate responses	System correctly processes multiple inputs and provides appropriate responses for each option.	System correctly processes multiple inputs and provides appropriate responses for each option.	Pass

Test Cases for Clinic Management System Main Menu:

Test Case ID	Functionality	Scenario	Steps	Expected Outcome	Actual Outcome	Pass/Fail
TC-1	Admin Mode Selection	Selecting Admin Mode from the main menu.	1. Program starts, displaying main menu.	Admin Mode is selected, prompting for admin credentials.	Admin Mode functions accessible after successful login.	Pass
TC-2	User Mode Selection	Selecting User Mode from the main menu.	1. Program starts, displaying main menu.	User Mode is selected, prompting for user options.	User Mode functions accessible.	Pass
TC-3	Exit Program	Selecting Exit from the main menu.	1. Program starts, displaying main menu.	Program gracefully exits with a goodbye message.	Program exits without errors.	Pass
TC-4	Invalid Input - Non-integer	Entering a non-integer value for menu choice.	1. Enter a character or string when prompted for menu choice.	Error message prompts to enter a valid integer choice.	Program handles non-integer input gracefully.	Pass
TC-5	Invalid Input - Out of Range	Entering an out-of-range number for menu choice.	1. Enter a number greater than 3 or less than 1 for menu choice.	Error message prompts to enter a valid menu option.	Program handles out-of-range input correctly.	Pass
TC-6	Sequential Selection - Admin to User to Exit	Sequentially selecting Admin Mode, User Mode, and Exit.	1. Select Admin Mode (1), then User Mode (2), and finally Exit (3).	Admin Mode -> User Mode -> Program exits successfully.	Sequential menu transitions are smooth; program exits as expected.	Pass

TC-7	Sequential Selection - User to Admin to Exit	Sequentially selecting User Mode, Admin Mode, and Exit.	1. Select User Mode (2), then Admin Mode (1), and finally Exit (3).	User Mode -> Admin Mode -> Program exits successfully.	Sequential menu transitions are smooth; program exits as expected.	Pass
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