Phase 8: Data Management & Deployment

Goal:

To efficiently manage, migrate, and secure student data and metadata across Salesforce environments using native tools, packages, and modern deployment methods.

1. Data Import Wizard

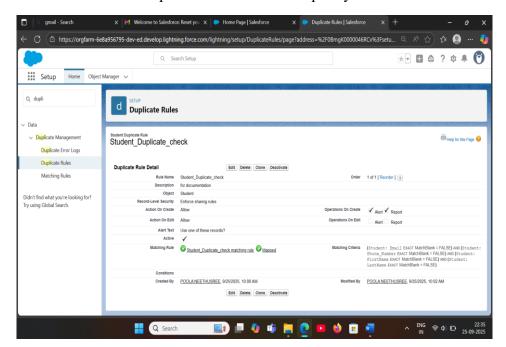
- o Imported sample student records and related data through the Salesforce UI.
- o Validated successful import with list views and reports.
- o Documented mapping fields for reusability.

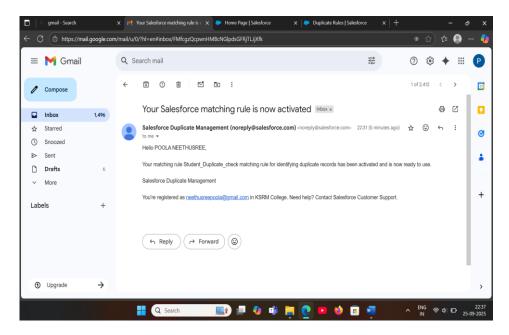
2. Data Loader

- o Performed bulk inserts, updates, and deletes for large datasets.
- o Created CSV templates for Student and Course objects.
- o Logged and reviewed success/error CSVs for audit.

3. Duplicate Rules

- o Defined matching rules to detect duplicate student records.
- o Configured duplicate rules to block or allow with alerts.
- o Tested with sample data to ensure data quality.





4. Data Export & Backup

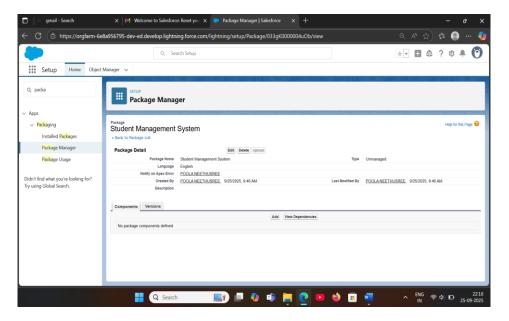
- Scheduled weekly data export from Setup for backup.
- o Downloaded CSVs of critical objects (Students, Courses, Enrollments).
- o Stored backup securely for rollback scenarios.

5. Change Sets

- o Created outbound change sets with custom objects and fields.
- Uploaded change sets to target sandbox and deployed.
- o Validated deployment results post-migration.

6. Unmanaged vs Managed Packages

- o Built an unmanaged package containing custom objects for sharing.
- o Created a managed package to test namespace and code protection.
- o Installed both in a new org and documented differences.



7. ANT Migration Tool

- o Configured build.xml and package.xml for metadata retrieval.
- o Retrieved custom object and Apex class metadata from source org.
- o Deployed changes to target org and validated success logs.

8. VS Code & SFDX

- o Set up VS Code project with Salesforce CLI and authorized orgs.
- o Retrieved metadata using sf project retrieve start.
- o Modified and deployed changes back using sf project deploy start.