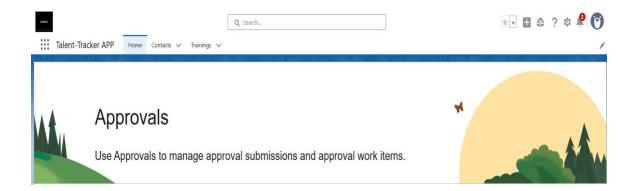
Talent Tracking App — Salesforce Project Report



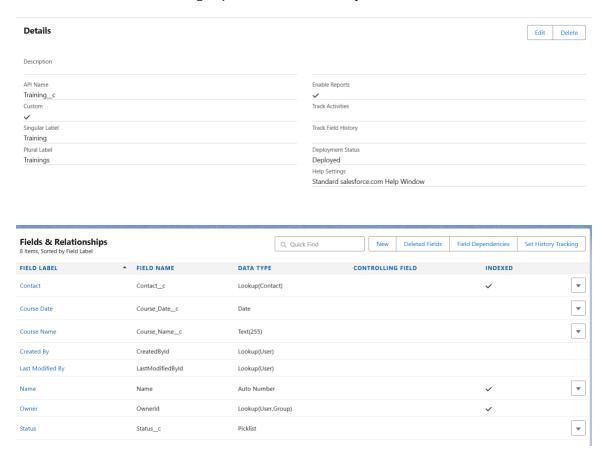
Phase 1: Problem Understanding & Industry Analysis

- **Requirement Gathering**: Track employee training progress efficiently.
- **Stakeholder Analysis**: HR team, Trainers, Employees.
- Business Process Mapping:
- HR assigns training.
- Employees complete training.
- HR monitors training status.
- Industry-specific Use Case: Corporate learning & development.
- **AppExchange Exploration**: Alternatives like Cornerstone, but opted for custom solution.

Phase 2: Org Setup & Configuration

- Salesforce **Developer Edition** org used.
- Profiles: Standard User, HR Manager.
- Roles: HR > Employee.
- Permission Sets: Access to Training object.

• OWD: Private for Training object, shared via lookup.



Phase 3: Data Modeling & Relationships

- Custom Fields & Objects:
 - On Contact: Training_Status_c (Picklist: Not Started, In Progress, Completed).
 - **Training_c** (Custom Object).
 - Fields:
 - Name (Auto Number)
 - Contact (Lookup → Contact)
 - Course_Date_c (Date)
 - Course_Name_c (Text)
 - Status_c (Picklist: Not Started, In Progress, Completed)

• Relationship: Contact \leftrightarrow Training (1-to-Many).

Phase 4: Process Automation (Admin)

- Validation Rule: Ensure Course Date is not in the past when creating a training.
- Flows could be used but here we chose **Apex Trigger** for business logic.

```
trigger TrainingTrigger on Training_c (after insert, after update) {
    if(Trigger.isAfter & Trigger.isInsert){
        TrainingTriggerHandler.afterInsert(Trigger.new);
}

if(Trigger.isAfter && Trigger.isUpdate){
        TrainingTriggerHandler.afterUpdate(Trigger.new, Trigger.oldMap);
}
```

Phase 5: Apex Programming (Developer)

- **Trigger** on Training:
- After Insert: Update Contact's Training_Status_c.
- After Update: Sync Contact's Training_Status_c with Training record's Status_c.
- Batch Apex:
- BatchUpdateTrainingStatus
- Finds Training records with Status = 'In Progress' and Course_Date < TODAY()-7.
- Updates them to Completed.
- Scheduled Apex:
- Job runs daily at 1 AM.
- Calls BatchUpdateTrainingStatus.

```
blic with sharing class TrainingTriggerHandler {
  public static void afterInsert(List<Training_c> listNew){
   Map<Id,String> mapContactIds = new Map<Id,String>();
   for/Toring
                          c item : listNew){
             mapContactIds.put(item.Contact__c,item.Status__c);
       List<Contact> listContact = [SELECT Id, Training_Status_c FROM Contact WHERE Id IN :mapContactIds.keySet()];
       for(Contact item : listContact)
             if(mapContactIds.containsKey(item.Id)){
                 item.Training_Status__c = mapContactIds.get(item.Id);
       if(!listContact.isEmpty()){
            update listContact;
  public static void afterUpdate(List<Training_c> listNew, Map<Id,Training_c> mapOld){
    Map<Id,String> mapContactIds = new Map<Id,String>();
    for(Training_c item : listNew){ // Status = 'Not Started' -> 'In Progress'
            Training_c oldRecord = mapOld.get(item.Id);
if(item.Status_c != oldRecord.Status_c){
   mapContactIds.put(item.Contact_c,item.Status_c);
       List<Contact> listContact = [SELECT Id, Training_Status_c FROM Contact WHERE Id IN :mapContactIds.keySet()];
        for(Contact item : listContact){
            if(mapContactIds.containsKey(item.Id)){
   item.Training_Status_c = mapContactIds.get(item.Id);
        if(!listContact.isEmpty()){
            update listContact;
```

```
public with sharing class SchedulerUpdateTrainingStatus implements Schedulable {
    public void execute(SchedulableContext sc){
        Database.executeBatch(new BatchUpdateTrainingStatus(), 200);
    }
}
```

```
public with sharing class TrainingService {

@AuraEnabled(cacheable=true)
public static List<Training_c> getTrainings(Id contactId){
    return [SELECT Id, Course_Name_c, Status_c FROM Training_c WHERE Contact_c = :contactId];
}

@AuraEnabled
public static void markCompleted(Id trainingId){
    Training_c t = [SELECT Id, Status_c FROM Training_c WHERE Id = :trainingId LIMIT 1];
    t.Status_c = 'Completed';
    update t;
}
```

Phase 6: User Interface Development

- LWC: trainingList
- Accepts recordId (Contact Id).

- Displays list of Training records for that Contact.
- Provides button → Mark training as Completed.
- Used @wire with Apex method to fetch trainings.
- Imperative Apex call on button click to update Status.

```
import { LightningElement, wire, api } from 'lwc';
import { refreshApex } from '@salesforce/apex';
import getTrainings from '@salesforce/apex/TrainingService.getTrainings';
import updateStatus from '@salesforce/apex/TrainingService.markCompleted';

export default class TrainingList extends LightningElement {

@api recordId;

@wire(getTrainings, { contactId: '$recordId' }) trainings;

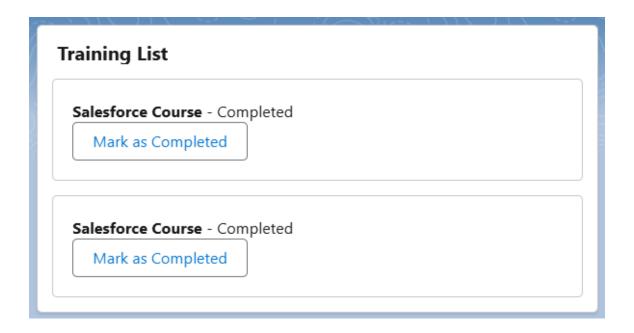
handleMarkCompleted(event) {

const trainingId = event.target.dataset.id;
 updateStatus({ trainingId })

.then(() => {

    return refreshApex(this.trainings);
    });

}
```

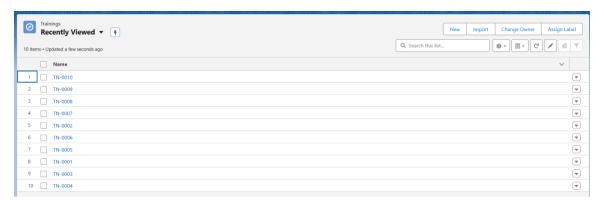


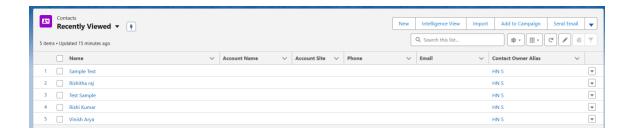
Phase 7: Integration & External Access

- No external integrations required in MVP.
- (Future enhancement: integrate with e-learning platforms via REST API).

Phase 8: Data Management & Deployment

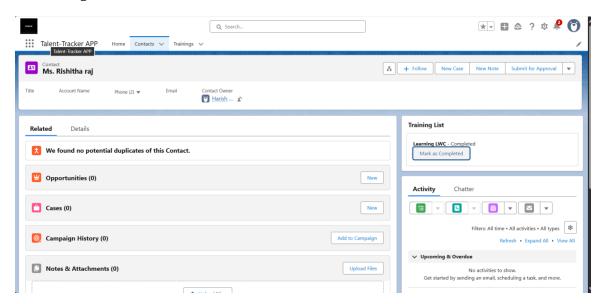
- Test Data: Loaded using Data Import Wizard.
- Metadata Deployment: SFDX + Change Sets.
- Backup: Data Export scheduled weekly.

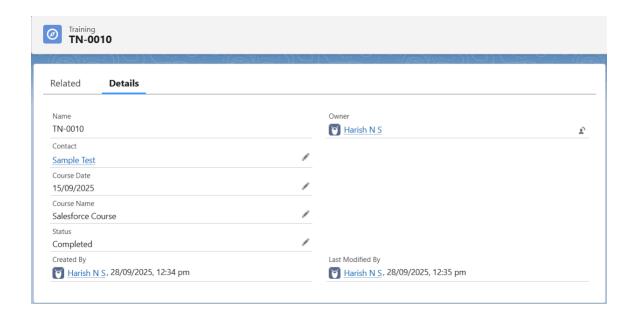




Phase 9: Reporting, Dashboards & Security Review

- Reports: Training by Status, Training by Contact.
- Dashboards: HR Dashboard → % Completed, In Progress, Overdue.
- Security:
- Field-Level Security for Training Status.
- Sharing rules for HR role.





Phase 10: Final Presentation & Demo Day

- Demo Walkthrough:
- Create Contact.
- Assign Trainings.
- Update Status manually or via batch job.
- Show Contact's Training Status roll-up.
- **Client Q&A**: Cover automation & reporting.
- **Documentation**: Admin guide + developer code notes.
- **Portfolio Showcase**: Position project as L&D solution.