

Appendix B

Pharmacy Management Application

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Explicit Client Requirements' Testing Feedback

The results of the survey questionnaires given to the testers is evaluated and summarised.

Criteria Serial	Success Criteria	Met / Not Met
1	Profiles for the Front Desk, Pharmacists, Doctors, and the Admin	Met (10/10): The user could access all applications through the carousel on the home page. On successful login, the user could access the profile.
2	Only the admin profile can verify and remove employees and edit doctor specializations.	<p>Met (10/10): The admin users could successfully verify and remove employees. They could also add, edit, and delete doctor specializations. The changes for all actions were reflected in the database accordingly.</p> <p>Testers also reported that these features were not available in any of the other profiles.</p>

3	Admin and pharmacy profiles can view and edit medicines and inventory, and lab tests.	<p>Met (10/10): Both admin and pharmacy users could successfully add, view, and edit medicines, their inventory and lab test instances. The changes were also successfully reflected in the database.</p> <p>Testers also reported that these features were not available in any of the other profiles.</p>
4	The front desk profile can book appointments for new and existing patients.	<p>Met (10/10): Front desk users could successfully enter details for new patients and book their appointments. They could do the same for existing patients and link a new appointment to a previous one for continuity.</p> <p>Testers reported that the appointments were successfully reflected in the assigned doctor's application and the database.</p>

5	<p>The doctor profile can write a prescription for booked appointments.</p>	<p>Met (8/10): After an appointment was booked for a specific doctor, it was reflected for that doctor user. The doctor user could then write a prescription for that patient. However, the layout of the prescription page did not match the traditional layout.</p>
6	<p>The doctor's profile allows access to the prescription at all times, and the pharmacy profile allows access for some time, abiding by medical rules and regulations.</p>	<p>Met (10/10): Testers reported that on submission of a prescription, the doctor could view it on the home page under previous prescriptions data table. If the current prescription was associated with a previous one, doctor users could successfully view it.</p> <p>The pharmacy users could only view the prescription until they mark the status tracker for medicines and lab tests completed themselves. They are also marked as complete if the lab tests have</p>

		not been initiated at all, and the patient pays for the appointment.
7	The pharmacy profile can dispense medicines and enter the required data for lab tests.	Met (10/10): The testers were able to dispense medicines with the required quantity and enter data for lab tests. They were also able to update the status for both medicines and each individual lab test. The updates were accordingly reflected in the database and the front end.
8	Status trackers for prescribed medicines, lab tests and prescriptions.	Met (8/10): Pharmacy users were able to update the status trackers for medicines and lab tests. These updates were accordingly reflected in the database and also in the front end. For instance, if the medicines_fulfilled field was updated to true, the testers could not access those medicines again. More status trackers

		could have been implemented for even more comprehensive progress checks.
9	All required fields must be filled out before submitting; to inform the user otherwise appropriately.	Met (10/10): The testers could not submit data if the required fields were not filled. They were prompted using notifications the field that was not filled.
10	Sessions will automatically expire after a set period, requiring re-login.	Met (10/10): After every 30 minutes, axios requests to the refresh endpoint to generate a new access token. After 24 hours since login, the user is redirected to login.
11	Structured way of generating tokens at the front desk, for an ordered way of writing prescriptions by the doctor.	Met (5/10): Front desk users were able to successively generate tokens for any doctor at any given day. Testers could not find any faults. However, the concept of time slots could not have been implemented.

12	The system will calculate the total costs for an appointment based on consultations, lab tests, and medicines taken.	Met (10/10): The front desk users could see the total amount and its breakdown in the home page for due patients. Testers calculated each component manually, and found the results to be accurate.
13	The system will display clear error messages and success notifications for user actions to keep them informed.	Met (8/10): For most of the major actions, the testers reported that they were informed using notifications. However, some minor notifications were missed out. The error messages were also reported to be cryptic and not very user-friendly.

Generic Requirements

Serial	Criteria	Comments
1	Usability and Accessibility	(7/10) All the buttons and views are easy to navigate, and every page maintains a consistent user experience

		that becomes more intuitive with use. However, the interface can feel cluttered, making it somewhat confusing for first-time users.
2	Reliable and accurate database connection	(10/10) The users reported accurate data entry and retrieval, without any bugs. All actions were reflected in the database accordingly, and the users were informed accordingly in the case of an error
3	Accurate user authentication with predefined permissions	(10/10) All views had pre-defined permissions for users. Only permitted users were allowed to request or post data to that endpoint and view. Unauthorised access would result in errors.
4	Properly structured tables and models for the database	(9/10) Users upon viewing the tables felt it was efficiently structured and felt intuitive. Relationships were appropriately defined.
5	Illegal/out of bound entries should be prohibited	(10/10) PrimeVue's different components for different types of input data ensured that illegal data was not allowed. Additionally, limits for each individual fields were set if required for the smooth functioning of the application.