

SRI VIDYA COLLEGE OF ENGINEERING & TECHNOLOGY

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Approved by AICTE, New Delhi and Affiliated to
Anna University, Chennai



Subject Name : ServiceNow Administrator (NM1051)
(Under Naan Mudhalvan Scheme)

Project Title : Calculating Family Expenses using ServiceNow

Team ID:

Team Members:

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Laptop Request Catalog Item

Problem Statement:

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:

- Develop a **Laptop Request Catalog Item** in the ServiceNow instance for end users.
- Configure **catalog variables** to capture user inputs (laptop model, purpose, delivery location, etc.).
- Implement **approval and fulfillment workflows** using **Flow Designer**.
- Integrate with **Asset Management** for automatic asset assignment and tracking.
- Ensure a **user-friendly interface** using UI policies and client scripts.
- Generate **notifications** for approvals, fulfillment, and closure stages.
- Improve operational efficiency and reduce request processing time.

Skills:

- Service Catalog Configuration
- Catalog Items, Variable Sets, and Record Producers
- Flow Designer / Workflow Editor
- Catalog UI Policies and Client Scripts Notifications and Approvals Configuration
- Integration with Asset Management and CMDB
- Request (REQ), Request Item (RITM), and Task (TASK) Management
- Service Portal and Employee Center customization

Steps to Setting up:

Setting up ServiceNow Instance

- Sign up for a developer account on the ServiceNow Developer site "<https://developer.servicenow.com>".
- Once logged in, navigate to the "Personal Developer Instance" section.
- Click on "Request Instance" to create a new ServiceNow instance.
- Fill out the required information and submit the request.
- You'll receive an email with the instance details once

it's ready.

- Log in to your ServiceNow instance using the provided credentials.

Now you will navigate to the ServiceNow.

Update set:

Create Local Update set:

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

Note:

Perform all actions under this newly created update set only.

dev196626.service-now.com/now/nav/ui/classic/params/target/sys_update_set.do%3Fsys_id%3D1%26sys_js_list%3Dtrue%26sys_target%3Dsys_update_set%26sysparm...

servicenow All Favorites History Workspaces Admin Update Set - Create Laptop Request Project 2 Application scope: Global Update set: Default [Global] Finish update

update set Update Set New record Submit Save Submit and Make Current

FAVORITES No Results

ALL RESULTS

- System Update Sets
 - Update Sources
 - Retrieved Update Sets
 - Update log
 - Local Update Sets
 - Merge Update Sets
 - Merge Completed Sets
 - Update Sets to Commit
 - Update Set Commit History

* Name Laptop Request Project Application Global

State In progress

Parent

Release date

Description

Submit Save Submit and Make Current

Service Catalog Item:

Create Service Catalog Item

1. Open service now.
2. Click on All >> service catalog
3. Select maintain items under catalog definitions
4. Click on New.

dev196626.service-now.com/now/nav/ui/classic/params/target/sc_cat_item_list.do%3Fsysparm_query%3Dtype%2521%253Dbundle%255Esys_class_name%2521%253Ds...

servicenow All Favorites History Workspaces Admin Catalog Items Application scope: Global Update set: Default [Global] Finish update

service catalog Catalog Items Name Search Actions on selected rows... New

All > Type := Bundle > Class := Order guide > Type := Package > Class := Content Item > Published Item is empty

Name	Short description	Active	Roles	Catalogs	Category	Price	Type	Updated
3M Privacy Filter - Lenovo X1 Carbon	Privacy Filter - X1 Carbon	true		Service Catalog	Peripherals	\$43.19	Item	2022-11-20 20:46:33
3M Privacy Filter - MacBook Pro	Privacy Filter	true		Service Catalog	Peripherals	\$42.23	Item	2022-11-20 20:46:33
3M Privacy Filter - Macbook Pro Retina	Privacy Filter	true		Service Catalog	Peripherals	\$40.31	Item	2022-11-20 16:00:00
401(k) Plan Enrollment	Enroll in or modify your 401(k) plan	true		Human Resources Catalog	Benefits	\$0.00	Item	2022-08-18 10:52:30
401(k) Plan Enrollment Inquiry	Ask a question about your retirement pla...	true		Human Resources Catalog	Benefits	\$0.00	Item	2016-05-20 17:59:56
401(k) Retirement Plan Inquiry	Ask a question about your existing plan	true		Human Resources Catalog	Benefits	\$0.00	Item	2016-05-20 17:59:55
Access	Microsoft Access	true		Service Catalog	Software	\$139.99	Item	2022-11-20 20:46:33
Acrobat	Adobe Acrobat	true		Service Catalog	Software	\$139.99	Item	2022-12-05 20:46:33
Add Beneficiaries	Add or modify your beneficiaries	true		Human Resources Catalog	Benefits	\$0.00	Item	2016-06-13 16:48:57
Add network switch to datacenter cabinet	This standard change template describes...	true		Service Catalog	Network Standard Changes	\$0.00	Item	2024-10-21 07:20:03
Add/Remove users from group	Add/Remove users from group	true		Service Catalog	Services	\$0.00	Item	2022-12-05 10:17:33
Adobe Acrobat Doc...	Create, edit or convert PDF	true		Service Catalog	Software	\$0.00	Item	2022-12-05

Activate Deactivate 1 to 20 of 229

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'

The screenshot shows the ServiceNow interface for creating a new catalog item. The left sidebar contains the navigation menu with 'Service Catalog' and 'Catalog Definitions' expanded, and 'Maintain Items' selected. The main form is titled 'Catalog Item - Laptop Request'. The form fields are as follows:

- Name:** Laptop Request (highlighted with a red box)
- Application:** Global
- Catalog:** Service Catalog (highlighted with a red box)
- Category:** Hardware (highlighted with a red box)
- State:** -- None --
- Checked out:** -- None --
- Owner:** System Administrator
- Active:** ☒
- Fulfillment automation level:** Unspecified

Below the form fields, there are tabs for 'Item Details', 'Process Engine', 'Picture', 'Pricing', and 'Portal Settings'. The 'Item Details' tab is active, showing the 'Short description' field with the text 'Use this item to request a new laptop' (highlighted with a red box) and a rich text editor for the 'Description'.

Add variables:

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 left sidebar contains a navigation menu with options like 'Catalogs', 'Open Records', 'Catalog Definitions', and 'My Catalogs'. The main form area has tabs for 'Question', 'Annotation', 'Type Specifications', 'Default Value', 'Auto-populate', 'Permission', and 'Availability'. The 'Question' tab is active, showing fields for 'Question' (set to 'Laptop Model'), 'Name' (set to 'laptop_model'), 'Tooltip', and 'Example Text'. The 'Submit' and 'Save' buttons are at the bottom of the form.

2. Variable 2:Justification

Type: Multi line text

Name: justification

Order:200

3. Variable 3:Additional Accessories

Type: Checkbox

Name: additional_accessories

Order:300

4. Variable 4: Accessories Details

Type: Multi line text

Name:accessories_details

Order:400

Step2:

- After adding above variable which are added to newly created catalog item
- Then save the catalog item form

The screenshot shows the ServiceNow interface for editing a 'Catalog Item - Laptop Request'. The left sidebar contains navigation links for 'service catalog', 'Catalogs', 'Open Records', 'Requests', 'Items', 'Tasks', 'Catalog Definitions', 'My Catalogs', 'My Categories', 'My Items', 'Maintain Catalogs', 'Maintain Categories', 'Renderers', 'Maintain Dynamic Categori...', 'Maintain Items', 'My Content Items', 'Content Items', 'Ordered Item Links', 'My Order Guides', 'Order Guides', 'My Record Producers', and 'Record Producers'. The main content area shows the 'Catalog Item - Laptop Request' form. The 'Meta' field is empty. Below it are buttons for 'Copy', 'Insert', 'Insert and Stay', 'Save', 'Try It', 'Update', 'Edit in Catalog Builder', and 'Delete'. The 'Related Links' section includes links for 'Item Diagnostic', 'Run Point Scan', and 'SN Utils Versions (8)'. The 'Related Catalog Items' table is highlighted with a red box. The table has columns 'Type', 'Question', and 'Order'. The 'Related Catalog Items' table is highlighted with a red box.

Type	Question	Order
Single Line Text	Laptop Model	100
Multi Line Text	Justification	200
CheckBox	Additional Accessories	300
Multi Line Text	Accessories Details	400

UI Policy:

Create Catalog Ui policies

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'

[field: additional_ accessories, operator: is, value: true]

The screenshot shows the ServiceNow interface for configuring a Catalog UI Policy. The left sidebar shows the navigation menu with 'Maintain Items' selected. The main content area is titled 'Catalog UI Policy - Show Accessories Details'. The 'Applies to' section is set to 'A Catalog Item' with the 'Catalog item' field set to 'Laptop Request'. The 'Application' is set to 'Global' and the policy is 'Active'. The 'Short description' is 'Show Accessories Details'. The 'When to Apply' tab is selected, showing a list of conditions: 'The catalog UI policy is Active', 'The items in the Conditions field evaluate to true', and 'The field specified in the catalog UI policy is present on the specified catalog item'. Below this, the 'Catalog Conditions' section shows a single condition: 'additional_accessories is true'. The 'Applies on a Catalog Item view' checkbox is checked. The 'Applies on Catalog Tasks' and 'Applies on Requested Items' checkboxes are unchecked. The 'On load' checkbox is checked, and the 'Reverse if false' checkbox is also checked. The bottom of the page shows a list of actions: 'Apply the catalog UI policy actions when the form is loaded or when the user changes values on the form' and 'Reverse the effects of the catalog UI policy actions when the Conditions evaluate to false'.

8. Click on **save**.(do not click on submit)
9. Scroll down and select 'catalog ui action'
10. Then click on new button
11. Select variable name as: accessories_details

Order:100

Mandatory: True

Visible : True

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

The screenshot shows the 'Catalog UI Policy Action - accessories_details' form in ServiceNow. The left sidebar contains navigation links for 'service catalog', 'Request Overview', 'Catalogs', 'Open Records', 'Requests', 'Items', 'Tasks', 'Catalog Definitions', 'My Catalogs', 'My Categories', 'My Items', 'Maintain Catalogs', 'Maintain Categories', 'Renderers', 'Maintain Dynamic Categories', 'Maintain Items', and 'My Content Items'. The main form area has a title bar with 'Catalog UI Policy Action - accessories_details' and a search bar. Below the title bar, there's a description: 'UI policy actions specify exactly what actions to take on a specified field. The conditions specified in the UI policy determine when these actions are triggered. [More Info](#)'. The form contains several 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), and 'Field message type' (None). At the bottom, there are buttons for 'Insert', 'Insert and Stay', 'Save', 'Update', and 'Delete'. The 'Save' button is highlighted with a red box.

The screenshot shows the 'Catalog UI Policy - Show Accessories Details' form in ServiceNow. The left sidebar is the same as the previous screenshot. The main form area has a title bar with 'Catalog UI Policy - Show Accessories Details' and a search bar. Below the title bar, there's a description: '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 Record. [Catalog Task Item: User Info](#)'. The form contains several fields: 'Applies to' (A Catalog Item), 'Application' (Global), 'Active' (checked), 'Catalog Item' (Laptop Request), 'Short description' (Show Accessories Details), 'When to Apply' (Script), 'Catalog Conditions' (additional_accessories is true), 'Applies on a Catalog item view' (checked), 'Applies on Catalog Tasks' (unchecked), 'Applies on Requested Items' (unchecked), 'Apply the catalog UI policy actions when the form is loaded or when the user changes values on the form' (checked), 'On load' (checked), 'Reverse the effects of the catalog UI policy actions when the Conditions evaluate to false' (checked), and 'Reverse if false' (checked). At the bottom, there are buttons for 'Insert', 'Insert and Stay', 'Save', 'Update', and 'Delete'. The 'Save' button is highlighted with a red box. Below the form, there's a 'Related Links' section with 'Run Point Scan' and 'SN Utils | Versions (1)'. At the very bottom, there's a table with columns 'Name', 'Read only', 'Mandatory', 'Visible', and 'Order'. The table contains one row: 'accessories_details', 'Leave alone', 'True', 'True', '100'.

UI Action:

Create ui action

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:

```
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 - Reset Form' configuration page. The left sidebar contains a navigation menu with 'UI Action' selected. The main form area is divided into two columns. The left column contains fields for 'Name' (Reset Form), 'Table' (Shopping Cart [sc_cart]), 'Order' (100), and 'Action name' (Reset Form), all of which are highlighted with a red box. Below these are checkboxes for 'Active', 'Show insert', 'Show update', 'Client' (checked and highlighted with a red box), 'List v2 Compatible', and 'List v3 Compatible'. There is also an 'Overrides' search field. The right column contains various options for the UI action, including 'Application' (Global), 'Form button', 'Form context menu', 'Form link', 'Form style' (None), 'List banner button', 'List bottom button', 'List context menu', 'List choice', 'List link', and 'List style' (None). At the bottom of the form are sections for 'Messages', 'Comments', 'Hint', 'OnClick', and 'Condition'. The top right of the page features a toolbar with buttons for 'Insert', 'Insert and Stay', 'Save' (highlighted with a red box), 'Update', and 'Delete'.

Export Update set:

Exporting changes to another instances:

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 an update set named 'Laptop Request Project'. The 'State' is set to 'Complete'. The 'Export to XML' link is highlighted. The table below shows the updates associated with this set.

Created	Type	View	Target name	Updated by	Remote update set	Action
2025-01-26 22:40:32	Catalog UI Policy		Show Accessories Details	admin	(empty)	INSERT_OR_UPDATE
2025-01-26 22:43:26	Catalog UI Policy Action		accessories_details	admin	(empty)	INSERT_OR_UPDATE

Login to another Instance:

Retrieving the update set:

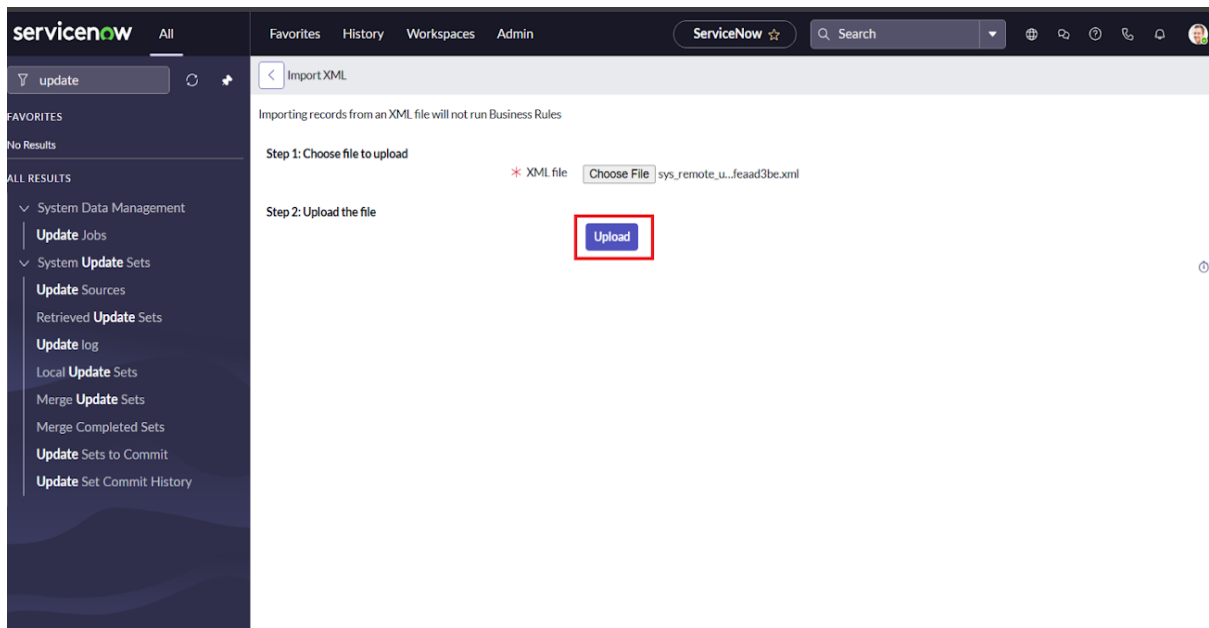
1. Open another instance in incognito window
2. Login with credentials
3. Click on all>> search for update sets
4. Select “Retrieved update set” under system update set
5. It open retrieved update set list and scroll down
6. Click on Import update set from XML

The screenshot displays the ServiceNow interface for 'Retrieved Update Sets'. The left sidebar contains a navigation menu with the following items: 'update', 'System Data Management', 'Update Jobs', 'System Update Sets', 'Update Sources', 'Retrieved Update Sets' (highlighted), 'Update log', 'Local Update Sets', 'Merge Update Sets', 'Merge Completed Sets', 'Update Sets to Commit', and 'Update Set Commit History'. The main content area shows a table of update sets. The table has columns: Name, Application, State, Update source, Description, Loaded, Committed, Parent, and Remote Batch Base. The table contains several rows, including 'first update set', 'first update set 2', 'Migration of /AI Search Profile/ AI Se...', 'program', 'project', 'Rathan's Snow' (highlighted), 'second', 'sunny', and 'sunny gujja'. The 'Rathan's Snow' row is highlighted, and its 'State' is 'Loaded'. Below the table, the 'Related Links' section shows a link 'Import Update Set from XML' which is highlighted with a red box. The bottom of the page shows a pagination bar indicating '1 to 15 of 15'.

Name	Application	State	Update source	Description	Loaded	Committed	Parent	Remote Batch Base
first update set	Global	Previewed	sandeep		03:00:03	(empty)	(empty)	(empty)
first update set 2	Global	Previewed	sandeep		2024-08-30 03:00:07	(empty)	(empty)	(empty)
Migration of /AI Search Profile/ AI Se...	Advanced AI Search Management Tools	Loaded	(empty)	Automatically created by the migration s...	2023-06-30 15:09:18	(empty)	(empty)	(empty)
program	Global	Previewed	sandeep		2024-08-30 03:00:03	(empty)	(empty)	(empty)
project	Global	Committed	sandeep		2024-08-30 03:00:05	2024-08-30 03:01:03	(empty)	(empty)
Rathan's Snow	Global	Loaded	(empty)	Testing purpose	2024-07-10 23:32:45	(empty)	(empty)	(empty)
second	Global	Previewed	sandeep		2024-08-30 03:00:01	(empty)	(empty)	(empty)
sunny	Global	Previewed	sandeep		2024-08-30 03:00:02	(empty)	(empty)	(empty)
sunny gujja	Global	Previewed	sandeep		2024-08-30 03:00:00	(empty)	(empty)	(empty)

7.Upload the downloaded file in XML file

8.Click on Upload and it gets uploaded.



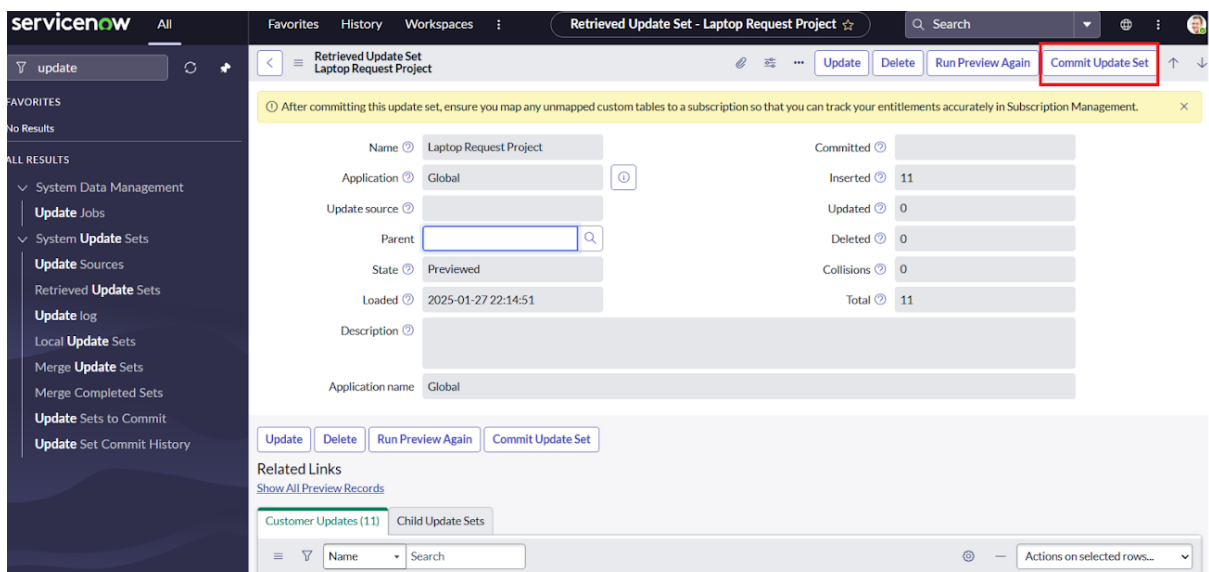
9. Open retrieved update set 'laptop request project'

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



Testing:

Test Catalog Item

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

The screenshot displays the ServiceNow interface for a 'Laptop Request' item. The breadcrumb trail at the top indicates the path: Service Catalog > Hardware > Laptop Request. The left-hand navigation pane shows the 'Catalog' menu item selected. The main content area is titled 'Use this item to request a new laptop' and includes a 'Laptop Model' text field, a 'Justification' text area, and an 'Additional Accessories' checkbox. On the right side, there is a section for 'Order this Item' with a 'Quantity' dropdown set to 1 and a 'Delivery time' of 2 Days. Below this are 'Order Now' and 'Add to Cart' buttons. At the bottom right, a 'Shopping Cart' section shows it is currently 'Empty'.

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.

The screenshot displays the ServiceNow interface for a 'Laptop Request' catalog item. The left sidebar shows the navigation menu with 'Service Catalog' expanded. The main form area is titled 'Use this item to request a new laptop'. It contains a 'Laptop Model' field with 'hp' entered, a 'Justification' text area, and a checked 'Additional Accessories' checkbox. Below the checkbox is a red-bordered box containing the 'Accessories Details' field. On the right, the 'Order this Item' section shows a quantity of '1' and a delivery time of '2 Days', with 'Order Now' and 'Add to Cart' buttons. A 'Shopping Cart' section at the bottom right indicates it is empty.

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.