**Final Project- Intelligent File Management and Collaboration System Using Power Automate**

**Project Title**

**Automate File Management Using Outlook, OneDrive, SharePoint, and Microsoft Teams in Power Automate**

**Objective**

To design and implement a fully automated file management and collaboration system that:

1. Monitors incoming emails in **Outlook** with attachments,
2. Saves those attachments in **OneDrive**,
3. Copies them to a specific folder in **SharePoint**, and
4. Notifies a **Microsoft Teams** channel with details of the uploaded file.

This project demonstrates intelligent document workflow automation and integration across Microsoft 365 services.

**Learning Goals**

After completing this project, learners will be able to:

* Build **end-to-end automated workflows** using Power Automate.
* Integrate **Outlook**, **OneDrive**, **SharePoint**, and **Microsoft Teams** connectors.
* Enable **real-time collaboration** and **document traceability** within organizations.
* Understand **event-driven automation principles** in cloud environments.

**Prerequisites**

* Microsoft 365 account with access to:
  + **Power Automate**
  + **Outlook**
  + **OneDrive for Business**
  + **SharePoint Online**
  + **Microsoft Teams**
* A SharePoint site and Teams channel created for your department or project.
* Basic understanding of workflow creation in Power Automate.

**System Architecture**

**Workflow:**  
Outlook → OneDrive → SharePoint → Microsoft Teams

**Process Flow:**

1. New Email Arrives in Outlook (Trigger)
2. Attachment Saved to OneDrive Folder
3. File Copied to SharePoint Document Library
4. Teams Channel Message Sent with File Details

**Step-by-Step Implementation**

**Step 1: Create a OneDrive Folder**

1. Go to **OneDrive** → Create a new folder named **EmailAttachments**.
2. This will act as the temporary storage location for incoming files.

**Step 2: Create a SharePoint Folder**

1. Open **SharePoint Site** → Go to **Documents Library**.
2. Create a folder named **FromOneDrive** to store final copies.

**Step 3: Create Microsoft Teams Channel**

1. Open **Microsoft Teams** → Create a **Team** (e.g., *Automation Project Team*).
2. Add a **Channel** (e.g., *File Notifications*).
3. Copy the **Team Name** and **Channel Name** (you’ll need it for Power Automate).

**Step 4: Build the Power Automate Flow**

**4.1 Trigger: Outlook**

1. In Power Automate, click **Create → Automated Cloud Flow**.
2. Choose the trigger: **When a new email arrives (V3)**.
3. Configure:
   * **Folder:** Inbox
   * **Include Attachments:** Yes
   * **Has Attachments:** Yes

**4.2 Condition: Check for Attachments**

Add a **Condition** block:

* If Has Attachments = true → continue

**4.3 Save File to OneDrive**

Inside the loop:

* Add **OneDrive → Create file**
* Configure:
  + **Folder Path:** /EmailAttachments/
  + **File Name:** Attachment Name
  + **File Content:** Attachment Content

**4.4 Copy File to SharePoint**

* Add **SharePoint → Create file**
* Configure:
  + **Site Address:** Choose your SharePoint site.
  + **Folder Path:** /Shared Documents/FromOneDrive/
  + **File Name:** Attachment Name
  + **File Content:** Attachment Content

**4.5 Notify in Microsoft Teams**

* Add **Microsoft Teams → Post a message (V3)** action.
* Configure:
  + **Team:** Your Team Name
  + **Channel:** *File Notifications*
  + **Message:**
  + New file uploaded to SharePoint

**Step 5: Save and Test the Flow**

1. Save the flow and click **Test → Manually → Run Flow**.
2. Send an email with an attachment to your Outlook inbox.
3. Check results:
   * File in **OneDrive/EmailAttachments**
   * File copied in **SharePoint/FromOneDrive**
   * Teams message notification appears in *File Notifications* channel

**Expected Output**

Whenever an email with an attachment is received:

* The attachment is **stored in OneDrive**,
* **Copied automatically to SharePoint**, and
* A **notification is posted in Teams** with file details and timestamp.