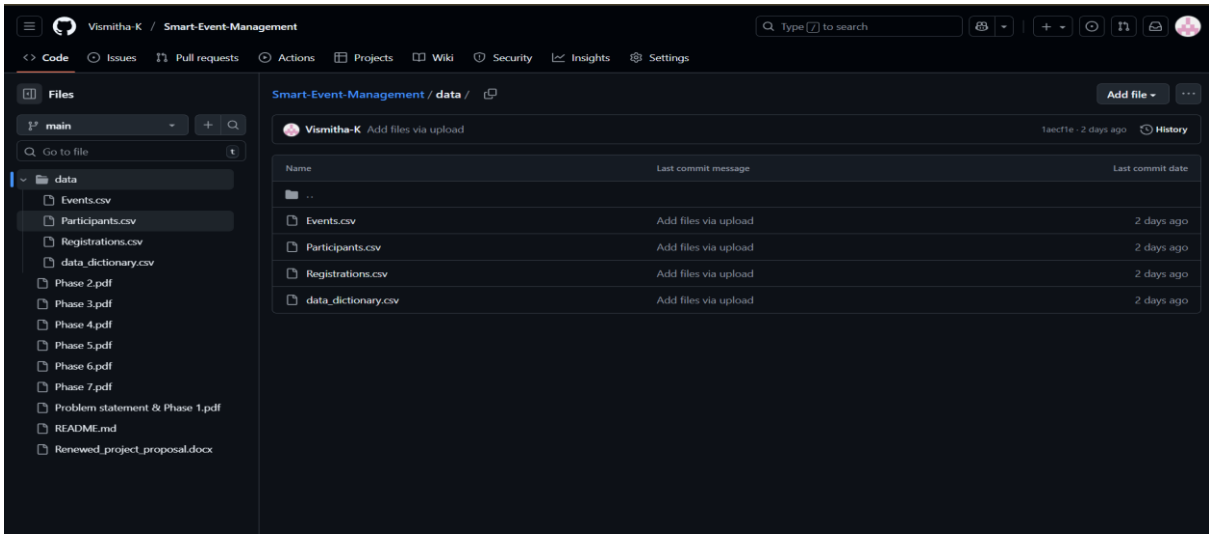
PHASE 8: DATA MANAGEMENT & DEPLOYMENT

Goal: Ensure that the Smart Event Management app maintains high-quality data, supports smooth data migration, and enables deployment of customizations to Salesforce orgs and repositories.

---

1. Data Import (using existing CSVs)

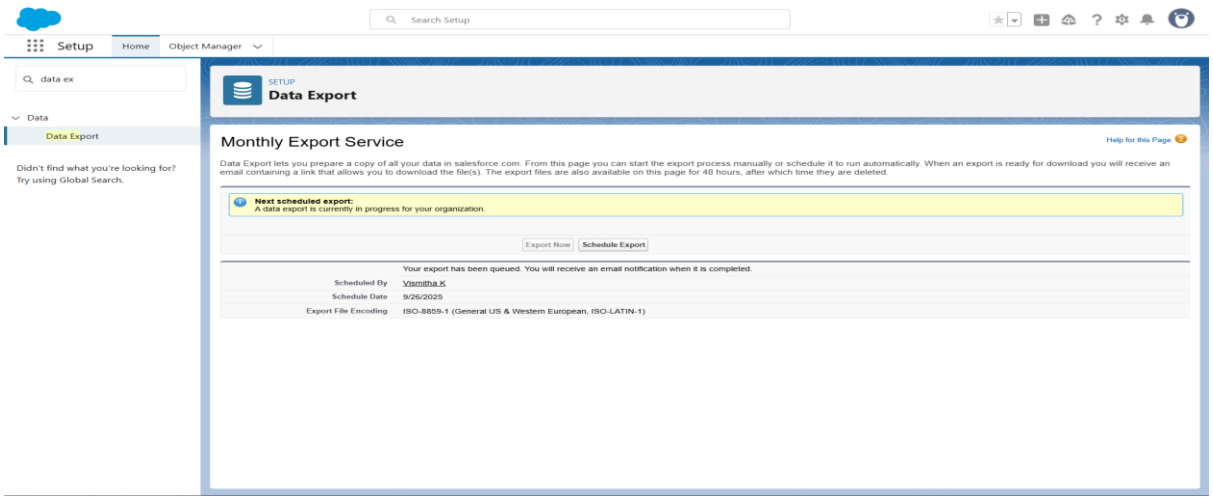
- CSV files for **Events, Participants, and Registrations** had already been prepared and committed in earlier phases.
- These CSVs serve as the data source for importing records into Salesforce.



---

2. Data Export & Backup

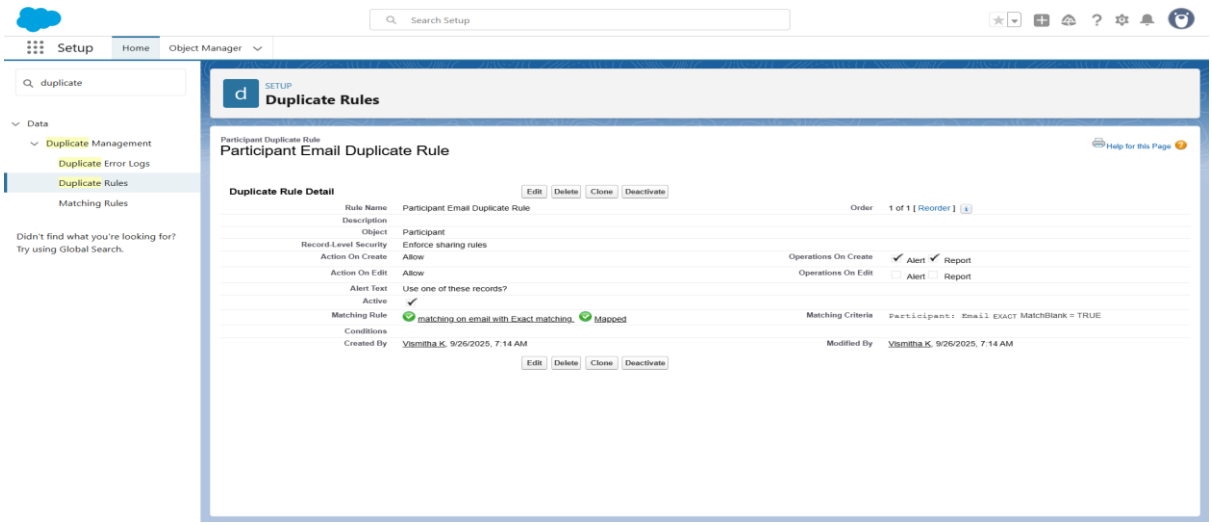
- To ensure data safety, Salesforce's **Data Export service** was used.
- An **Export Now** operation was initiated, including Event, Participant, and Registration data.
- This step demonstrates good data management practices by ensuring periodic backups.



---

3. Duplicate Rules

- To prevent duplicate participant entries, a **Duplicate Rule** was created for the **Participant__c** object.
- A **Matching Rule** was configured on the Email__c field with “Exact Match.”
- The rule was set to **Block duplicates** at the time of record creation.
- Testing confirmed that attempting to insert a participant with an already used email triggered the duplicate prevention alert.



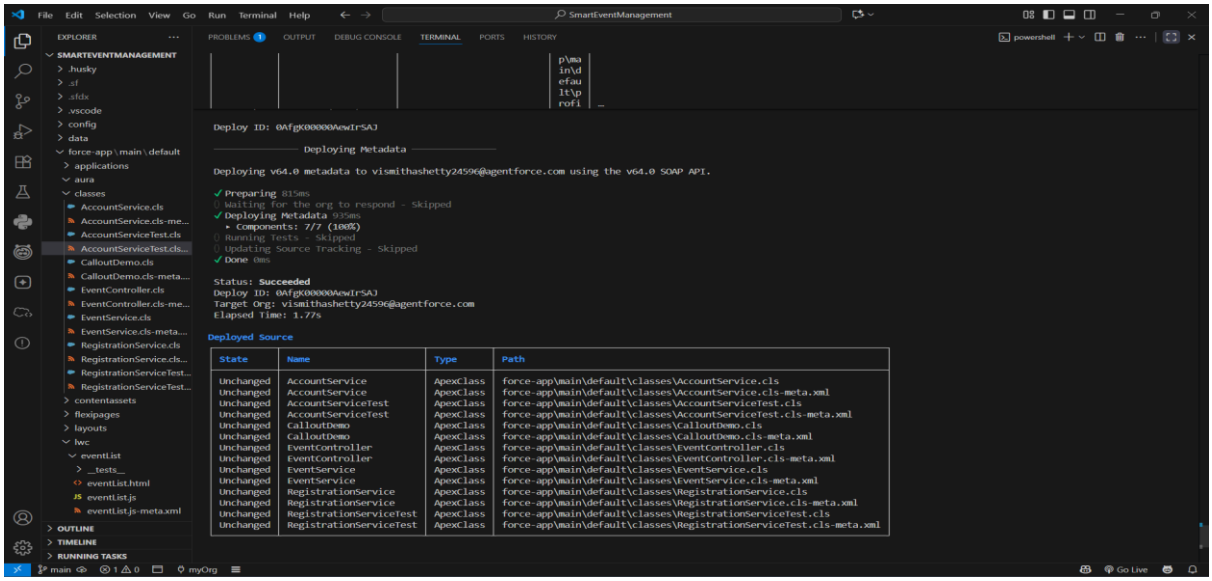
---

4. Deployment with Salesforce CLI

- Salesforce CLI (SFDX) was used to deploy metadata (Apex classes, triggers, and LWCs) into the org.
- Command used:

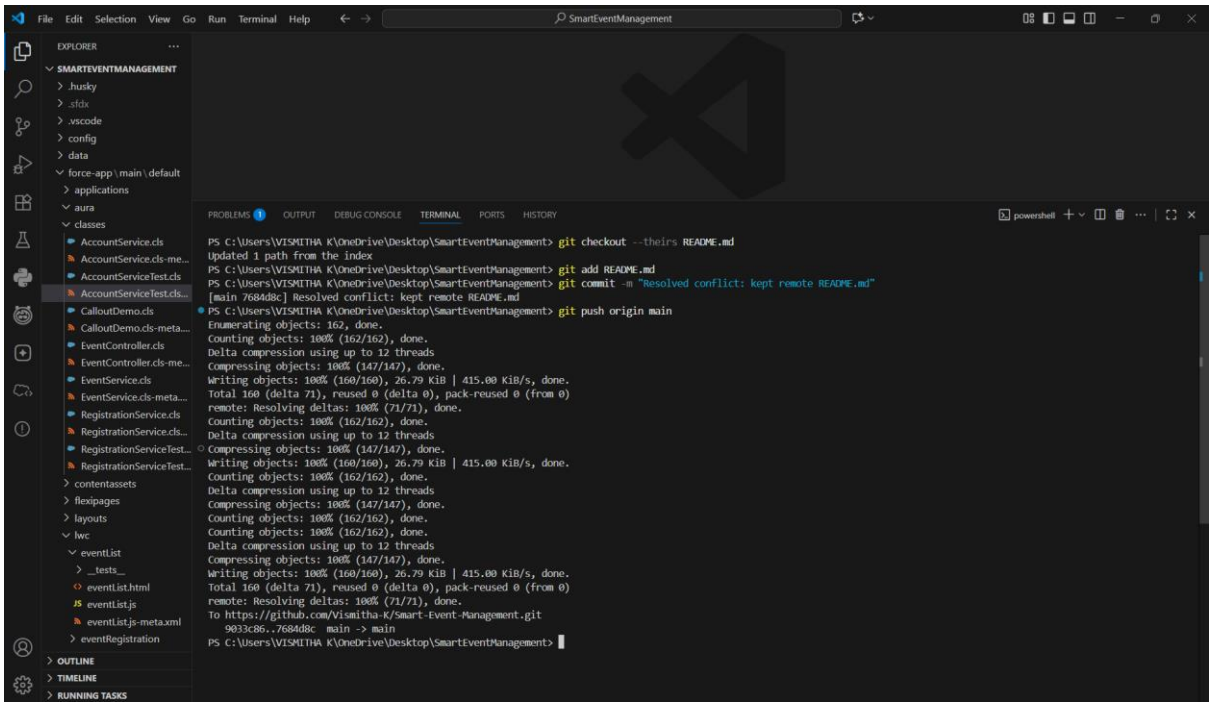
  sf project deploy start --source-dir force-app/main/default

- Deployment logs confirmed the metadata was successfully pushed to the org.



5. Version Control with GitHub

- The Salesforce project was version-controlled using Git and GitHub.
- A new commit was pushed with the Phase 8 changes.
- This ensures traceability, collaboration, and the ability to roll back if needed.



Achievements in Phase 8

- Reused previously prepared CSVs for data migration and testing.
- Demonstrated **import** and **export** of Salesforce data.
- Implemented **duplicate detection rules** to enforce data quality.
- Successfully deployed metadata using Salesforce CLI.
- Maintained proper version control by pushing project updates to GitHub.