

# Final Project Report – SkillSync

**Project Title:** SkillSync – Knowledge & Expertise Management

**Phase:** 10 – Final Documentation & Presentation

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## 1. Project Overview

**SkillSync** is a Salesforce-based CRM platform designed to enhance **employee skill management, engagement, and collaboration** within organizations. The system connects **employees, managers, mentors, and administrators**, creating a transparent and gamified ecosystem for **skill development and workforce productivity**.

Through **10 structured phases**, the project addressed real-world organizational challenges such as **skill tracking, project allocation, mentorship management, learning path progression, and employee engagement**. The solution was built on Salesforce with scalable features, including **custom data modeling, process automation, Apex programming, integration, reporting, and interactive dashboards**.

The project delivered an **end-to-end system** where employees can:

- Showcase and update their **skills & learning paths**,
- Earn **gamification points** through projects, tasks, and mentorships,
- Track progress via **reports and dashboards**,
- Get recognized through a **leaderboard-driven engagement model**.

Managers and administrators benefit from **real-time visibility** into workforce capabilities, engagement levels, and project readiness, enabling **data-driven talent management**.

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## 2. Problem Statement

In modern organizations, managing employee **skills, learning progress, and engagement** remains a major challenge. Traditional systems are often **fragmented, manual, and lack real-time visibility**, which leads to:

- Difficulty in **tracking employee skills** and matching them to project needs.
- Limited **employee engagement** and recognition, reducing motivation and productivity.
- Ineffective **mentorship programs**, as progress and outcomes are not measured properly.
- Lack of **centralized dashboards** and reports for managers to make data-driven decisions.
- No gamification or incentive system to encourage continuous learning and collaboration.

As a result, organizations face **skill gaps, underutilized talent, and reduced workforce productivity**. There is a strong need for a **centralized, automated, and gamified Salesforce solution** that can bring together employees, mentors, and managers to **track, measure, and enhance skill development and engagement** in a transparent way.

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### 3. Solution Overview

The SkillSync project was implemented in Salesforce with a focus on the **Admin Login module**. The administrator acts as the central user who manages the entire system. Through the admin login, the project provides:

- **Secure access** to the platform with admin authentication.
- Ability for the admin to **create and manage records** for employees, skills, learning paths, and mentorship programs.
- **Configuration of page layouts, record types, and permissions**, ensuring the right data is visible and controlled.
- Setup of **validation rules and process automation** to maintain data accuracy and reduce manual effort.
- **Reports and dashboards** accessible to the admin, providing insights into employee points, engagement breakdown, learning path progress, and mentorship effectiveness.
- Centralized **control panel for the admin**, ensuring smooth monitoring of activities and system management.

By focusing on the **Admin Login**, the project delivers the foundation of the SkillSync system, allowing administrators to have **full visibility, data accuracy, and control** over the skill and engagement management processes within the organization.

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### 4. Project Phases & Deliverables

#### Phase 1: Problem Understanding & Industry Analysis

- Identified the challenge of managing **employee skills, learning journeys, and mentorship programs** in organizations.
  - Validated that organizations need **gamification (points), visibility of engagement, and structured learning paths**.
  - Defined success metrics: admin-controlled system, accurate tracking, and clear dashboards.
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#### Phase 2: Org Setup & Configuration

- **Salesforce Developer Org** created for project implementation.
- Configured **Company Profile, Roles, Profiles, and Users**.
- Defined **Admin Login** with full access to manage system records.

- Set up **Security Model**: Organization-Wide Defaults (OWD), Field-Level Security (FLS), and Permission Sets.
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### Phase 3: Data Modeling & Relationships

- Created custom objects:
    - **Employee\_\_c** → Employee details + Points.
    - **Engagement\_Log\_\_c** → Tracks activities and awarded points.
    - **Learning\_Path\_\_c** → Training and skill progress.
    - **Mentorship\_\_c** → Mentor–Mentee sessions and outcomes.
  - Used **Schema Builder** to map relationships (Employee ↔ Engagement Logs, Mentor ↔ Mentee).
  - Configured **Page Layouts, Record Types, and Compact Layouts** for each object.
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### Phase 4: Process Automation (Admin)

- **Workflows** built for:
    - Sending notifications when new Engagement Logs are created.
    - Updating fields automatically on certain conditions.
  - **Validation Rules** to enforce correct data entry (e.g., Points cannot be negative).
  - Basic **Approval Logic** handled using workflow-based notifications (Admin review).
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### Phase 5: Apex Development

- Developed **Apex Triggers** to send automated **emails** when:
    - A new mentorship session is logged.
    - A learning path status is marked as "Completed."
  - Ensured data integrity through **trigger logic validations**.
  - Created **Test Classes** to validate Apex functionality (achieved >75% coverage).
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### Phase 6: Lightning Web Components (LWCs)

*(Not implemented – system used Salesforce standard UI and dashboard visualization.)*

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### Phase 7: Integration

*(Not implemented – no external API integrations in current phase.)*

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### Phase 8: Data Management & Deployment

- Created sample records (Employees, Engagement Logs, Learning Paths, Mentorships).
  - Imported test data using **Data Import Wizard**.
  - Simple **deployment within Developer Org** (did not include multi-org pipelines).
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### Phase 9: Reporting & Dashboards

- Created 4 main reports:
    - **Leaderboard Report** – Employees ranked by Points.
    - **Engagement Breakdown** – Engagement types with total points.
    - **Learning Path Progress** – Distribution by status.
    - **Mentorship Effectiveness** – Completed mentorships by mentor.
  - Built **SkillSync Dashboard** with bar, donut, and summary chart components.
  - Configured **Dashboard Filters & Subscriptions** for automated delivery to Admin.
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### Phase 10: Final Presentation & Wrap-Up

- Consolidated project into final documentation and presentation slides.
  - Demonstrated the **Admin Login, Data Modeling, Apex Email Triggers, Workflows, Reports, and Dashboards**.
  - Delivered SkillSync as a Salesforce solution for **skill management, employee growth tracking, and engagement analytics**.
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## 5. Security & Compliance

- **Data Security:** Role hierarchy, FLS, OWD.
  - **Compliance:** GDPR & Indian data privacy policies.
  - **Audit Trail:** System logging & approval history tracking.
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## 6. Project Outcomes

- The SkillSync project delivered a centralized Salesforce system for managing employee skills, learning paths, and mentorship.
  - Workflows automated notifications and updates, while Apex triggers sent email alerts for key events like mentorship and learning completion.
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## 7. Future Enhancements

- **AI (Einstein Analytics):** Provide Suggestions and Easy Processessing.
- **Mobile App Extension:** Knowledge will be shared with the expertise.

## 8. Conclusion

The SkillSync project successfully streamlined employee skill tracking and engagement within Salesforce. By combining workflows, Apex email triggers, and dashboards, the system enhanced automation, visibility, and employee development management.

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**Final Status: Project Completed (Phase 1–10).**

**Deliverables: Documentation, Apex Codes, Lightning App and PPT**