

Project Design Phase
Solution Architecture

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|---------------|------------------------|
| Date | 30 June 2025 |
| Team ID | LTVIP2025TMID31201 |
| 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)

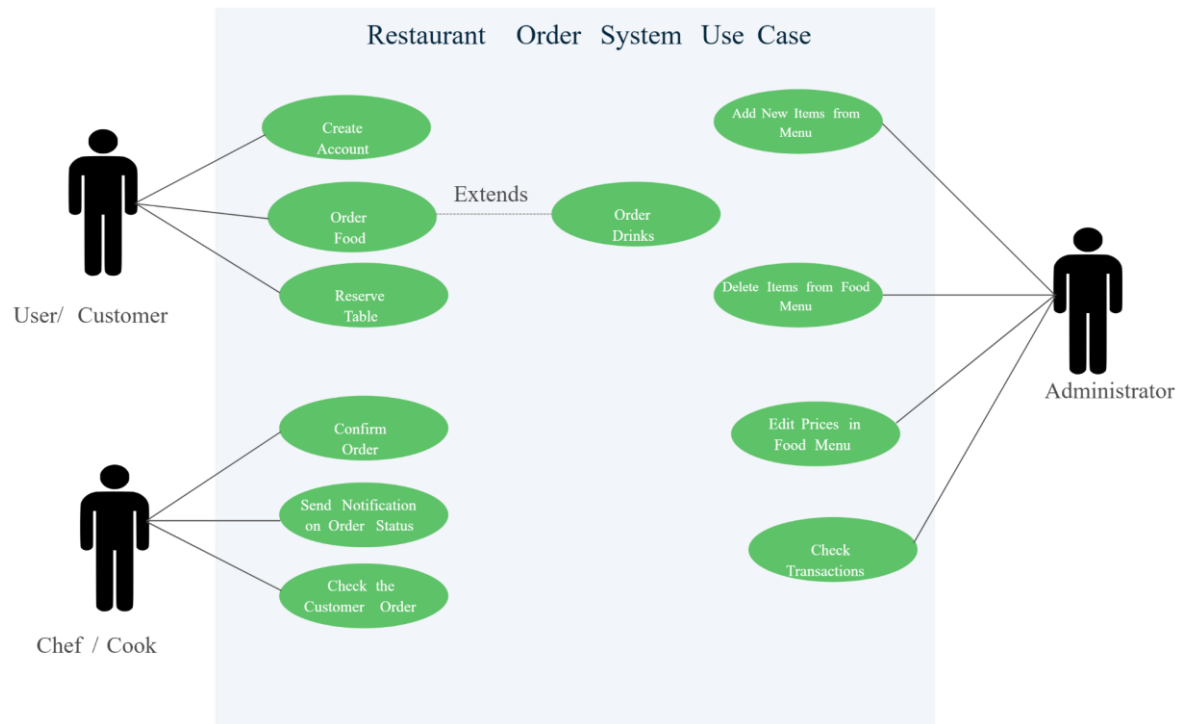
4. Deployment & Maintenance

- **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>