**6.1P**

**Testing the SNEEZL Web Application**

Testing is a crucial step in the development process to ensure the SNEEZL web application's dependability, functionality, and performance. We may efficiently identify and address software defects using various testing methodologies, including unit, integration, and end-to-end testing.

**Unit Testing:** The primary objective of unit testing is to validate the application's smallest parts or features. To ensure correctness at a fine level, unit tests will be used to check SNEEZL's features, including pollen level calculations, symptom tracking, and AI-based prediction logic.

**Integration Testing:** Verifying that the various components of the program work together is made easier via integration testing. Tests will be carried out, for example, between the AI module and the live pollen API or between the database (which houses symptom data) and the user interface (symptom diary), to guarantee proper data flow and communication.

**End-to-end Testing:** To confirm the application's user experience and workflow, end-to-end testing will mimic real-world usage. Scenarios such as users logging symptoms, examining pollen maps, receiving AI forecasts, and exporting PDF diaries will be assessed to ensure smooth operation across the application.

By combining these testing methods, we intend to produce a strong, reliable, and excellent SNEEZL application that meets user needs and ensures seamless operation in a range of situations.