

Functional & Performance Testing Template

Model Performance Test

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| Date | 18 February 2026 |
| Team ID | LTVIP2026TMIDS66241 |
| Project Name | Civil Engineering Insight studio |
| Maximum Marks | 3 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 | Enter valid and invalid text in description field | Valid text accepted, system handles empty input properly | System accepts valid text and handles empty input without error | Pass |
| FT-02 | Image Format Validation | Upload JPG, PNG and unsupported file types | JPG/PNG accepted, unsupported formats rejected | Only valid formats accepted | Pass |
| FT-03 | Image-Based Structure Analysis | Upload image and click "Describe Structure" | AI generates structured civil engineering analysis | Structured analysis generated correctly | Pass |
| FT-04 | API Connection Check | Run system with valid API key | Gemini API responds successfully and generates output | API response received successfully | Pass |
| PT-01 | Response Time Test | Measure time taken to generate output after clicking button | Response generated within acceptable time (3–5 seconds) | Average response time | Pass |

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|--------------|------------------------|--|--|---------------------------------------|------|
| | | | | within limit | |
| PT-02 | Multiple Request Test | Send multiple image requests sequentially | System handles multiple requests without failure | System stable under repeated requests | Pass |
| PT-03 | Image Upload Load Test | Upload large-size images and test processing | Upload multiple PDFs and check processing | Should work smoothly without crashing | Pass |