Functional & Performance Testing Template

Model Performance Test

Date	7 June 2025
Team ID	LTVIP2025TMID60699
Project Name	Sustainable Smart City Assistant Using IBM Granite LLM
Maximum Marks	

Test Scenarios & Results

Test Case ID	Scenario (What to test)	Test Steps (How to test)	Expected Result	Actual Result	Pass/Fail
FT-01	Text Input Validation (e.g., city search, feedback)	Enter valid and invalid city names, blank fields, special characters	Valid inputs accepted, error messages shown for invalid/empty input	App accepts correct input, shows "Invalid City" for wrong input	Pass
FT-02	Number Input Validation (e.g., AQI range, filters)	Enter AQI values manually or simulate inputs beyond limits (e.g., -5 or 600)	Accepts values within 0–500, shows alert for out-of-range inputs	Correctly handled edge cases, showed warnings	Pass
FT-03	Dashboard Content Generation	Select a city, wait for data to load, and check widgets (AQI, traffic, water, etc.)	All cards should populate with relevant, real-time data	Cards updated correctly with live data and visual elements	Pass
FT-04	API Connection Check	Disconnect internet, test retry	Shows error if connection fails or invalid key	Displayed "No Internet / Check	Pass

		mechanism, or wrong API key		API Key" properly	
PT-01	Response Time Test	Time how long it takes from selecting city to loading dashboard	Should complete in under 3 seconds on standard network	Average load time was 2.1 seconds	Pass
PT-02	API Speed Test	Open app in multiple tabs or simulate parallel API calls	App should not slow down or crash	No noticeable delay, app handled concurrent calls	Pass
PT-03	Mobile Responsiveness	Test app on different devices: phone, tablet, desktop	Should adapt layout and scale elements properly	Responsive across devices and resolutions	Pass
FT-05	Notification Behavior	Trigger alerts (e.g., AQI > 200) and verify notification delivery	Notifications should be smart, relevant, and non-repetitive	Sent alerts accurately without spam	Pass
FT-06	Theme Switching & UI Consistency	Switch between multiple themes, check readability, contrast, and color consistency	Theme applied consistently with correct font, dark mode respected	All themes worked as expected, no UI glitches	Pass
FT-07	Language Toggle (if implemented)	Change app language from English to another (e.g., Telugu, Hindi) and verify UI	Text should reflect new language without breaking layout	Language switch functional, some strings remain in English	Partial