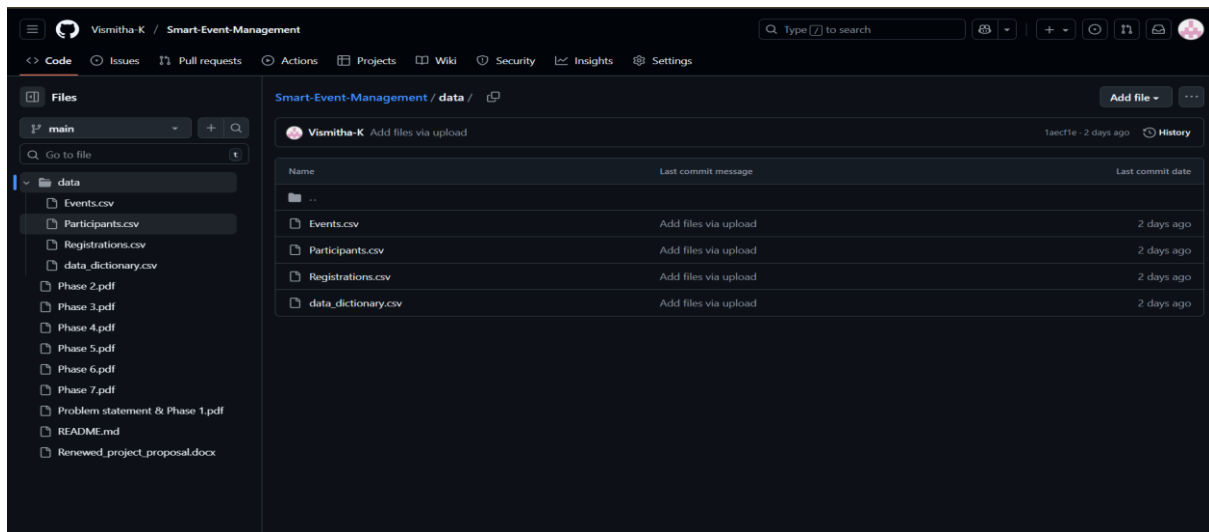


# PHASE 8: DATA MANAGEMENT & DEPLOYMENT

**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.

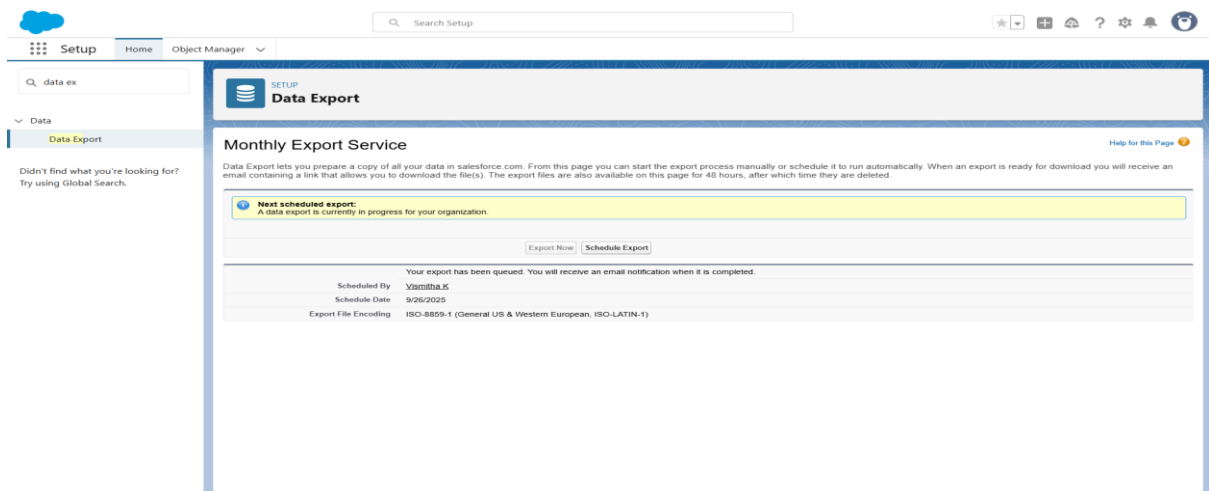
## 1. Data Import (using existing CSVs)

- 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.



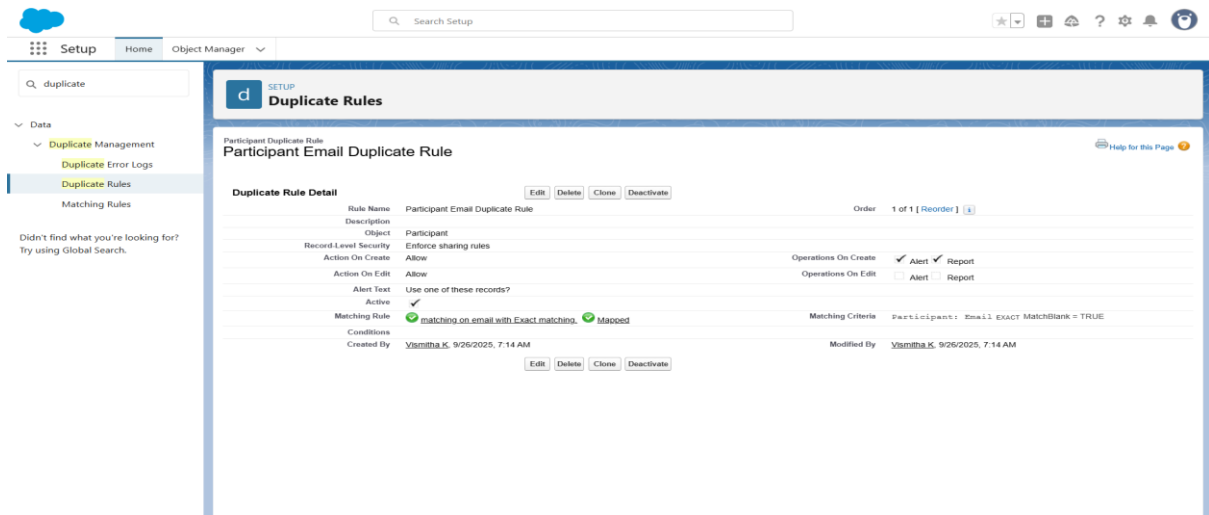
## 2. Data Export & Backup

- 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.



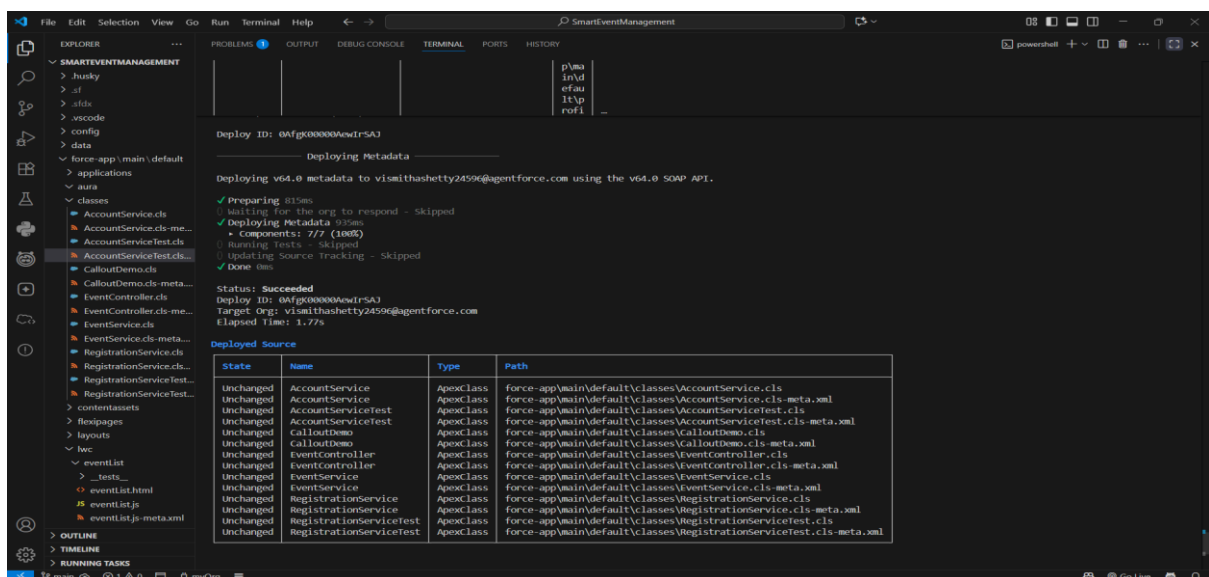
### 3. Duplicate Rules

- 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.



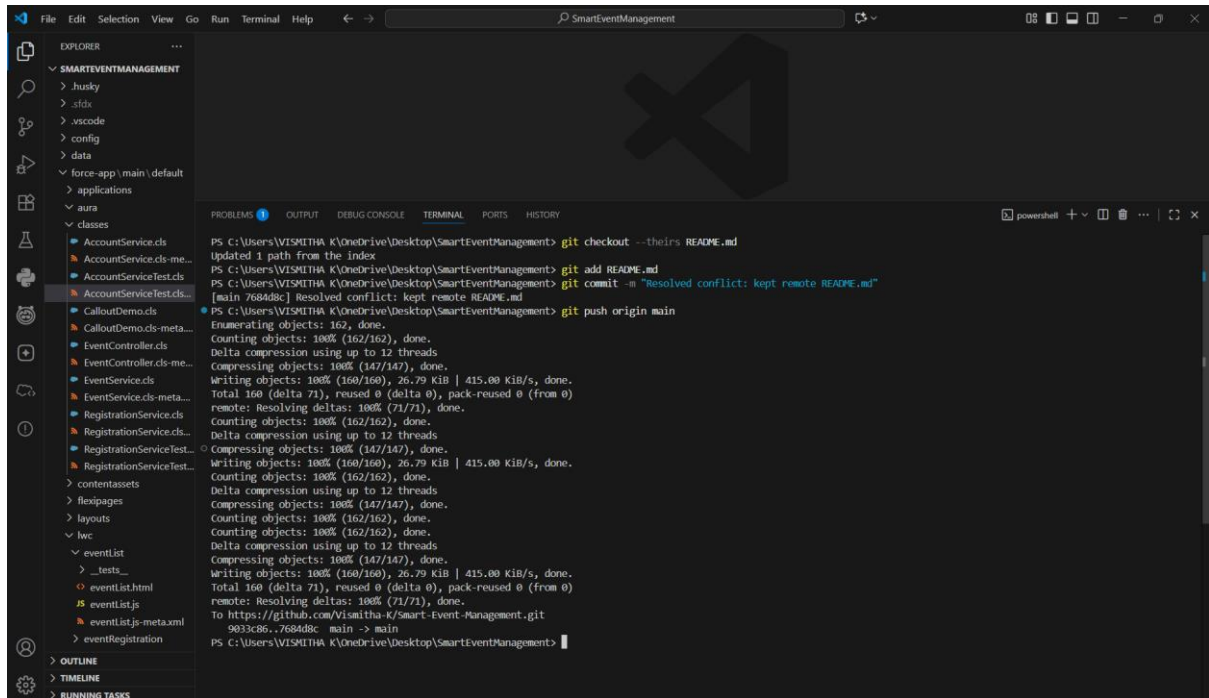
### 4. Deployment with Salesforce CLI

- 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.



The screenshot shows the Visual Studio Code interface with a terminal window open. The Explorer pane on the left shows the project structure for 'SmartEventManager'. The terminal window displays the following commands and output:

```
PS C:\Users\VISMITHA K\OneDrive\Desktop\SmartEventManager> git checkout --theirs README.md
Updated 1 path from the index
PS C:\Users\VISMITHA K\OneDrive\Desktop\SmartEventManager> git add README.md
PS C:\Users\VISMITHA K\OneDrive\Desktop\SmartEventManager> git commit -m "Resolved conflict: kept remote README.md"
[main 7684d8c] Resolved conflict: kept remote README.md
1 file changed, 1 insertion(+), 1 deletion(-)
PS C:\Users\VISMITHA K\OneDrive\Desktop\SmartEventManager> git push origin main
Enumerating objects: 162, done.
Counting objects: 100% (162/162), done.
Delta compression using up to 12 threads
Compressing objects: 100% (147/147), done.
Writing objects: 100% (160/160), 26.79 KiB | 415.00 KiB/s, done.
Total 160 (delta 71), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (71/71), done.
Counting objects: 100% (162/162), done.
Delta compression using up to 12 threads
Compressing objects: 100% (147/147), done.
Writing objects: 100% (160/160), 26.79 KiB | 415.00 KiB/s, done.
Total 160 (delta 71), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (71/71), done.
To https://github.com/Vismitha K/Smart-Event-Management.git
9033c86..7684d8c main -> main
PS C:\Users\VISMITHA K\OneDrive\Desktop\SmartEventManager>
```

## 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.