

LAPTOP REQUEST CATALOG ITEM

Submitted by

Team Leader

Steffi Joy S (910022104034)

Team Members

Prasanna R (910022104303)

Divya K (910022104008)

In partial fulfilment for the award of the degree

BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE AND ENGINEERING

NAAN MUDHALVAN LAB

ANNA UNIVERSITY REGIONAL CAMPUS MADURAI-625-019



ANNA UNIVERSITY: CHENNAI 600 025

NOVEMBER 2025

Supervised by

Dr. Srie Vidhya Janani, M.E., Ph.D.,

BONAFIDE CERTIFICATE

This is to certify that the project report titled " **Laptop Request Catalog Item** " is the bonafide work of **Steffi Joy S (910022104034), Prasanna R (91022104303), Divya K (910022104008)**, who carried out the project work under my supervision in the Naan Mudhalvan Lab.

V. Dille
30/10/25

SIGNATURE

HEAD OF THE DEPARTMENT

Dr. Arun Kumar
30/10/25

SIGNATURE

FACULTY

Department of Computer Science and Engineering,
Anna University Regional Campus Madurai-625-019

ACKNOWLEDGEMENT

I extend my heartfelt gratitude to **Dr. Srie Vidhya Janani, M.E., Ph.D.**, Faculty Incharge of Naan Mudhalvan Lab, for her guidance and support throughout this project. I also thank my peers and family for their encouragement, without which this project would not have been possible.

I am deeply grateful to **Dr. V. Sasikala, M.E., Ph.D.**, Head of the Department, for her constant support and guidance.

I extend my sincere thanks to all teaching and non-teaching staff of the Department of Computer Science and Engineering and my peers for their support and encouragement.

Finally, I thank my family and friends, whose encouragement and patience motivated me to complete this project successfully.

Team Leader

Steffi Joy S (910022104034)

Team Members

Prasanna R (910022104303)

Divya K (910022104008)

ABSTRACT

The **Laptop Request Catalog Item** project, developed using the **ServiceNow** platform, focuses on automating and streamlining the process of requesting laptops within an organization. In most workplaces, laptop requests are handled manually through emails or paper-based forms, often resulting in delays, incomplete data, and inefficient tracking. This project replaces that manual system with a dynamic, digital Service Catalog item that provides a user-friendly and efficient experience for both employees and administrators.

The proposed system allows users to submit laptop requests using an interactive form that adapts dynamically based on user input. Key features include **dynamic field visibility** using **UI Policies**, which display or hide fields such as “Accessories Details” depending on user selections, and a **UI Action** that allows users to reset the form with a single click. All configuration changes are captured and managed using **Update Sets**, enabling smooth migration between different ServiceNow instances and ensuring version control.

This solution not only improves data accuracy and speeds up the request process but also enhances user satisfaction by offering a clear and intuitive interface. It demonstrates how the ServiceNow platform can be customized to build non-IT service management applications that bring automation, transparency, and operational efficiency to routine business processes.

Overall, the **Laptop Request Catalog Item using ServiceNow** project showcases how low-code automation can replace traditional manual workflows with intelligent, scalable, and easily maintainable digital solutions that promote efficiency and governance within organizations.

ProblemStatement:

Employees in the organization need a quick and efficient way to request laptops for work. The current process is manual and prone to delays, with no dynamic form behavior to guide users or ensure accurate data collection. To address this, a Service Catalog item needs to be created, allowing users to easily request a laptop, with dynamic fields, clear instructions, and additional functionality like resetting the form if needed. The solution should also ensure all changes are tracked for governance and deployment.

Objectives:

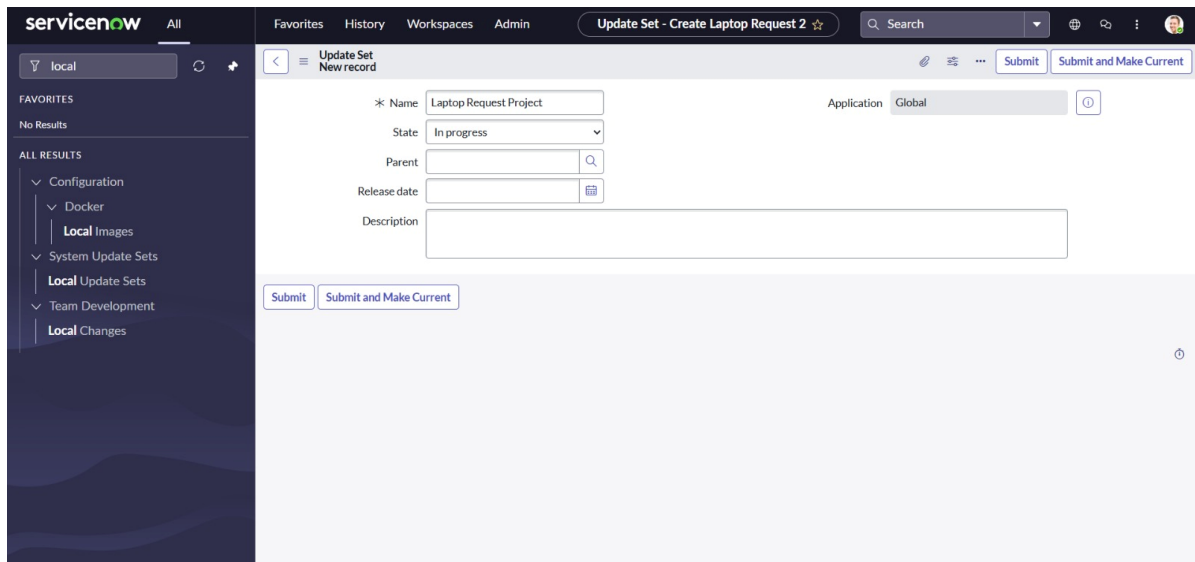
The main objective of the **Laptop Request Catalog Item** project is to automate and simplify the laptop request process within the organization through an efficient, user-friendly Service Catalog form. This solution aims to eliminate manual errors, reduce processing delays, and enhance the overall user experience.

- To design and implement a dynamic Service Catalog item that allows employees to request laptops easily and accurately.
- To incorporate dynamic field behavior, ensuring that form options change based on user input, making the process more intuitive and context-aware.
- To provide clear instructions and validation messages within the form, helping users enter correct and complete data.
- To include a “Reset Form” functionality, enabling users to clear all inputs and restart the process when needed.
- To maintain proper governance and traceability by tracking all configurations and updates through update sets for deployment.
- To improve operational efficiency by minimizing approval delays, ensuring accurate data collection, and streamlining IT asset management.

Skills Required:

Update set

Create Local Update set



The screenshot shows the ServiceNow interface for creating a new update set. The left sidebar displays a search bar with 'local' entered and a list of results under 'ALL RESULTS', including 'Configuration', 'Docker', 'Local Images', 'System Update Sets', 'Local Update Sets', 'Team Development', and 'Local Changes'. The main form area is titled 'Update Set - Create Laptop Request 2' and contains the following fields: 'Name' (Laptop Request Project), 'State' (In progress), 'Parent' (empty), 'Release date' (empty), and 'Description' (empty). The 'Application' dropdown is set to 'Global'. At the bottom of the form are two buttons: 'Submit' and 'Submit and Make Current'.

Skill Tags:

1. Open service now.
2. Click on All >> search for update sets
3. Select local update sets under system update sets
4. Click on new
5. Fill the following details to create a update set as: “Laptop Request”
6. Click on submit and make current
7. By clicking on the button it activates the update set .

Service Catalog Item

Create Service Catalog Item

Duration: 1 Hrs

Skill Tags:

1. Open service now.
2. Click on All >> service catalog
3. Select maintain items under catalog definitions
4. Click on New.
5. Fill the following details to create a new catalog item
Name: Laptop Request
Catalog: service Catalog
Category: Hardware
Short Description: Use this item to request a new laptop
6. Click on 'SAVE'

servicenow All

Favorites History Workspaces Admin Catalog Item - Laptop Request

Search

Copy Try It Update Edit in Catalog Builder Delete

Catalog Item
Laptop Request

Catalog items are goods or services available to order from the service catalog. Items can be anything from hardware, like tablets and phones, to software applications, to furniture and office supplies.

- Enter a Name and Short description to display for the item.
- Enter a Price, approvals, variables, and other information as needed.

Name: Laptop Request Application: Global

Catalogs: Service Catalog Active: ☒

Category: Hardware Fulfillment automation level: Unspecified

State: -- None --

Checked out: -- None --

Owner: System Administrator

Item Details Process Engine Picture Pricing Portal Settings

Short description: Use this item to request a new laptop

Description:

Rich text editor toolbar: Bold, Italic, Underline, Link, Unlink, Text color, Background color, Bulleted list, Numbered list, Indent, Outdent, Undo, Redo, Help.

Add variables

Duration: 1 Hrs

Skill Tags:

Step1:

- After saving the catalog item form scroll down and click on variable (related list)
- Click on new and enter the details as below

1. Variable 1: Laptop Model

Type: Single line text

Name: laptop_model

Order:100

- Click on submit
- Again click on new and add Remaining variables in the above process

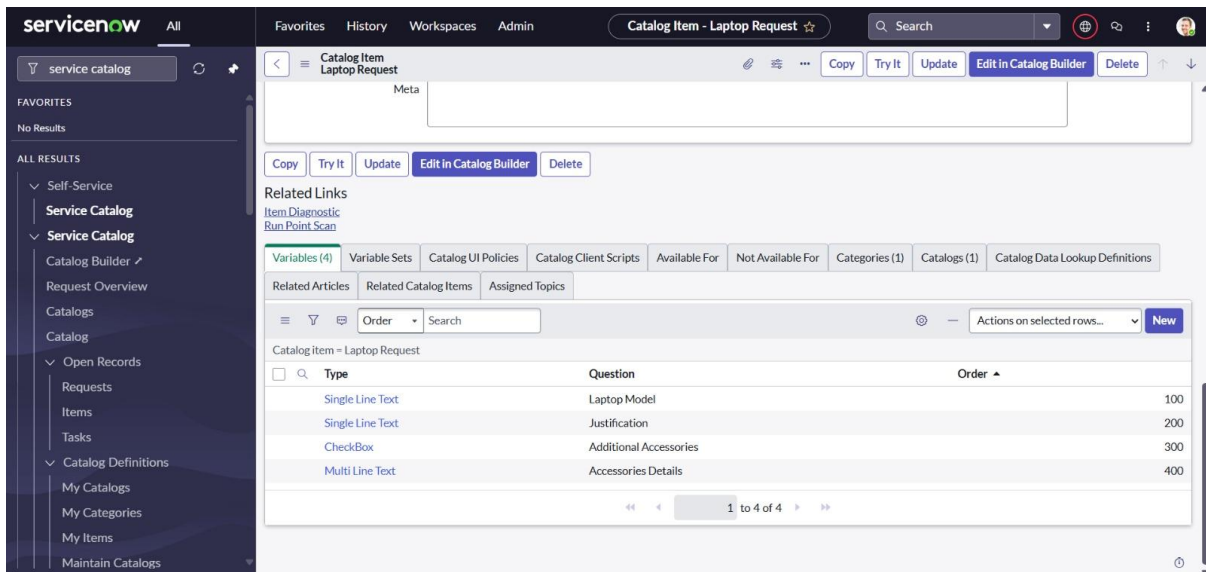
The screenshot shows the ServiceNow 'Variable - New Record' form. The top navigation bar includes 'servicenow', 'All', 'Favorites', 'History', 'Workspaces', 'Admin', and a search bar. The main header is 'Variable - New Record'. The form fields are as follows:

- Application:** Global
- Type:** Multi Line Text
- Catalog item:** Laptop Request
- Order:** 200
- Active:** ☒
- Mandatory:** ☐
- Read only:** ☐
- Hidden:** ☐
- Disable automatic slot fill based on user context:** ☐

The 'Question' tab is selected, showing the following fields:

- * Question:** Justification
- * Name:** justification
- Conversational label:**
- Tooltip:**
- Example Text:**

The 'Submit' button is located at the bottom left of the form.



Variable 2: Justification

Type: Multi line text

Name: justification

Order:200

Variable 3: Additional Accessories

Type: Checkbox

Name: additional_accessories

Order:300

Variable 4: Accessories Details

Type: Multi line text

Name:accessories_details

Order:400

UI Policy

Create Catalog Ui policies

Skill Tags:

1. Click on all>> search for service catalog
2. Select maintain item under catalog definition
3. Search for 'laptop request' which is created before
4. Select 'laptop request' and scroll down click on "Catalog Ui policies"
5. In the catalog ui policies related list tab click on new
6. Give short description as: show accessories details
7. Set the Catalog Condition in the related list tab 'when to apply'

servicenow All Favorites History Workspaces Catalog UI Policy - Show accessories details

Filter Catalog UI Policy - Show accessories details

Update Delete

Catalog UI policies are similar to standard UI policies. Catalog UI policies dynamically change variables that are part of a catalog item or change how variable sets are handled. Policies can also be applied when the variables are present in a Requested Item or Catalog Task form. [More Info](#)

Applies to A Catalog Item Application Global

* Catalog Item Laptop Request Active

* Short description Show accessories details

When to Apply Script

Catalog UI policy actions are applied only if all the following conditions are met:

1. The catalog UI policy is Active
2. The items in the Conditions field evaluate to true
3. The field specified in the catalog UI policy is present on the specified catalog item

Catalog Conditions Add Filter Condition Add "OR" Clause

additional_accessories is true AND OR X

Applies on a Catalog Item view ☒

Applies on Catalog Tasks ☐

Applies on Requested Items ☐

On load ☒

Apply the catalog UI policy actions when the form is loaded or when the user changes values on the form

8. Scroll down and select 'catalog ui action'
9. Then click on new button
10. Select variable name as: accessories_details

Order:100

Mandatory: True

Visible : True

11. Click on save and again click save button of the catalog ui policy form

The screenshot shows the 'Catalog UI Policy Action - New Record' form in ServiceNow. The form includes the following fields:

- Catalog Item: Laptop Request
- Variable name: accessories_details
- Order: 100
- Application: Global
- Mandatory: True
- Visible: True
- Read only: Leave alone
- Value action: Leave alone
- Field message type: None

A 'Submit' button is located at the bottom left of the form.

The screenshot shows the 'Catalog UI Policy - show accessories details' form in ServiceNow. The form includes the following fields:

- additional_accessories is true
- Applies on a Catalog Item view: ☒
- Applies on Catalog Tasks: ☐
- Applies on Requested Items: ☐
- On load: ☒
- Reverse if false: ☒

Buttons for 'Update' and 'Delete' are located at the bottom left of the form.

Related Links: Run Point Scan

Below the form, there is a table titled 'Catalog UI Policy Actions' with the following data:

Name	Read only	Mandatory	Visible	Order
accessories_details	Leave alone	True	True	100

UI Action

Create ui action

Duration: 1 Hrs

Skill Tags:

1. Open service now.
2. Click on All >> search for ui action

3. Select ui actions under system definition
4. Click on new
5. Fill the following details to create ui action

Table: shopping cart(sc_cart)

Order:100

Action name: Reset form

Client : checked

Script:

Script:

```
function resetForm() {  
  g_form.clearForm(); // Clears all fields in the form  
  alert("The form has been reset.");  
}
```

Click on save

The screenshot shows the ServiceNow 'UI Action - New Record' form. The form includes fields for Hint, Onclick, and Condition. A red warning message states: 'Condition field should be specified to restrict execution of this UI Action to certain users. For example, current.canWrite() condition restricts the UI Action to the users who can modify the current record, gs.hasRole("admin") condition restricts the UI Action to the users with admin role.' The Script field contains the following code:

```
1 function resetForm() {  
2   g_form.clearForm(); // Clears all fields in the form  
3   alert("The form has been reset.");  
4 }
```

Below the script field is a 'Protection policy' dropdown set to '-- None --'. At the bottom, there are checkboxes for 'Workspace Form Button' and 'Workspace Form Menu', both of which are currently unchecked. A 'Format for Configurable Workspace' checkbox is also present.

Export Update set

Exporting changes to another instances

Duration: 1 Hrs

Skill Tags:

1. Click on All >> search for update sets
2. Select local update set
3. Select created update set i.e. 'Laptop Request Project'
4. Set the state to 'Complete'
5. In the related list Update tab, updates are visible which we perform under this update set.
6. Click on export to XML ,it download one file

The screenshot shows the ServiceNow interface for configuring an Update Set. The left sidebar contains a search bar and a list of update set categories under 'ALL RESULTS'. The main area displays the configuration for the 'Laptop Request Project' update set, including fields for Name, State, Parent, Release date, Install date, Installed from, and Description. The State is set to 'Complete'. Below the configuration fields are 'Update' and 'Back Out' buttons. The 'Related Links' section includes links for 'Export to XML', 'Merge With Another Update Set', and 'Scan Update Set'. At the bottom, there is a table of updates associated with this update set.

Created	Type	View	Target name	Updated by	Remote update set	Action
2025-10-28 07:52:26	Catalog UI Policy Action		accessories_details	admin	(empty)	INSERT_OR_UPDATE
2025-10-28 07:51:38	Catalog UI Policy		Show accessories details	admin	(empty)	INSERT_OR_UPDATE

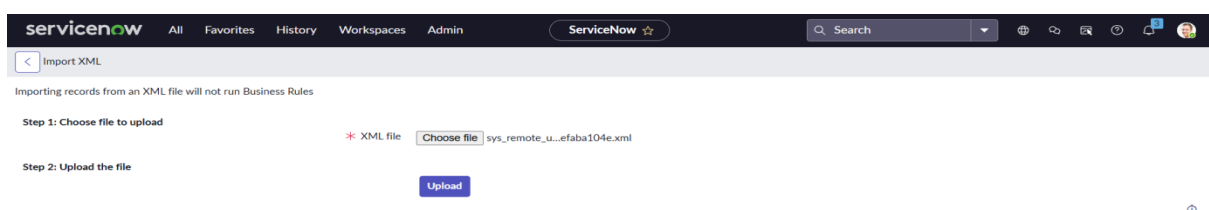
Login to another Instance

Retrieving the update set

Duration: 1 Hrs

Skill Tags:

1. Open another instance in incognito window
2. Login with credentials
3. Click on all>> search for update sets
4. Select “Retrieved update set” under system update set
5. It open retrieved update set list and scroll down
6. Click on Import update set from XML
7. Upload the downloaded file in XML file
8. Click on Upload and it gets uploaded.
9. Open retrieved update set ‘laptop request project’
10. Click on preview update set
11. And click on commit update set
12. And also see the related tab updates
13. After committing update set in this instance we get all updates which are done in the previous instance.



servicenow

AllFavoritesHistoryWorkspaces

Retrieved Update Set - Laptop Request

Search

UpdateDeletePreview Update Set

After committing this update set, ensure you map any unmapped custom tables to a subscription so that you can track your entitlements accurately in Subscription Management.

NameLaptop Request

ApplicationGlobal

Update source

Parent

StateLoaded

Loaded2025-10-28 06:18:21

Description

Application nameGlobal

Committed

Inserted

Deleted

UpdateDeletePreview Update Set

Related Links

Export to XML

Customer Updates (10)Child Update Sets

NameSearch

Actions on selected rows...

servicenow

AllFavoritesHistoryWorkspaces

Retrieved Update Set - Laptop Request

Search

UpdateDeletePreview Update Set

After committing this update set, ensure you map any unmapped custom tables to a subscription so that you can track your entitlements accurately in Subscription Management.

NameLaptop Request

ApplicationGlobal

Update source

Parent

StatePreviewed

Loaded2025-10-28 06:18:21

Description

Application nameGlobal

Committed

Inserted0

Updated10

Deleted0

Collisions0

Total10

UpdateDeletePreview Update Set

Related Links

Export to XML

Customer Updates (10)Child Update Sets

NameSearch

Actions on selected rows...

servicenow

AllFavoritesHistoryWorkspaces

Retrieved Update Set - Laptop Request

Search

UpdateDeleteRun Preview AgainCommit Update Set

After committing this update set, ensure you map any unmapped custom tables to a subscription so that you can track your entitlements accurately in Subscription Management.

NameLaptop Request

ApplicationGlobal

Update source

Parent

StatePreviewed

Loaded2025-10-28 06:18:21

Description

Application nameGlobal

Committed

Inserted0

Updated10

Deleted0

Collisions0

Total10

UpdateDeleteRun Preview AgainCommit Update Set

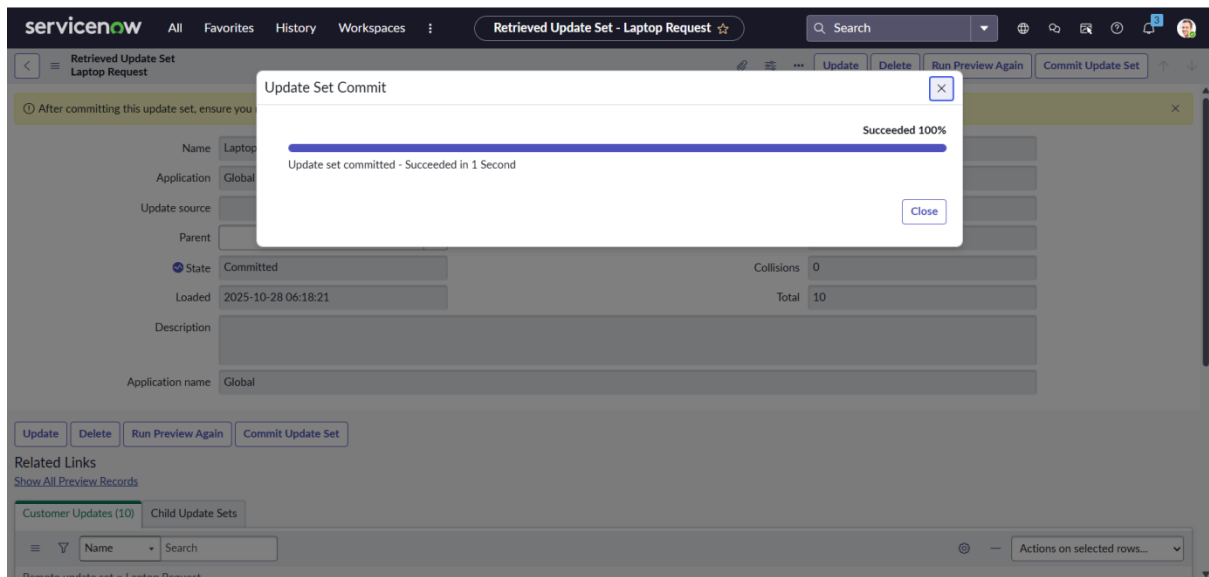
Related Links

Show All Preview Records

Customer Updates (10)Child Update Sets

NameSearch

Actions on selected rows...



Name	Type	Target name	Table	View	Action
catalog_ui_policy_action_56f080be937032105c4835befaba1069	Catalog UI Policy Action	accessories_details			INSERT_OR_UPDATE
catalog_ui_policy_eabf7bea937032105c4835befaba1081	Catalog UI Policy	show accessories details			INSERT_OR_UPDATE
item_option_new_1adbffe2937032105c4835befaba1080	Variable	Justification			INSERT_OR_UPDATE
item_option_new_593c7f26937032105c4835befaba1009	Variable	Additional Accessories			INSERT_OR_UPDATE
item_option_new_dc7cb766937032105c4835befaba1028	Variable	Accessories Details			INSERT_OR_UPDATE
item_option_new_e02b3fa2937032105c4835befaba1065	Variable	Laptop Model			INSERT_OR_UPDATE
sc_cat_item_catalog_7d4a3362937032105c4835befaba104a	Catalog Items Catalog	Service Catalog.Laptop Request			INSERT_OR_UPDATE
sc_cat_item_category_314a3362937032105c4835befaba105f	Catalog Item Category	Hardware.Laptop Request			INSERT_OR_UPDATE
sc_cat_item_d0983f6e933032105c4835befaba1013	Catalog Item	Laptop Request			INSERT_OR_UPDATE
sys_ui_action_6ed2c87293b032105c4835befaba10f2	UI Action	shopping cart(sc_cart)			INSERT_OR_UPDATE

Testing

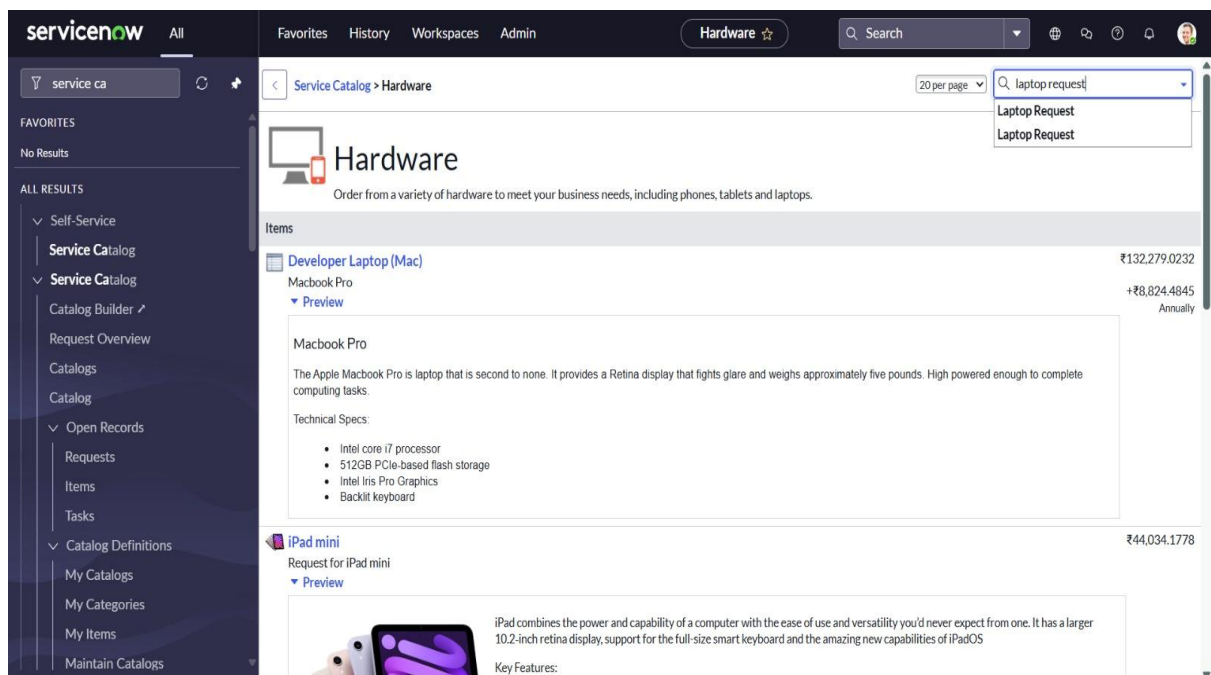
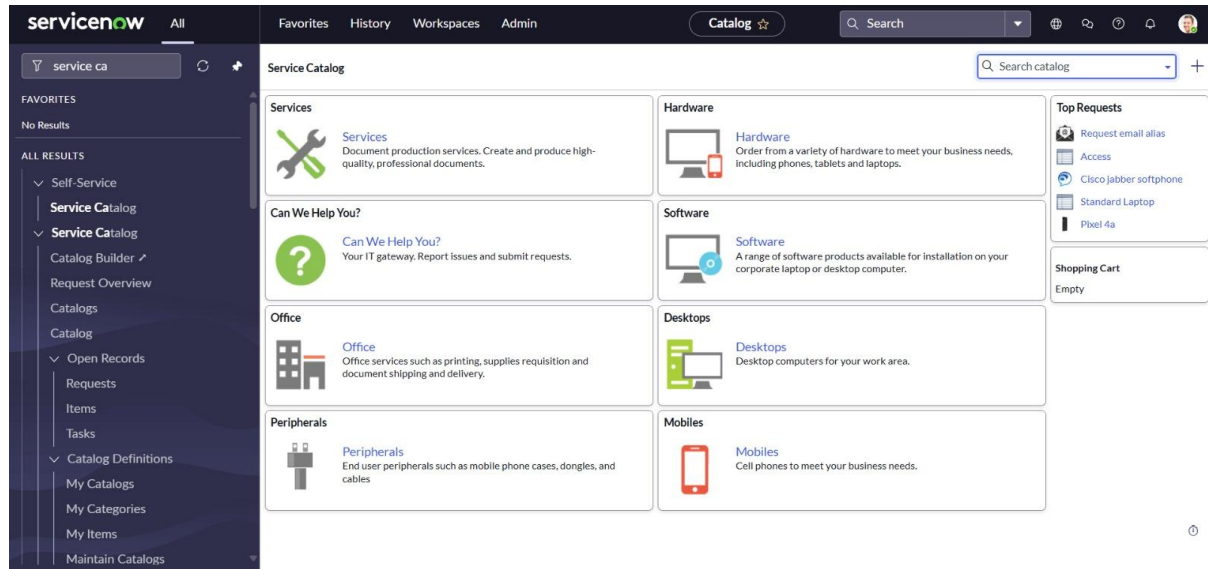
Test Catalog Item

Duration: 1 Hrs

Skill Tags:

1. Search for service catalog in application navigator in target instance
2. Select catalog under service catalog
3. Select hardware category and search for 'laptop request' item
4. Select laptop request item and open it

5. It shows three variables only
6. As per our scenario, when we click on additional accessories checkbox then accessories details fields is visible and that should be mandatory
7. Now see the results, it fulfills our requirements.



servicenow

All

FavoritesHistoryWorkspacesAdmin

ServiceNow

Search

20 per page

laptop request

Catalog Search Results: Service Catalog > Hardware > 'laptop request'

Found In
Service Catalog
Hardware (2)

Laptop Request
Use this item to request a new laptop
Service Catalog > Hardware

Laptop Request
Use this item to request a new laptop
Service Catalog > Hardware

1 to 2 of 2

1 to 2 of 2

service ca

FAVORITES
No Results

ALL RESULTS

Self-Service

Service Catalog

Service Catalog

Catalog Builder

Request Overview

Catalogs

Catalog

Open Records

Requests

Items

Tasks

Catalog Definitions

My Catalogs

My Categories

My Items

Maintain Catalogs

servicenow

All

FavoritesHistoryWorkspacesAdmin

Laptop Request

Search

Search catalog

Service Catalog > Hardware > Laptop Request

Use this item to request a new laptop

Laptop Model
HP

Justification
Software development tasks

Additional Accessories

* Accessories Details
Laptop bag

Order this Item
Quantity
1
Delivery time
2 Days
Order Now
Add to Cart
Shopping Cart
Empty

service ca

FAVORITES
No Results

ALL RESULTS

Self-Service

Service Catalog

Service Catalog

Catalog Builder

Request Overview

Catalogs

Catalog

Open Records

Requests

Items

Tasks

Catalog Definitions

My Catalogs

My Categories

My Items

Maintain Catalogs

servicenow

All

FavoritesHistoryWorkspacesAdmin

Order Status: REQ0010001

Search

Back to CatalogContinue ShoppingHome

Thank you, your request has been submitted

Order Placed: 2025-10-28 08:03:26
Request Number: REQ0010001
Estimated Delivery Date of Complete Order: 2025-10-30

Description	Delivery Date	Stage	Price (ea.)	Quantity	Total
Use this item to request a new laptop	2025-10-30	<div></div>		1	
				Total	

Back to CatalogContinue ShoppingHome

service ca

FAVORITES
No Results

ALL RESULTS

Self-Service

Service Catalog

Service Catalog

Catalog Builder

Request Overview

Catalogs

Catalog

Open Records

Requests

Items

Tasks

Catalog Definitions

My Catalogs

My Categories

My Items

Maintain Catalogs

Conclusion:

The Laptop Request Catalog Item project successfully streamlines the process of requesting laptops within the organization by leveraging ServiceNow's Service Catalog capabilities. Through the implementation of a dynamic catalog item, the project ensures that users have an intuitive and user-friendly interface, reducing errors and improving efficiency. This project demonstrates how ServiceNow can be used to replace manual, error-prone processes with automated, efficient, and user-centric solutions. It not only improves service delivery but also enhances employee satisfaction by providing a modern and streamlined request experience.