Literature Survey

A literature survey for a CURA HealthCare project involves researching existing studies on drug classification, reviewing scheduling/appointment systems, identifying strengths and weaknesses, addressing knowledge gaps, examining methods from previous drug classification projects, and incorporating relevant data to inform the design and implementation of the current project.

literature survey related to software testing in e-commerce environments within the context of CURA Healthcare services.

1. CURA Healthcare Service Web Testing Framework:

- ➤ A small testing framework has been developed in Java using Selenium and TestNG specifically for the CURA Healthcare Service website.
- ➤ The website under test (AUT) can be accessed at CURA Healthcare Service.

2. Sample WebUI Project in Katalon Studio:

➤ Katalon Studio provides a sample project demonstrating WebUI testing fundamentals.

The AUT for this sample project is the CURA Healthcare Service website.

You can explore WebUI testing techniques and best practices using this sample project.

3. Testing CURA Healthcare Service:

- ➤ The CURA Healthcare Service website allows patients to book appointments with doctors.
- As part of your literature survey, consider researching existing testing methodologies, tools, and approaches specific to e-commerce healthcare services.
- ➤ Investigate how other projects have addressed challenges related to security, usability, performance, and regulatory compliance in similar contexts.

4. Challenges in E-Commerce Health Care Services:

- > Testing e-commerce platforms in the healthcare sector involves unique challenges:
 - 1. Security: Ensuring data privacy and protection of sensitive patient information.
 - 2. Usability: Verifying that the user interface is intuitive and user-friendly.

- 3. Interoperability: Testing interactions between different systems (e.g., appointment scheduling, payment gateways).
- 4. Performance: Assessing system responsiveness, scalability, and reliability.
- 5. Regulatory Compliance: Ensuring adherence to healthcare regulations (e.g., HIPAA).

5. Testing Strategies for E-Commerce Health Care Services:

> Functional Testing:

- 1. Validate core functionalities such as appointment booking, prescription refills, and patient profiles.
- 2. Test scenarios related to doctor availability, medication ordering, and lab results retrieval.

> Security Testing:

- 1. Assess vulnerabilities in authentication, authorization, and data transmission.
- 2. Penetration testing to identify potential weaknesses. o Usability Testing:
 - i. Evaluate the user experience across devices (web, mobile).
 - ii. Verify accessibility features for diverse user groups.

> Performance Testing:

- 1. Load testing to simulate concurrent users during peak times.
- 2. Stress testing to assess system stability under heavy loads.

> Regression Testing:

- 1. Ensure that new features or updates do not break existing functionality.
- 2. Validate integrations with third-party services.

6. Automation in E-Commerce Health Care Testing:

- ➤ Implement test automation to improve efficiency and coverage. o Use tools like Selenium, TestNG, and Katalon Studio to automate repetitive test cases.
- > Focus on end-to-end scenarios, including appointment booking, payment processing, and feedback submission.

In summary, understanding software testing in e-commerce environments for CURA Healthcare services is essential for ensuring robust, secure, and user-friendly platforms that enhance patient experiences