

# Functional & Performance Testing Template

## Model Performance Test

Date	26 June 2025
Team ID	LTVIP2025TMID3098
Project Name	Sustainable Smart City Assistant using IBM Granite Model
Maximum Marks	

### Test Scenarios & Results

Test Case ID	Scenario (What to Test)	Test Steps (How to Test)	Expected Result	Actual Result	Pass/Fail
SC-01	Smart City Assistant Dashboard Data Load	Navigate to Smart City dashboard and load city sustainability stats	Dashboard loads with accurate, updated sustainability data	Dashboard displayed updated Smart City sustainability data	Pass
SC-02	API Connection with IBM Granite Model	Verify API key and request/response with the Granite Model	API responds successfully with relevant Smart City insights	API connection with IBM Granite Model was successful and accurate	Pass
SC-03	Environmental Query Response Time	Measure response time for pollution, traffic, and air quality queries	System should respond within 3 seconds	System consistently responded within 3 seconds	Pass
SC-04	Concurrent API Request Handling	Send multiple API requests for city updates simultaneously	API should handle multiple requests without significant delay	API handled multiple simultaneous requests without delay	Pass
SC-05	File Upload Load Test for City Sustainability Reports	Upload various PDF reports and monitor system stability	System handles file uploads smoothly without crashing	File uploads processed smoothly without system crash or delay	Pass
FT-06	Health Analytics Dashboard Data Load	Navigate to dashboard, load health statistics	Dashboard loads with correct and updated analytics data	Dashboard displayed updated health analytics correctly	Pass

Test Case ID	Scenario (What to Test)	Test Steps (How to Test)	Expected Result	Actual Result	Pass/Fail
FT-07	API Connection with IBM Granite Model for Smart City Data	Check API key and request/response with the IBM Granite Model	API responds successfully and generates accurate Smart City insights	API connection with IBM Granite Model was successful and responses were accurate	Pass
PT-01	Real-Time City Query Response Time Performance	Measure time for city-related queries (e.g., air quality, traffic)	Should respond within 3 seconds	City query response time was consistently under 3 seconds	Pass
PT-02	Concurrent API Request Performance for City Updates	Send multiple API requests for real-time Smart City updates	API should handle load without significant delay	API handled multiple simultaneous Smart City update requests without delay	Pass
PT-03	File Upload Load Test for Smart City Sustainability Reports	Upload multiple PDFs/files and monitor system stability	System should handle file uploads smoothly without crashing	File uploads processed smoothly without system crash or delay	Pass