✅ Mini Project: Leave Management System in ServiceNow

**✅ Project Objective**

To develop a custom scoped application in **ServiceNow** that allows employees to apply for leave and managers to approve or reject the request. The system tracks leave requests, automates workflow actions, and sends notifications using ServiceNow platform tools.

**🧩 Step 1: Create a New Scoped Application**

Navigate to:  
**System Applications → Studio → Create Application**

Provide the following:

* **Name**: Leave Management System
* **Scope**: Auto-generated
* **Description**: An app for managing employee leave requests and automating approval workflows

Click **Create** → Enter Studio.

**🗃️ Step 2: Create a Table to Store Leave Data**

Inside **Studio → Create Application File**  
Choose **Data Model → Table**

**Table Configuration:**

* **Label**: Leave Request
* **Name**: x\_994336\_leave\_man\_leave\_request
* **Create module**: ✅ Yes

| **Field Name** | **Type** | **Description** |
| --- | --- | --- |
| Leave Type | Choice | Casual, Sick, Earned |
| Start Date | Date | Start date of leave |
| End Date | Date | End date of leave |
| Reason | Multi Line Text | Reason for taking leave |
| Requested By | Reference (User) | Auto-filled with logged-in user |
| Status | String | Requested / Approved / Rejected |
| Manager | Reference (User) | Auto-filled based on user profile |

Click **Submit** to save the table.

**📝 Step 3: Create a Catalog Item – "Apply for Leave"**

Navigate to:  
**Service Catalog → Maintain Items → New**

**Catalog Item Configuration:**

* **Name**: Apply for Leave
* **Catalog**: Service Catalog
* **Category**: HR Services (Create if not present)

| **Variable Name** | **Type** | **Notes** |
| --- | --- | --- |
| Leave Type | Select Box | Choices: Casual, Sick, Earned |
| Start Date | Date |  |
| End Date | Date |  |
| Reason | Multi Line Text |  |

**⚙️ Step 4: Add Record Producer for Catalog Item**

Navigate to:  
**Service Catalog → Record Producers → New**

Configure:

* **Table**: Leave Request
* **Name**: Apply for Leave
* **Catalog**: Service Catalog
* **Category**: HR Services

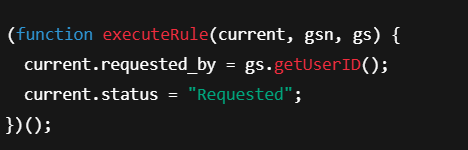
Map variables to fields using **Script field** or **Set Values**.

**🎨 Step 5: Add UI Policy / Business Rules**

**✅ UI Policy – Make Reason Mandatory for Certain Leave Types**

* Go to: **System UI → UI Policies**
* Table: Leave Request
* Condition: Leave Type is "Sick"
* Action: Make Reason field mandatory
* **✅ Business Rule – Auto-populate Requested By and Status**
* Navigate to: **System Definition → Business Rules → New**

| **Field** | **Value** |
| --- | --- |
| Name | Set Default Fields |
| Table | Leave Request |
| When | before insert |
| Advanced | ✅ Check this |



**🔁 Step 6: Workflow / Flow Designer for Approvals**

Navigate to: **Flow Designer → Create New Flow**

**Flow Logic:**

1. Trigger: New Leave Request created
2. Action: Get manager of current user
3. Action: Create Approval Request for Manager
4. If approved → Set status = Approved
5. If rejected → Set status = Rejected
6. Send Notification

**📬 Step 7: Notifications**

Go to: **System Notification → Email → Notifications**

Create two notifications:

1. **To Employee** – On Approved/Rejected
2. **To Manager** – On New Leave Request

**🧪 Step 8: Test the Flow**

1. Log in as an Employee
2. Go to **Service Catalog → Apply for Leave**
3. Submit the form
4. Check **Leave Request** table
5. Log in as **Manager**
6. Approve/Reject request
7. Observe:
   * Email sent
   * Status updated

**📦 Step 9: Create Update Set for Deployment**

Navigate to:  
**System Update Sets → Local Update Sets → New**

* Name: Leave Management App
* Set it as Current
* Perform all changes
* Click **Complete**, then **Export to XML**

To deploy on another instance:

* Go to: **Retrieved Update Sets**
* Click **Import Update Set from XML**