

Assessment 4 (Individual)

Activity 1.1:

Test cases for addPrescription function

Note- "f" is used to indicate float values for prescription constructor

Test Cases	Test Data	Expected Result	Test Result	Pass/Fail
Test Case 1: Valid Names for Prescription, checking the lower and upper bound	Prescription(1, "John", "Sith", "123 Main St, Suburb, 12345, Country", -3.50f, 90f, -2.00f, dateFormat.parse("01/10/23"), "Dr. Jonathan") Prescription(2, "AlexanderParker", "Christophersons", "123 Main St, Suburb, 12345, Country", -3.50f, 90f, -2.00f, dateFormat.parse("01/10/23"), "Dr. Jonathan")	Both prescriptions should be added successfully.	Both prescriptions were added successfully.	Pass
Test Case 2: Invalid Names for Prescription, just above and below boundaries	Prescription(3, "Sam", "Tom", "789 Example Road, Area, 6000, Country", -2.0f, 180f, -1.00f, dateFormat.parse("01/10/23"), "Dr. Jonathan") Prescription(4, "AlexanderTheGreat", "VeryLongLastName", "789 Example Road, Area, 6000, Country", -2.0f, 180f, -1.00f, dateFormat.parse("01/10/23"), "Dr. Jonathan")	Neither prescription should be added due to invalid first and last names.	Both prescriptions were not added.	Pass
Test Case 3: Invalid Address, both below required length	Prescription(5, "Alice", "Brown", "1 Main St, City, CA", -3.50f, 90f, -2.00f, dateFormat.parse("20/10/23"), "Dr. Jonathan") Prescription(6, "Alice", "Brown", "Short Address", -3.50f, 90f, -2.00f, dateFormat.parse("20/10/23"), "Dr. Jonathan")	Both prescriptions should not be added due to invalid addresses.	Both prescriptions were not added.	Pass

Test Case 4: Valid Axis Values, checking the lower and upper bound	<div>Prescription(7, "David", "Leen", "1234 Oak St, City, 2000, Country", 2.5f, 0.00f, -2.0f, dateFormat.parse("12/10/23"), "Dr. Jonathan")</div> <div>Prescription(8, "David", "Leen", "1234 Oak St, City, 2000, Country", 2.5f, 180f, -2.0f, dateFormat.parse("12/10/23"), "Dr. Jonathan")</div>	Both prescriptions should be added successfully.	Both prescriptions were added successfully.	Pass
Test Case 5: Test the addPrescription function with invalid Axis, Sphere and Cylinder values, checking values above and below boundaries	<div>Prescription(9, "David", "Leen", "1234 Oak St, City, 2000, Country", -21.0f, -1.0f, -5.0f, dateFormat.parse("12/10/23"), "Dr. Jonathan");</div> <div>Prescription(10, "David", "Leen", "1234 Oak St, City, 2000, Country", 21.0f, 181.0f, 5.0f, dateFormat.parse("12/10/23"), "Dr. Jonathan");</div>	Neither prescription should be added due to invalid Axis, Sphere and Cylinder values	Both prescriptions were not added.	Pass
Test Case 6: Test the addPrescription function with all valid values to see if a fully valid prescription can be added	<div>Prescription(11, "Fallah", "David", "1234 Oak St, City, 2000, Country", -2.0f, 90f, -4.0f, dateFormat.parse("12/10/23"), "Dr. Jonathan")</div> <div>Prescription(12, "Fallah", "David", "1234 Oak St, City, 2000, Country", 2.0f, 90f, 4.0f, dateFormat.parse("12/10/23"), "Dr. Jonathan")</div>	Both prescriptions should be added successfully.	Both prescriptions were added successfully.	Pass

Test cases for **addRemark function**

Test Cases	Test Data	Expected Result	Test Result	Pass/Fail
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Test Case 1: Valid Remark Length	1. ("This is a valid remark test.", "client") 2. ("This is a long valid remark which includes exactly twenty words for testing purposes to ensure it works as expected.", "optometrist")	Both remarks should be added successfully.	Both remarks were added successfully.	Pass
Test Case 2: Invalid Remark Length	1. ("Five words, not long enough.", "client") 2. ("This remark has exactly twenty one words which makes it invalid as per the rules for adding remarks in the system.", "optometrist")	Both remarks should not be added due to invalid length.	Both remarks were not added.	Pass
Test Case 3: Valid Capital Letter at Start	1. ("This is considered a valid remark.", "client") 2. ("Valid remark again with capital start.", "optometrist")	Both remarks should be added successfully.	Both remarks were added successfully.	Pass
Test Case 4: Invalid Capital Letter at Start	1. ("this remark should not be valid.", "client") 2. ("remark not starting with capital letter.", "optometrist")	Both remarks should not be added due to invalid start.	Both remarks were not added.	Pass
Test Case 5: Valid Category	1. ("This is a valid remark for the client.", "client") 2. ("This is a valid remark for the optometrist.", "optometrist")	Both remarks should be added successfully.	Both remarks were added successfully.	Pass
Test Case 6: Invalid Category	1. ("This is an invalid category remark.", "admin") 2. ("This is another invalid category remark.", "staff")	Both remarks should not be added due to invalid categories.	Both remarks were not added.	Pass

Activity 1.3:

Link to my GitHub repository:

<https://github.com/s4002485/softwareassignment4>

Activity 2:

User Story 1: Prescription Management

As an Optometrist, I want to add a prescription for a patient so that the patient can have their details on file and access it for future use.

Acceptance Criteria:

1. The system must validate that all prescription fields (e.g., patient name, cylinder, axis, sphere) are correctly filled.
2. The system should ensure the prescription is saved only if all fields pass validation.
3. The System should notify the Optometrist with a confirmation message upon successful prescription entry.

User Story 2: Viewing Prescription History

As a Patient, I want to view my previous prescriptions so that I can easily access them for reference.

Acceptance Criteria:

1. The system must display a list of past prescriptions with details such as the prescription date, optometrist name, and prescription values.
2. The system should allow the patient to filter prescriptions by date range.
3. The patient must be logged in to view their prescription history.

User Story 3: Adding Remarks to a Prescription

As an Optometrist, I want to add remarks to a patient's prescription so that additional observations can be recorded for future reference.

Acceptance Criteria:

1. The system must validate that the remark text is between 6 and 20 words.
2. The system should ensure only up to two remarks can be added per prescription, categorized as 'client' or 'optometrist.'
3. The system should display a success message once a remark is added to the prescription.

User Story 4: Managing Appointments

As a Patient, I want to schedule an appointment with an optometrist so that I can consult them for my eye care.

Acceptance Criteria:

1. The system must allow the patient to view and select only available dates and times for the appointment.
2. The system must confirm the appointment within the EyeClear platform and provide a confirmation notification within the user dashboard.
3. The system should allow the patient to view their scheduled appointments and modify or cancel them if necessary.

User Story 5: Purchasing Glasses

As a Patient, I want to purchase glasses through the EyeClear platform so that I can conveniently buy prescription eyewear.

Acceptance Criteria:

1. The system must display available glasses based on the patient's prescription.
2. The system should allow the patient to add glasses to a shopping cart and complete the purchase through a secure payment method.
3. The system must allow the patient to be able to review and confirm their order details before completing the purchase.