# **Functional And Performance Testing**

#### **Date**

### **Project Name**

Automated Network Request Management in ServiceNow

### **College Name**

Ideal Institute Of Technology

### Functional Testing

Functional testing ensures that each feature of the system works as intended.

### **Test Scenarios and Cases:**

Test ID	Feature	Test Description	Expected Result	Status
FT1	Service Catalog	Submit a new network request using dynamic form.	Request is submitted and stored in the system.	Pass/Fa il
FT2	Auto-Populatio n	Check if user details (Name, Email, Contact) are auto-filled.	Fields are auto-populated correctly from user profile.	Pass/Fa il
FT3	Approval Workflow	Raise a request requiring approval.	Approval request is sent to the designated approver.	Pass/Fa il
FT4	Notifications	Submit request and check email/portal updates.	Notifications are sent to requester and IT staff in real time.	Pass/Fa il
FT5	Task Assignment	Request approved → verify IT/network team task assignment.	Task is created and assigned automatically.	Pass/Fa il
FT6	Request Tracking	Employee checks request status in portal.	Status updates reflect accurately at each stage.	Pass/Fa il
FT7	SLA Monitoring	Submit request and verify SLA timer.	SLA countdown begins; breaches flagged in dashboard.	Pass/Fa il

FT8

resolution data.



## → Performance Testing

Performance testing validates the system's stability, responsiveness, and scalability under expected load.

#### **Test Types and Goals:**

Test Type	Objective	Expected Outcome
Load Testing	Simulate multiple users submitting requests simultaneously.	System handles 100+ concurrent requests without delay.
Stress Testing	Push system beyond normal load (e.g., 500 requests at once).	System degrades gracefully without crashing; error logs captured.
Response Time Testing	Measure time to submit and process a request.	Average response time < 3 seconds.
Endurance Testing	Run workflows continuously for several hours.	No memory leaks, stable performance over time.
Scalability Testing	Increase users and requests to test scaling ability.	System scales efficiently without performance drop.

### Tools & Methods

- ServiceNow Test Management for defining and executing test cases.
- Flow Designer Logs for debugging automation workflows.
- **ServiceNow Automated Test Framework (ATF):** To simulate form submission, workflow execution, and SLA tracking.
- **Performance Analytics Dashboards:** To track load, request resolution times, and SLA compliance.