

# SkillSync – Phase 4: Process Automation(Admin)

**Project Title:** SkillSync- Knowledge and Expertise Management

Phase4 : Process Automation

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Prepared By: SHARANYA LAKSHMI S N

## 1. Validation Rules

- **Purpose:** Ensure data accuracy and integrity before saving a record.
- **Examples in SkillSync:**
  - Prevent saving an **Employee** without an email.
  - Ensure **Learning Path Completion Date** is filled only when status = *Completed*.
- **Steps:**
  - Setup → Object Manager → Employee\_\_c → Validation Rules → New.
  - Example Formula:
  - ISBLANK(Email\_\_c)

Error Message: “Email address is required.”

## 2.Flow Builder (Recommended modern automation tool)

Salesforce Flows provide multiple automation types:

### a. Points Allocation (Record-Triggered Flow)

**Goal:** When an Engagement Log is created/updated to Completed, award points to the relevant Employee(s) and store Points\_Awarded\_\_c.

### Build steps (exact clicks)

1. **Setup → Quick Find → Flows → New Flow.**
2. Choose **Record-Triggered Flow** → Click **Create**.
3. Configure Start:
  - **Object:** Engagement\_Log\_\_c
  - Trigger: **A record is created or updated**

- Condition Requirements: Status\_\_c Equals Completed (optional: add AND Points\_Awarded\_\_c Is Null to prevent double awarding)
- When to Run the Flow: **After the record is saved**
- Optimize the Flow for: **Actions and Related Records**
- Click **Done**.

#### 4. Add a Decision Element

- Label: Check Engagement Type
- Outcome 1: Task Completion → Condition: {!\$Record.Type\_\_c} Equals 'Task Completion'
- Outcome 2: Mentorship Session → {!\$Record.Type\_\_c} Equals 'Mentorship Session'
- Outcome 3: Learning Path Completion → {!\$Record.Type\_\_c} Equals 'Learning Path Completion'
- Default Outcome: No Action
- Save.

#### 5. For Task Completion outcome:

- **Get Records:** Name GetEmployeeForTask
  - Object: Employee\_\_c
  - Filter: Id = {!\$Record.Employee\_\_c}
  - Store all fields (or at least Points\_\_c)
- **Assignment:** Create variable varNewPoints (Number) and set  
varNewPoints = GetEmployeeForTask.Points\_\_c + 10
- **Update Records:** Name UpdateEmployeePoints\_Task
  - Update the Employee record found by GetEmployeeForTask → set  
Points\_\_c = varNewPoints
- **Update Records** (optional): update the triggering Engagement\_Log record  
→ set Points\_Awarded\_\_c = 10
- Connect elements: Start → Decision outcome → Get → Assignment → Update Employee → Update Engagement Log.

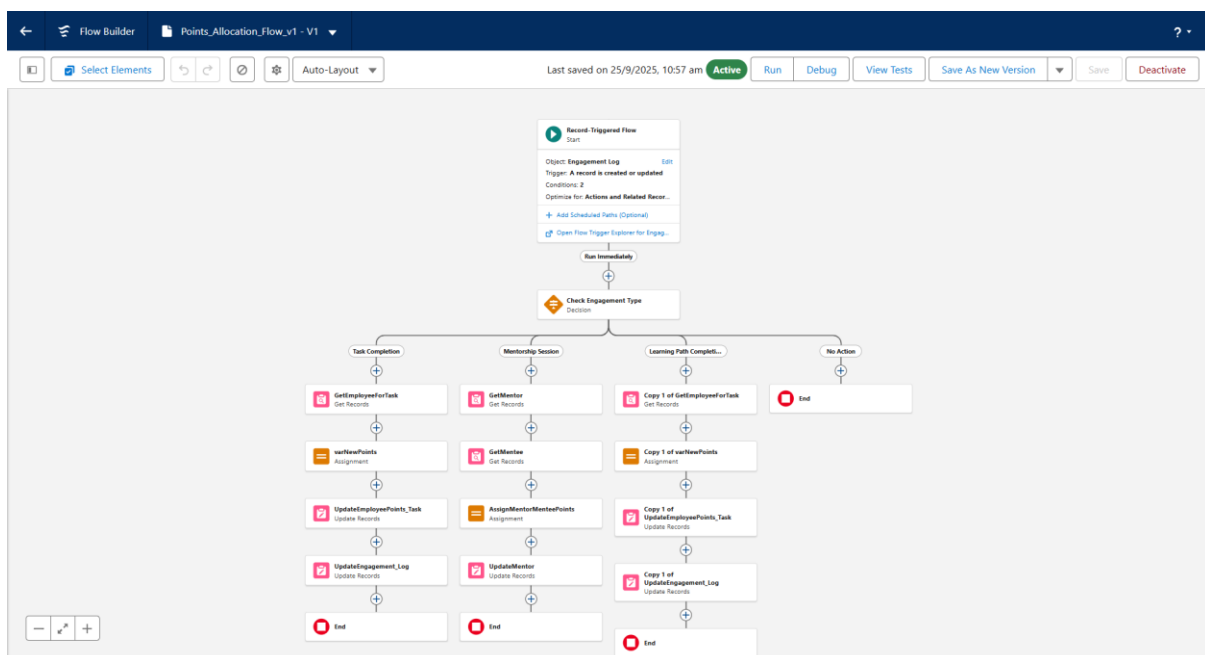
#### 6. For Mentorship Session outcome:

- **Get Records** GetMentor (Employee\_\_c where Id = \$Record.Mentor\_\_c)
- **Get Records** GetMentee (Employee\_\_c where Id = \$Record.Mentee\_\_c)
- **Assignment:** varMentorPoints = GetMentor.Points\_\_c + 25 and  
varMenteePoints = GetMentee.Points\_\_c + 15
- **Update Records:** Update Mentor record Points\_\_c = varMentorPoints and  
Update Mentee record Points\_\_c = varMenteePoints — you can do two  
separate Update Records elements or use a single Update with a  
collection.
- **Update Engagement Log:** set Points\_Awarded\_\_c = 25 (or store both  
mentor/mentee amounts in custom fields if needed).

## 7. For Learning Path Completion outcome:

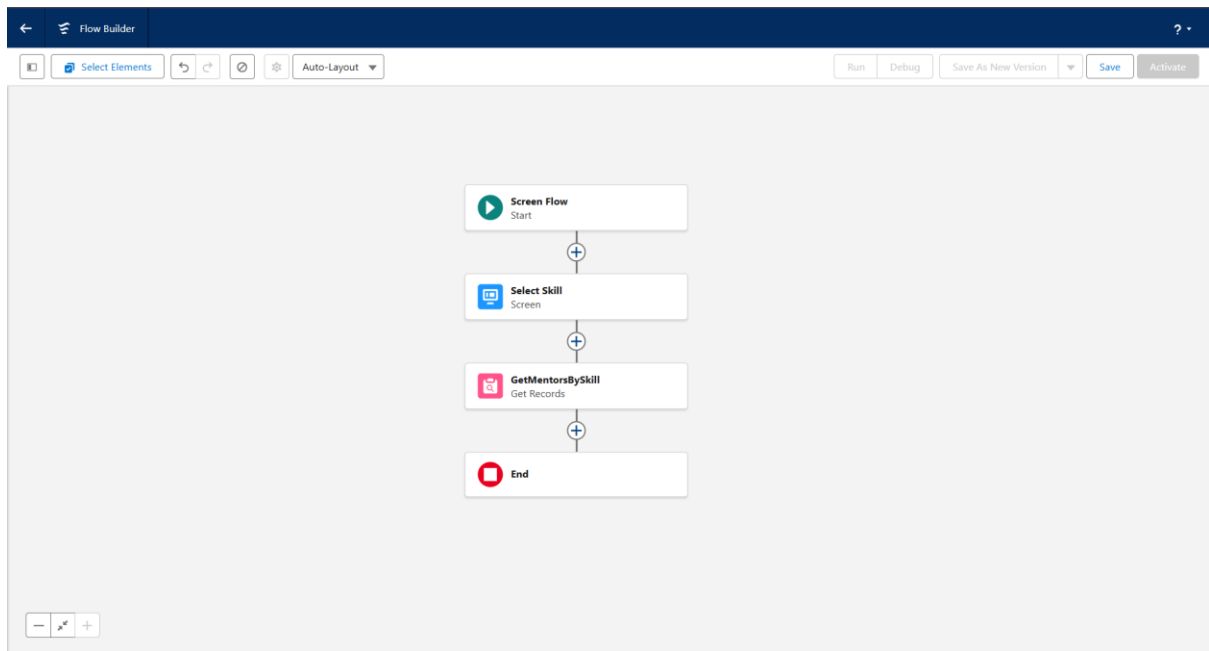
- Similar to Task: Get Employee → Assignment +30 → Update Employee →  
Update Engagement Log.

## 8. Save Flow: Points\_Allocation\_Flow\_v1 → **Activate**.



## b) Screen Flow

- Used for guided UI experiences.
- Example: When an employee applies for a mentorship program, a guided form collects Mentor/Mentee details.



### 3. Email Alerts:

#### - Implemented via Apex Triggers

- In SkillSync, email triggers automatically notify employees when they are added with an active status.
- These triggers send welcome emails with login instructions, ensuring users can access the platform without delay.
- Implemented using Apex triggers and handler classes, the system ensures emails are sent only to active employees with valid roles.

```

1 public with sharing class EmployeeEmailHandler {
2     public static void sendRegistrationEmails(List<Employee__c> newEmployeeRecords) {
3         List<Messaging.SingleEmailMessage> mails = new List<Messaging.SingleEmailMessage>();
4
5         // Get the Salesforce org domain URL
6         String baseUrl = URL.getOrgDomainUrl().toExternalForm();
7
8         for (Employee__c rec : newEmployeeRecords) {
9             Messaging.SingleEmailMessage mail = new Messaging.SingleEmailMessage();
10            mail.setToAddresses(new String[]{ rec.Email__c });
11            mail.setSubject('Welcome to SkillSync - Access Invitation');
12
13            String body = 'Hello ' + rec.Name__c + ',\n\n' +
14                'You have been added to SkillSync as a ' + rec.Role__c + '.\n\n' +
15                'Please use the following link to set your Salesforce password:\n' +
16                baseUrl + '/secur/forgotpassword.jsp\n\n' +
17                'Thank you,\nSkillSync Admin Team';
18
19            mail.setPlainTextBody(body);
20            mails.add(mail);
21        }
22    }
  
```

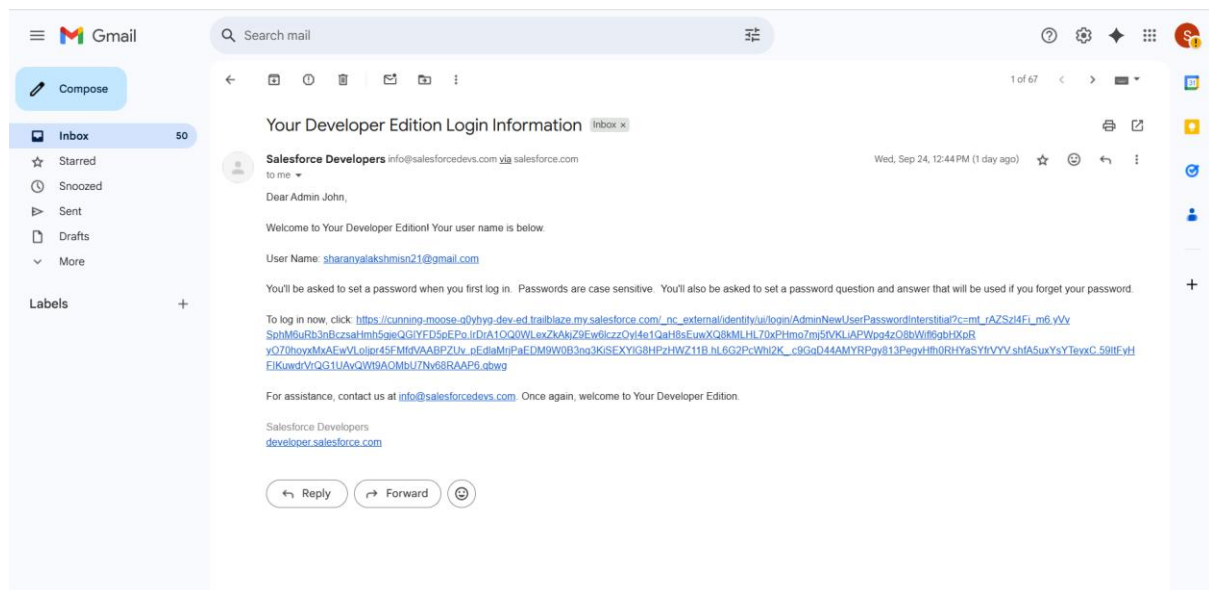
18	
19	mail.setPlainTextBody(body);
20	mails.add(mail);
21	}
22	
23	if (!mails.isEmpty()) {
24	Messaging.sendEmail(mails);
25	}
26	}
27	}
28	

Logs	Tests	Checkpoints	Query Editor	View State	Progress	Problems
User	Application	Operation	Time	Status	Read	Size
SANKU NARAYANA SHAMI GARI SHAR...	Browser	/aura	25/09/2025, 13:59:41	Success	Unread	310 bytes
SANKU NARAYANA SHAMI GARI SHAR...	Browser	/aura	25/09/2025, 13:23:36	Success	Unread	3.38 KB
SANKU NARAYANA SHAMI GARI SHAR...	Unknown	ApexTestHandler	25/09/2025, 13:21:44	Success	Unread	995 bytes
SANKU NARAYANA SHAMI GARI SHAR...	Unknown	ApexTestHandler	25/09/2025, 13:21:42	Insert failed. First exception on row 1:...	Unread	23.45 KB
SANKU NARAYANA SHAMI GARI SHAR...	Unknown	ApexTestHandler	25/09/2025, 13:20:53	Insert failed. First exception on row 1:...	Unread	23.45 KB
SANKU NARAYANA SHAMI GARI SHAR...	Unknown	ApexTestHandler	25/09/2025, 13:20:53	Success	Unread	998 bytes

## Screenshot Suggestion:

Show a trigger sending email and the validation rule for email input in the object setup.



## Optional:

Workflow Rules, Approval Process, Custom Notifications – Not required since all updates and notifications were handled via triggers and LWC actions.

Some workflows such as LearningPath and Mentorship Workflow are optional since all email alerts and points are handled by the record triggered flow.