

**Project Design Phase  
Solution Architecture**

Date	30 June 2025
Team ID	LTVIP2025TMID30350
Project Name	Cafeteria Menu Display
Maximum Marks	4 Marks

**Solution Architecture:**

Leveraging **ServiceNow's powerful low-code/no-code platform**, the Cafeteria Menu Display Portal can be built as a custom scoped application with seamless integration into the enterprise ecosystem. The architecture utilizes **ServiceNow's App Engine, Flow Designer, Service Portal**, and platform capabilities like notifications, role-based access, and reporting.

**1. User Interface Layer (Service Portal)**

- The user-facing experience is built using **ServiceNow's Service Portal**:

**For Admins:**

- Access menu management dashboards
- Create, update, and schedule menus via dynamic forms
- Upload images or attach files (e.g., PDF menus)

**For Employees:**

- View menus in calendar or list format
- Filter meals by type, dietary tags, or allergens
- Provide feedback or ratings

**2. Backend & Workflow Layer**

- Built using **App Engine Studio** with custom tables for:
  - Menus
  - Meals & items

- Dietary info & tags
- Feedback & ratings

## 2. Key Components

### A. Data Model

- Custom Table: **u\_cafeteria\_menu**
  - Fields include:
    - **Date** (for which the menu applies) ■
    - Meal Type** (Breakfast, Lunch, Dinner)
    - **Dish Name**
    - **Category** (Main Course, Dessert, Beverage, etc.)
    - **Calories** (optional)
    - **Is Vegetarian** (Boolean)
    - **Image URL** (optional)

## 3. Security & Access Control

- **ACLs (Access Control Rules)**
  - Only assigned roles can edit menu items
  - General users can view menus only
- **Data Validation**
  - Prevent entry of menus for past dates
  - Mandatory fields (e.g., dish name, date)

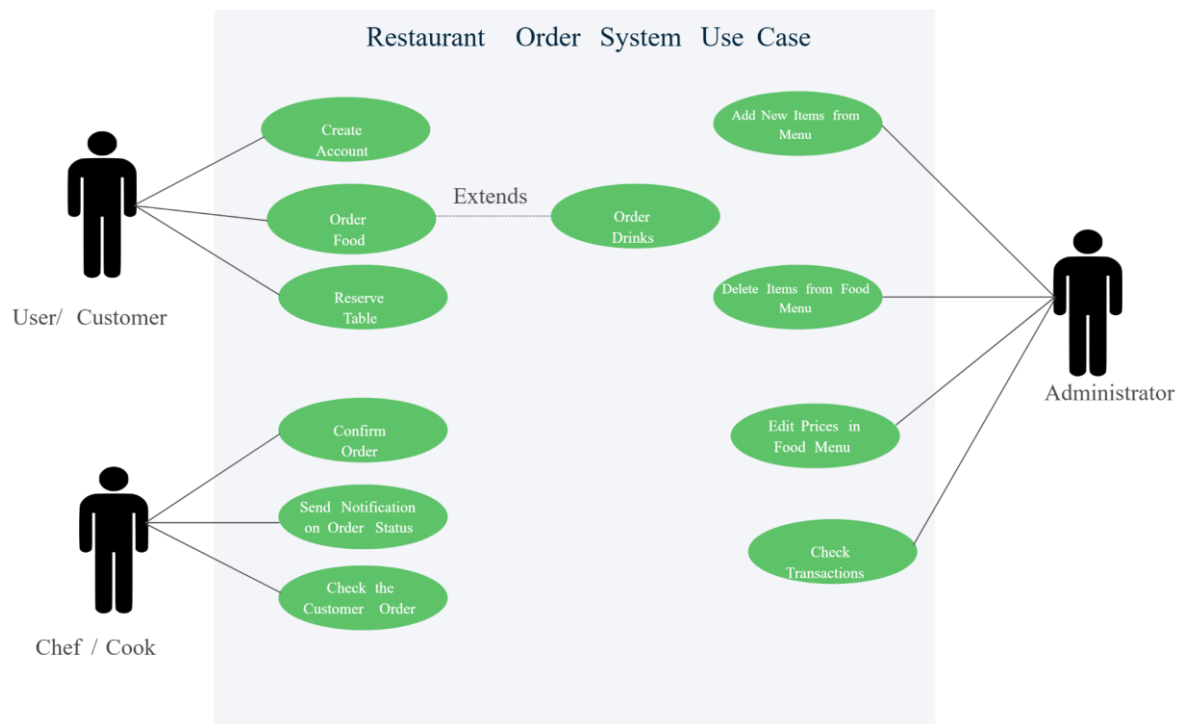
## 4. Deployment & Maintenance

- **Update Sets**
  - All configurations and scripts packaged as update sets for easy deployment across instances
- **Monitoring**
  - Logging and notification in case of data entry errors
- **User Training**
  - Brief training or help documentation for cafeteria staff

## 5. Future Enhancements

- **User Feedback**
  - Allow employees to rate meals or give feedback
- **AI Recommendations**
  - Suggest popular dishes based on previous rating

### Example - Solution Architecture Diagram:



### Reference:

<https://creately.com/diagram/example/ie54gr4b1/restaurant-order-system-template>