✅ Functional Testing in ServiceNow

Functional testing ensures that the Cafeteria Menu Display works according to its intended design and business requirements.

1. Test Cases to Consider:

Test Case	Description
Menu Load	Verify that the daily/weekly menu loads correctly.
User Roles	Ensure only authorized users (e.g., cafeteria staff) can update menus.
CRUD Operations	Test Create, Read, Update, and Delete functions for menu items.
Time-based Display	Check that the menu updates based on current day/time (e.g., breakfast vs. lunch).
Mobile Responsiveness	Verify that the menu displays properly on mobile/tablet.
Image Attachments	If images of dishes are included, confirm upload and display.
Localization	If the app supports multiple languages, validate translations.
Notifications	Test if menu update notifications go to subscribers.

2. Functional Testing Tools in ServiceNow:

- **ATF (Automated Test Framework):**
    - Create test steps to simulate user actions.
    - Validate that forms, lists, and UI Policies behave correctly.
- **Manual Testing:**
    - Use realistic user roles (end user, admin).
    - Walk through the application manually using test cases.

🚀 Performance Testing

Performance testing validates that the application performs well under expected user loads.

1. Goals:

- Fast page loads for menu viewing
- Efficient updates by cafeteria staff
- Scalability during peak hours (e.g., lunch rush)

2. Performance Metrics:

Metric	Description
Load Time	How long it takes for the menu page to load
Response Time	Time taken for submitting menu changes
Throughput	Number of users who can access simultaneously
Error Rate	% of failed requests under load

3. Tools to Use:

- **ServiceNow Performance Analytics**: For monitoring internal metrics.
- **Instance Performance Dashboard**: Native SN tool to check system health.
- **External Load Testing Tools** (for simulation):
    - JMeter
    - LoadRunner
    - BlazeMeter (with REST API testing if applicable)

🔄 **Suggested Test Scenarios**

Scenario	Functional	Performance
Load weekly menu as a user	✅	✅
Staff updates 5 new items	✅	✅
100 users access menu at once	❌	✅
Edit access denied for unauthorized users	✅	❌

📝 **Tips**

- Create **test data** for different days and meals (breakfast/lunch/dinner).
- Use **ATF for repeatable testing** during deployments or updates.
- Include **edge cases**: empty menus, invalid formats, high image sizes.