

Cafeteria Menu Display Portal

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1. INTRODUCTION:

1.1 Project Overview

The **Cafeteria Menu Display Portal** is a centralized platform developed using ServiceNow to manage, publish, and monitor cafeteria menus within an organization. The system enables administrators to create, update, approve, and publish daily or weekly menus efficiently. Employees can access real-time menu information, including meal options, special dishes, and dietary details.

The portal integrates menu creation, Service Catalog submission, reporting, and UI-based automation to streamline cafeteria operations.

1.2 Purpose

The purpose of this project is to:

- Centralize cafeteria menu management
- Provide real-time menu updates to employees
- Automate approval and publishing workflows
- Reduce manual errors and paperwork
- Improve employee dining experience

2. IDEATION PHASE:

2.1 Problem Statement

Organizations often manage cafeteria menus manually through emails or notice boards, leading to:

- Delays in menu updates
- Lack of real-time visibility
- Errors in meal scheduling
- Poor tracking of historical menus

The Cafeteria Menu Display Portal addresses these challenges by providing a structured, automated system for menu management.

2.2 Empathy Map Canvas

Think & Feel

- Employees want clarity on daily meals
- Administrators want easy menu management
- Management wants efficiency and reduced waste

See

- Confusing or outdated notice boards
- Lack of digital tracking

Say & Do

- Employees frequently ask about menu updates
- Admins manually update spreadsheets

Pain Points

- Manual errors
- No centralized system
- Time-consuming approvals

Gains

- Real-time access
- Automation
- Historical data tracking

2.3 Brainstorming

During brainstorming, the following ideas were generated:

- Create a custom table for storing menu details
- Use Service Catalog for new menu submission
- Develop UI Action for publishing menus
- Generate reports and dashboards
- Automate status updates

3. REQUIREMENT ANALYSIS:

3.1 Customer Journey Map

1. Admin logs into ServiceNow
2. Admin creates or updates menu
3. Menu is submitted via Service Catalog
4. Menu is reviewed and published

5. Employees view published menu
6. Reports are generated for tracking

3.2 Solution Requirement

Functional Requirements

- Create and store menu details (Name, Date, Items, Status)
- Submit new menu via Service Catalog
- Publish menu using UI Action
- Generate reports grouped by menu date
- Maintain historical records

Non-Functional Requirements

- Real-time performance
- Secure access
- User-friendly interface
- Scalable architecture

3.3 Data Flow Diagram (DFD):

Level 1

Admin → Cafeteria Portal → Employee

Level 2 DFD Flow

1. Admin inputs menu details
2. System stores data in Cafeteria Menu table
3. Service Catalog processes submission
4. UI Action updates status to “Published”
5. Employees view published data
6. Reports extract data from table

3.4 Technology Stack

- Platform: ServiceNow
- Module Used:
 - Service Catalog
 - Reports & Dashboard
 - Studio
 - System Definition (Tables & UI Actions)
- Scripting: Server-side scripting (Glide API)
- Database: ServiceNow Table

4. PROJECT DESIGN

4.1 Problem Solution Fit

Problem	Solution
Manual menu updates	Automated portal
No approval system	UI Action for publishing
No reporting	Built-in reporting feature
No historical data	Table-based storage

The system aligns perfectly with organizational needs for automation and efficiency.

4.2 Proposed Solution:

The proposed solution includes:

- Creating a custom table: **Cafeteria Menu Display**
- Fields:
 - Menu Name
 - Menu Date
 - Menu Items
 - Status
- Service Catalog Item: “Submit New Cafeteria Menu”
- UI Action: “Mark as Published”
- Reports grouped by menu date
- Dashboard integration

4.3 Solution Architecture:

Architecture Layers:

1. Presentation Layer – Service Portal & Forms
2. Application Layer – Business Logic & UI Actions
3. Data Layer – Cafeteria Menu Table
4. Reporting Layer – Reports & Dashboard

Flow:

User Input → Service Catalog → Database → UI Action → Reports/Dashboard

5. PROJECT PLANNING & SCHEDULING:

5.1 Project Planning:

Phase	Activity	Duration
Planning	Requirement Gathering	1 Week
Design	Table & Catalog Design	1 Week
Development	UI Action & Reports	1 Week
Testing	Functional & Performance Testing	1 Week
Deployment	Dashboard & User Training	1 Week

Total Duration: 5 Weeks

6. FUNCTIONAL AND PERFORMANCE TESTING:

6.1 Performance Testing:

Functional Testing:

- Tested menu submission via Service Catalog
- Verified table record creation
- Checked UI Action “Mark as Published”
- Verified report generation
- Tested dashboard integration

Performance Testing:

- Verified response time for menu retrieval
- Checked report loading time
- Ensured system handles multiple entries
- Validated real-time updates

7. RESULTS:

The system successfully:

- Allows menu submission
- Publishes menus with single-click UI action
- Generates grouped reports
- Displays data on dashboard
- Maintains historical records

The portal improved administrative efficiency and employee satisfaction.

7.1 Output Screenshots:

- Studio Application Creation

The screenshot shows the ServiceNow Studio interface. On the left, there's a sidebar with a search bar and a list of recently opened applications. The main area displays a grid of application cards under the heading 'Recently opened apps'. Each card shows a small icon, the application name 'Cafeteria Menu Display', and the word 'Custom'. Below this, there's a section titled 'Resources' featuring three decorative cards with abstract geometric shapes.

- Table Structure

The screenshot shows the 'Table fields' configuration screen for the 'Cafeteria Menu Display' application. On the left, there's a sidebar with a tree view of application details like Security, User Interface, and Other. The main area has tabs for 'Forms', 'Policies and rules', and 'Table'. The 'Table' tab is active, showing a table of fields. The columns are labeled: Column label, Column name, Type, Reference, Max length, and Default. The fields listed are:

Column label *	Column name *	Type *	Reference	Max length	Default
Updated by	sys_updated_by	String		40	
Updates	sys_mod_count	Integer			
Menu Name	menu_name	String		40	Enter def...
Menu Date	menu_date	Date			Enter def...
Menu Items	menu_items	Journal Input			Enter def...

At the bottom, there's a note: 'Scope: Scope is controlled & indicated by the builder.'

- Service Catalog Form

ServiceNow Developers | Submit new cafeteria menu | Cafeteria Menu Display - Default | Smartinternz

dev270908.service-now.com/nav/ui/classic/params/target/sc_cat_item.do%3Fsys_id%3D97be4dcf830332104afee070dead3c1%26sysparm_domain...

Catalog Item - Submit new cafeteria ... ★

Catalog Item
Submit new cafeteria menu

Name: Submit new cafeteria menu Application: Cafeteria Menu Display

Catalogs: Service Catalog Active:

Category: cafeteria services Fulfillment automation level: Unspecified

State: -- None --

Checked out: -- None --

Owner: System Administrator

Item Details Process Engine Picture Pricing Portal Settings

Short description:

ServiceNow Developers | Submit new cafeteria menu | Cafeteria Menu Display - Default | Smartinternz

dev270908.service-now.com/nav/ui/classic/params/target/sc_cat_item.do%3Fsys_id%3D97be4dcf830332104afee070dead3c1%26sysparm_domain...

Catalog Item - Submit new cafeteria ... ★

Catalog Item
Submit new cafeteria menu

Related Links

Item Diagnostic
Run Point Scan

Variables (3) Variable Sets Catalog UI Policies Catalog Client Scripts Available For Not Available For Categories (1) Catalogs (1) Catalog Data Lookup Definitions

Related Articles Related Catalog Items Assigned Topics

Order Search Actions on selected rows... New

Catalog item = Submit new cafeteria menu

Type	Question	Order ▲
Date	Menu date	
Single Line Text	Menu name	
Multi Line Text	Menu items	

1 to 3 of 3

- Dashboard

The screenshot shows the ServiceNow interface for creating a new variable. The top navigation bar includes tabs for 'ServiceNow Developers', 'New Record | Variable | Service', 'Cafeteria Menu Display - Default', and 'Smartintern'. The main title is 'Variable - New Record'. The application is set to 'Cafeteria Menu Display'. The type is 'Single Line Text'. The catalog item is 'Submit new cafeteria menu'. The question is 'Specify the Question that explains the options available to the end user when ordering the item'. Other settings include Active (checked), Mandatory (unchecked), Read only (unchecked), Hidden (unchecked), and a checkbox for 'Disable automatic slot fill based on user context'.

Question Annotation Type Specifications Default Value Auto-populate Permission Availability

Specify the Question that explains the options available to the end user when ordering the item

* Question: Menu name
* Name: menu_name
Conversational label:

8. ADVANTAGES & DISADVANTAGES:

Advantages:

- Centralized system
- Real-time updates
- Reduced manual effort
- Automated workflow
- Improved transparency
- Historical tracking

Disadvantages:

- Dependent on ServiceNow platform
- Requires initial configuration effort
- Training required for administrators

9. CONCLUSION:

The Cafeteria Menu Display Portal provides a comprehensive solution for managing and publishing cafeteria menus efficiently. By leveraging ServiceNow features such as Service Catalog, custom tables, UI Actions, and Reports, the system automates menu scheduling and enhances user experience.

The project demonstrates how automation and centralized management improve operational efficiency and employee engagement.

10. FUTURE SCOPE:

Future enhancements may include:

- Mobile application integration
- Notification alerts for menu updates
- Feedback and rating system
- Integration with payment systems
- AI-based meal recommendation system
- Analytics for food consumption trends

11. APPENDIX:

Fields Used

- Menu Name (Single Line Text)
- Menu Date (Date)
- Menu Items (Multi-line Text)
- Status (Choice Field – Draft/Published)

UI Action Script

```
current.status = 'Published';
current.update();
gs.addInfoMessage("Menu has been marked as Published");
action.setRedirectURL(current);
```