

Final Project Documentation

Project Title: Automated Car Catalog System for Enhanced Showroom Management

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Team Size : 4

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Project Duration: 8 hours

Internship Organization: SmartBridge

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1. Ideation Phase

The **Automated Car Catalog System** is envisioned to modernize traditional showroom operations by digitizing car listings, streamlining approval processes, and enhancing customer interaction through a ServiceNow-based portal. This idea aims to address the inefficiencies and delays caused by manual cataloging and approval procedures that often hinder customer satisfaction and operational speed.

Problem Identified

- **Manual cataloging** is inefficient, prone to errors, and lacks standardization.

- **Approval bottlenecks** delay catalog updates, impacting timely decision-making and customer engagement.
- Lack of **real-time access** to inventory and catalog data slows down showroom responsiveness.

Proposed Solution

- Develop a **centralized digital catalog** with customizable categories.
- Use **ServiceNow** to automate catalog item approvals and user requests.
- Assign **roles and permissions** (e.g., Salesperson, Manager) for better control and accountability.
- Integrate with the **Service Portal** to ensure user-friendly access for both employees and customers.

The ideation phase sets the direction for transforming a manual showroom catalog into an efficient, scalable, and user-centric digital system.

2. Requirement Analysis

To ensure successful delivery and adoption of the system, requirements were identified in two categories: **functional** (what the system should do) and **non-functional** (how the system should perform).

Functional Requirements

- **Catalog & Category Management:** Ability to create and manage various car categories (e.g., SUV, Sports).
- **Item Details:** Add car listings with specifications, media, and pricing.
- **Role-Based Access Control:** Define roles (e.g., emp1 for Salesperson) and groups (e.g., showroom team).
- **Order Requests:** Users should be able to submit catalog item requests through the portal.
- **Approval Workflows:** Each request should trigger an automated flow, routing it to the relevant approver.

Non-Functional Requirements

- **Responsive UI:** The portal should be usable across all device types (mobile, tablet, desktop).

- **Secure Access:** Access should be restricted using ServiceNow's RBAC mechanism.
- **Scalability:** The system should support growing catalog size and user volume without performance loss.
- **Reliability:** High uptime and minimal maintenance requirements.

These requirements ensure that the system is not only functional but also dependable, secure, and scalable for real-world showroom needs.

3. Project Planning

Project planning breaks down the scope into manageable tasks with estimated durations. Each task supports key milestones that track progress and ensure delivery within a short timeframe.

Estimated Duration: ~8 Hours

Tasks and Time Allocation

- **Catalog and Category Creation:** 2 hours
- **Item Setup** (e.g., Thar, Polo, XUV700): 2 hours
- **Role and Group Configuration:** 2 hours
- **Table and Workflow Setup:** 1 hour
- **Portal Testing and Validation:** 1 hour

Key Milestones

- Catalog and categories created with initial entries.
- Roles and groups defined and assigned to team members.
- Approval workflows implemented and linked to request forms.
- Portal tested for UI, accessibility, and functionality.

This structured plan enables the team to implement, validate, and refine the solution in a short sprint format.

4. Project Design Phase

The system is designed for **modularity, clarity, and ease of use**. The ServiceNow platform allows configuration without complex coding, using tables, workflows, and access control tools.

Design Overview

- **Catalog:** Named “Mahendra” to reflect the showroom brand.
- **Categories:** Sudden, XUV, and Sports for better segmentation.
- **Items:** Volkswagen Polo, Mahindra Thar, and Mahindra XUV700.

Design Elements

- **Item Records:** Each includes detailed descriptions, pricing, and visual media.
- **Fulfillment Table:** Custom table extending the ServiceNow Task table to manage catalog request life cycles.
- **Roles:** emp1 role created for Salesperson operations.
- **Groups:** 'Showroom' group includes relevant personnel for catalog management.
- **Workflows:** Built using Flow Designer, with automated routing for approvals and notification integration.

The design promotes a clean structure that is easy to maintain, update, and scale. The modular architecture allows for future enhancements like customer feedback, inventory tracking, and integration with external APIs.

5. Performance Testing

After implementation, testing ensures the system works as expected across all critical operations. This includes verifying workflows, access controls, and portal interaction.

Test Scenarios

1. **Portal Request Submission:** End-users successfully submit requests for cars via the service portal.
2. **Approval Routing:** Requests automatically route to assigned roles for approval or rejection.
3. **Notification Delivery:** Email notifications are sent to relevant users after approval actions.

Testing Tools

- Manual testing of ServiceNow UI and backend.
- Functional testing via simulated user requests.
- UI responsiveness check across different screen sizes.

Outcomes

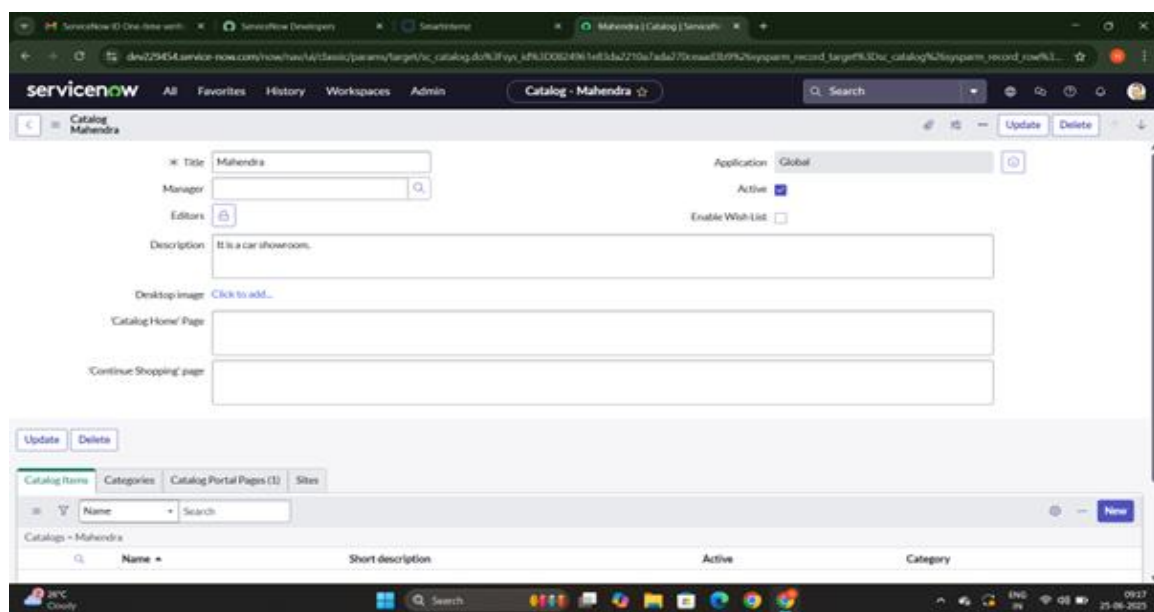
- All catalog items were visible and requestable in the portal.
- Role-based workflows operated correctly, assigning tasks to the right users.
- Emails were triggered correctly and on time.
- Portal loaded quickly with a smooth user experience.

Performance testing confirms the system is reliable, usable, and aligned with the project's functional and technical objectives.

Screenshots

◆ 1. Create Catalog

- A new service catalog titled "**Mahendra**" was created.
- This acts as the primary container for car-related service items.
- It helps organize the entire inventory and enables access via the Service Portal.



◆ 2. Create Categories

- Under the "Mahendra" catalog, three categories were added:
 - **Sudden**
 - **XUV**
 - **Sports**
- Categories allow users to filter and browse items based on vehicle type or class.

ServiceNow - Category - Sudden

Title: Sudden

Catalog: Mahendra

Location:

Description:

Application: Global

Active: ☒

Parent:

Desktop image: [Click to add...](#)

Header icon: [Click to add...](#)

Update Delete

Related Links

Make available for item discovery

Run Point Scan

Catalog Items

Catalog item	Short description	Active	Roles	Price	Type
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ServiceNow - Catalog - Mahendra

Desktop image: [Click to add...](#)

'Catalog Home' page:

'Continue Shopping' page:

Update Delete

Catalog Items

Title	Description	Active	Parent
Sudden		true	(empty)
Sports		true	(empty)
XUV		true	(empty)

Activate Deactivate

1 to 3 of 3

Item Details Process Engine **Picture** Pricing Portal Settings

Add an icon and picture for display

Icon: [Click to add...](#)

Picture: [Update](#) [Delete](#)

Item Details
Process Engine
Picture
Pricing
Portal Settings

Icon [Click to add...](#)


Picture [\[Update\]](#)[\[Delete\]](#)



Item Details
Process Engine
Picture
Pricing
Portal Settings

Icon [Click to add...](#)

Picture [\[Update\]](#)[\[Delete\]](#)



Catalog Items (3) Categories (3) Catalog Portal Pages (1) Sites				
Name Search				
Catalogs = Mahendra				
<input type="checkbox"/>	Name	Short description	Active	Category
<input type="checkbox"/>	polo	*Volkswagen Polo - Compact Hatchback wit...	true	Sudden
<input type="checkbox"/>	Thar	*Mahindra Thar - 4x4 Off-Road SUV with M...	true	XUV
<input type="checkbox"/>	XUV700	*Mahindra XUV700 - The Ultimate SUV Expe...	true	Sports

3. User Creation

- Test users were created within the ServiceNow instance.
- These users simulate roles such as customers, sales team members, and approvers.
- Each user was assigned unique credentials and associated metadata.

User sales person
Update
Set Password
Delete

User ID

01

First name

sales person

Last name

Title

Department

Password needs reset

☐

Locked out

☐

Active

☒

Web service access only

☐

Internal Integration User

☐

Email

Language

-- None --

Calendar integration

Outlook

Time zone

System (America/Los_Angeles)

Date format

System (yyyy-MM-dd)

Business phone

Mobile phone

Photo

[Click to add...](#)

Update

Set Password

Delete

Related Links

[View linked accounts](#)
[View Subscriptions](#)
[Reset a password](#)

Entitled Custom Tables

Roles (1)

Groups

Delegates

Subscriptions

User Client Certificates

◆ 4. Create Roles

- A custom role named **emp1** was created for the **Salesperson**.
- Role permissions were defined to control access to catalogs, tasks, and approvals.
- These roles were later used in workflow assignment conditions.

The screenshot shows the ServiceNow 'Role - emp1' configuration page. The 'Name' field is 'emp1' and the 'Application' is 'Global'. The 'Description' field is empty. There are 'Update' and 'Delete' buttons at the bottom.

◆ 5. Create Group

- A user group called **showroom** was created.
- This group represents the internal team managing catalog listings and approvals.
- Members of this group were granted workflow tasks and visibility into service requests.

The screenshot shows the ServiceNow 'Group - showroom' configuration page. The 'Name' field is 'showroom', the 'Manager' is 'Abraham Lincoln', and the 'Description' is 'Cars showroom sales persons.' Below the configuration fields, there is a 'Group Members (3)' section showing a list of users: 'Salesperson', 'Salesperson2', and 'Salesperson3'. The page includes 'Update' and 'Delete' buttons at the top and bottom.

◆ 6. Create a Table

- A custom table was created to track **catalog request fulfillment**.
- This table extended the **Task** table to inherit task functionality like assignment and state tracking.

- Each record in this table represents a car catalog request from the user.

servicenow All Favorites History Workspaces Admin Table - New Record

Table: cars fulfillment

* Label: cars fulfillment

* Name: u_cars_fulfillment

Extends table: Task

Application: Global

Create module: ☒

Create mobile module: ☒

Add module to menu: -- Create new --

New menu name:

Columns Controls Application Access

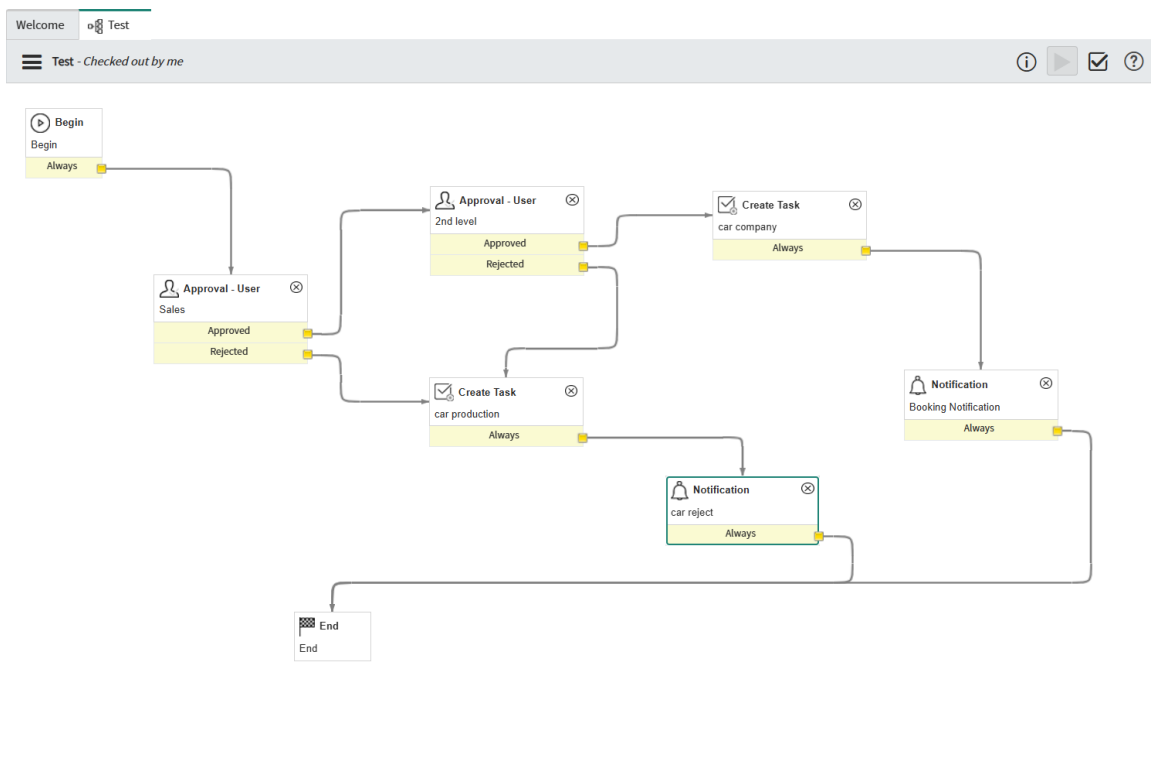
Table Columns for text Search

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
Company	Reference	Company	32		false
Opened by	Reference	User	32	javascript:gs.getUserID()	false
Made SLA	True/False	(empty)	40	true	false

7. Workflow Assignment to Mahendra Service Catalog

- A **Flow Designer workflow** was configured to trigger on item request submissions.
- The workflow included:
 - Auto-assignment to the appropriate group/role.
 - Email notification to the assigned user.
 - Logging of approval/rejection with status update.



◆ 8. Verify Catalog in Service Portal

- After setup, the **Mahendra catalog** and its items were published to the **ServiceNow Service Portal**.
- A simulated user accessed the portal to:
 - Browse available categories
 - View and select cars
 - Submit a request form

Submitted :2025-06-26 05:48:53 Request Number :REQ0010004 Estimated Delivery : 2025-06-28					
Item	Delivery Date	Stage	Price (each)	Quantity	Total
Thar	2025-06-28	<div><div>▼</div><div>✔ Waiting for Approval (Approved)</div><div>✔ Assess or Scope Task (Completed)</div><div>✔ Provide Service (Completed)</div><div>✔ Completed (Completed)</div></div>	\$150.00	--	\$150.00
					Total: \$150.00

◆ 9. Check Result

- The submitted requests triggered the intended workflow.
- Approvers received tasks via their dashboard.
- Email notifications were received for approval updates.
- The fulfillment table recorded the entire transaction lifecycle successfully.



Your request was approved

Hi System,

REQ0010004 was approved, and we'll proceed with completing your request.

You can view your request to track updates and make changes.

[View request](#)

About this request

Requested item number: **RITM0010004**

Short description: **Thar**

Thank you,
Fulfillment Team