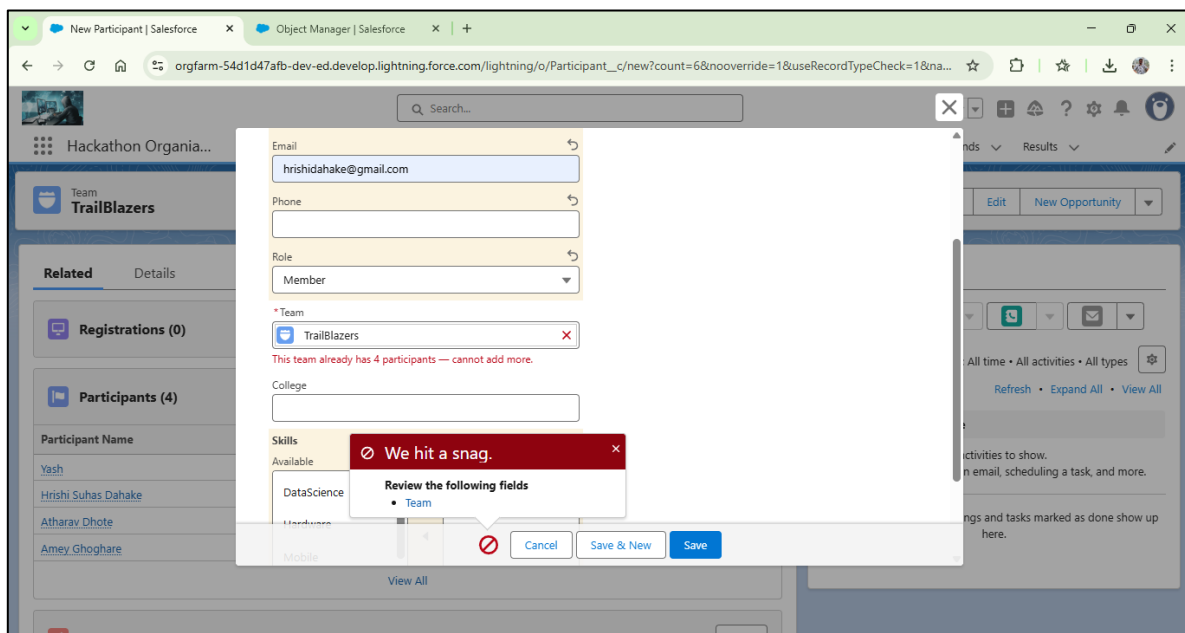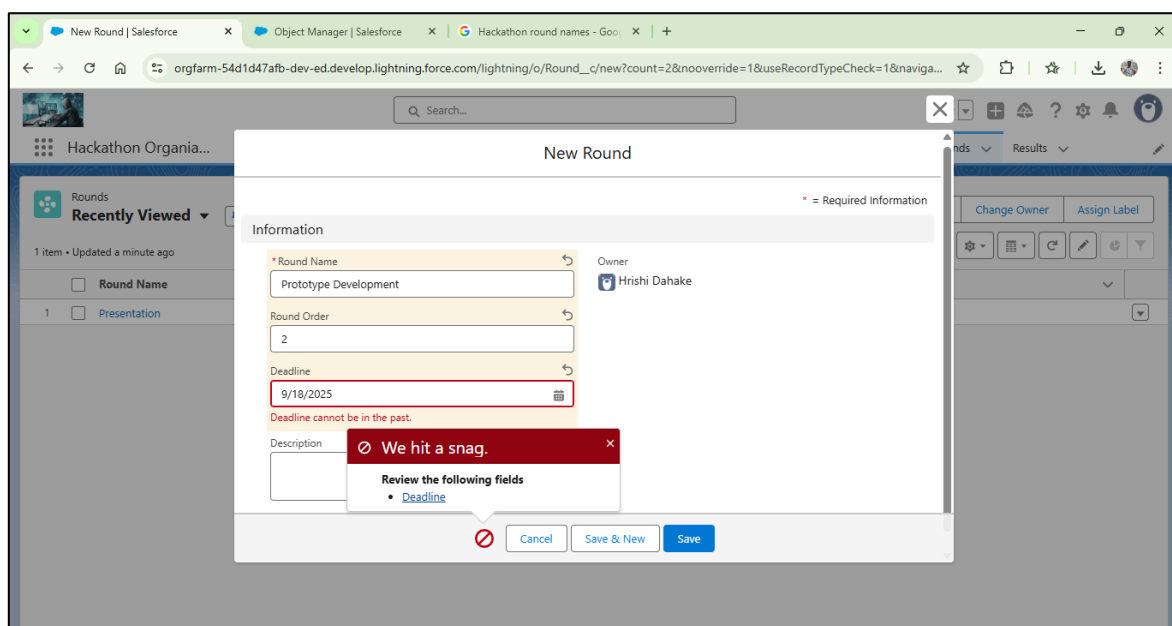# Phase 4: Process Automation

1. Validation Rules

Validation rules were created to maintain data quality and enforce hackathon constraints:

- **Rule 1: Team Size Limit**

    - **Logic:** A team cannot have more than **4 participants**.

    - **Impact:** Prevents organizers/participants from registering oversized teams.

- **Rule 2: Deadline Validation**

    - **Logic:** Event deadlines (e.g., submission, registration) cannot be set in the **past date**.

    - **Impact:** Ensures scheduling accuracy and avoids errors in event timeline management.
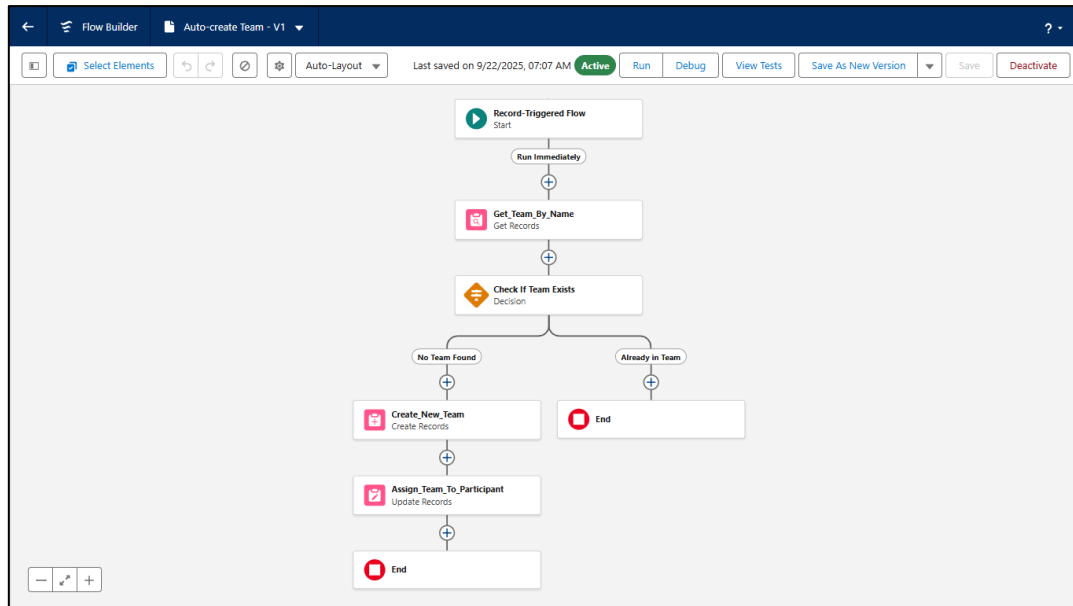
2. Flows (Automation via Salesforce Flows)

Several **Record-Triggered and Scheduled Flows** were built:
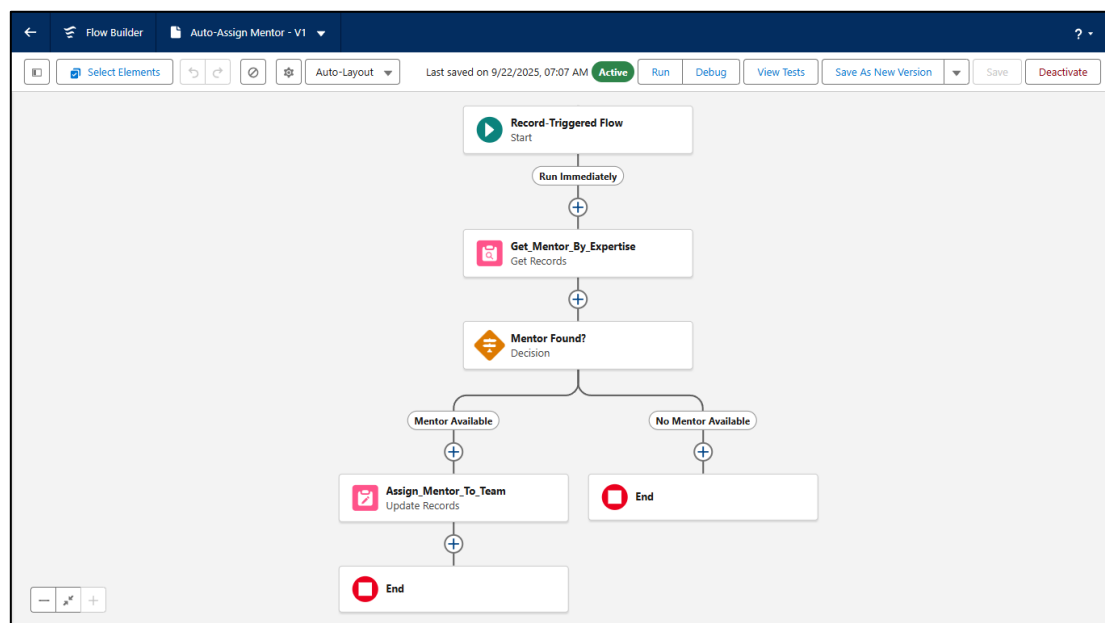
- **Flow 1: Auto-create Team Record**

  o **Trigger:** When the **first Participant** registers.

  o **Action:** Creates a new **Team record** and links the participant to it.

  o **Impact:** Eliminates manual team creation by organizers.
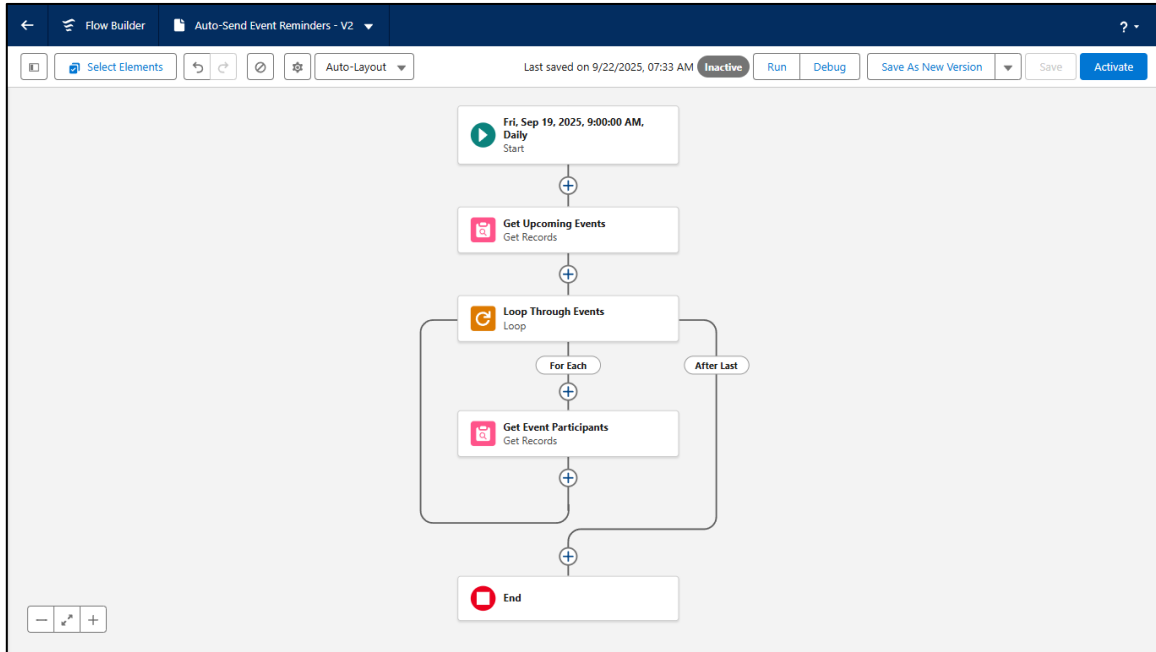

- **Flow 2: Auto-assign Mentors**

  o **Trigger:** When a **Team record** is created.

  o **Logic:** Matches mentor's expertise with the team's project/skills.

  o **Action:** Assigns the mentor to the team automatically.

  o **Impact:** Saves time and ensures expertise-based mentor distribution.
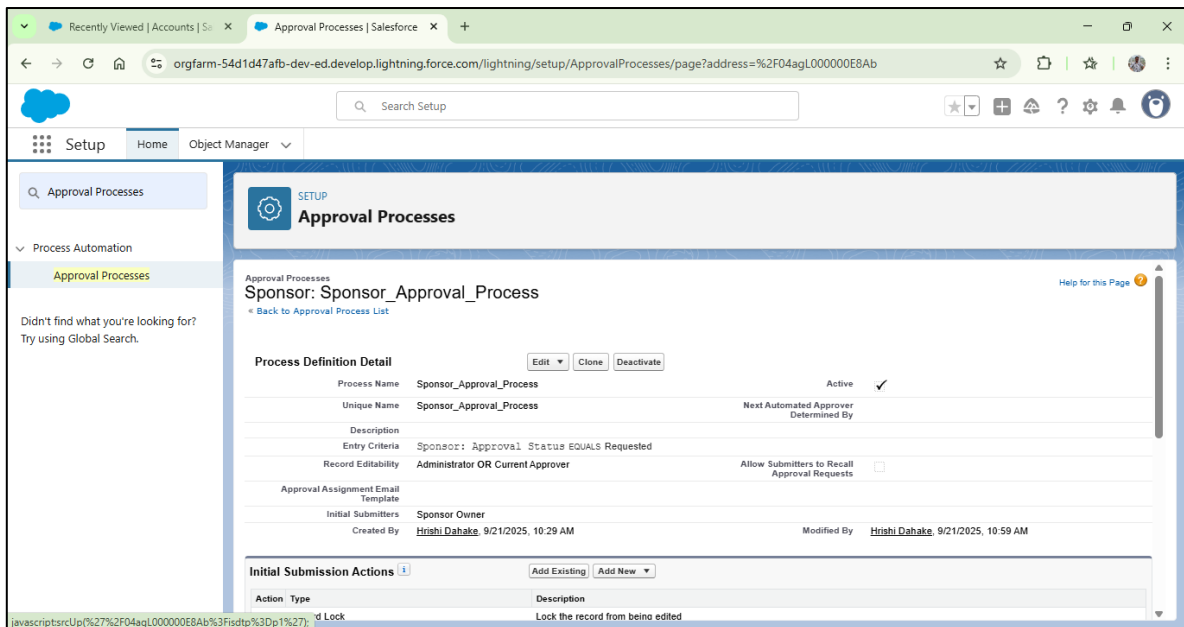
- **Flow 3: Event Reminder Emails**
  - **Type:** Scheduled Flow.
  - **Logic:** Runs before deadlines (e.g., 24 hours prior).
  - **Action:** Sends reminder emails to participants about event milestones.
  - **Impact:** Keeps participants engaged and reduces missed deadlines.
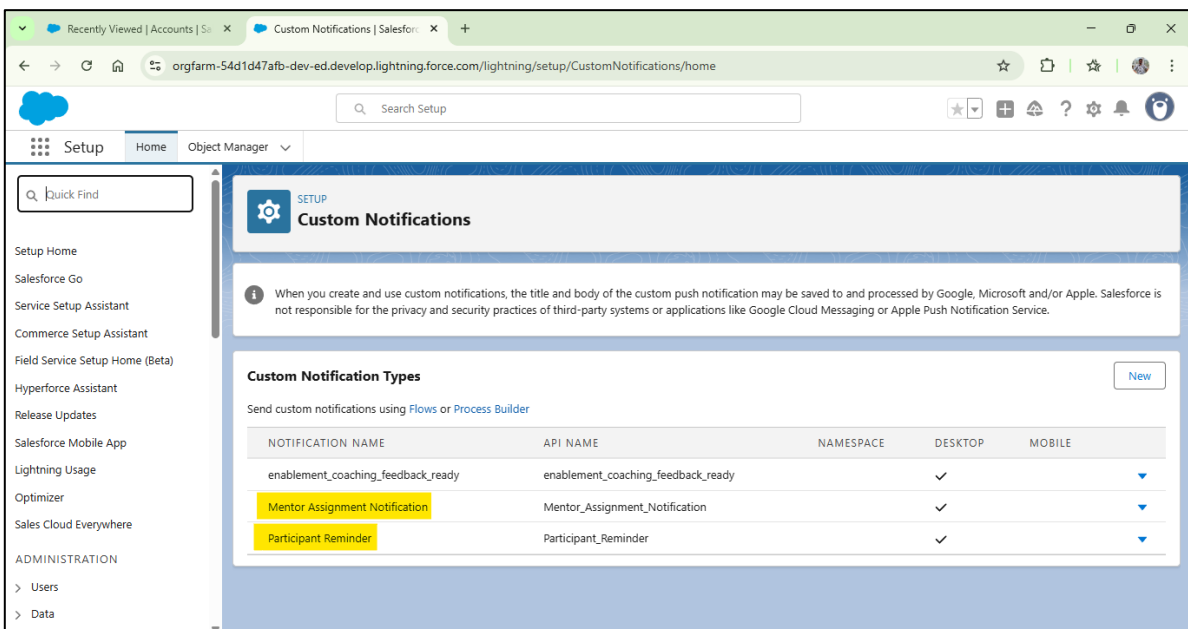

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3. Approval Process

- **Use Case:** Sponsor onboarding requires organizer confirmation.
- **Object:** *Sponsor__c* (custom object).
- **Steps:**
  - **Entry Criteria:** Sponsor status = *Pending*.
  - **Approver:** Organizer Role/Queue.
  - **Initial Action:** Lock record to prevent editing during review.
  - **On Approval:** Update Sponsor_Status → *Approved*.
  - **On Rejection:** Update Sponsor_Status → *Rejected*.
- **Impact:** Ensures controlled and transparent sponsor approvals.

4. Custom Notifications

Custom in-app and email notifications were configured:

- **Scenario:** Notify participants **before important deadlines** (e.g., project submission, evaluation start).

- **Action:** Notifications sent via Flow + Notification Builder.

- **Impact:** Improves communication and ensures participants stay on track.

Deliverables Achieved in Phase 4

By the end of Phase 4, we automated the core hackathon processes:

- **Validation Rules** for enforcing data quality.

- **Flows** for team creation, mentor assignment, and event reminders.

- **Approval Process** for sponsor requests.

- **Custom Notifications** to keep participants informed.

This automation ensures the **Hackathon Org runs smoothly, reduces manual effort, and provides real-time visibility** to all stakeholders.