

# SkillSphereX – AI-Powered Skill Exchange & Learning Platform on Salesforce CRM

- Exchange. Learn. Grow.

Salesforce Project Implementation Phases (Admin + Developer)

By Ayushi Rai

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## Problem Statement

In today's fast-changing world, individuals—students, professionals, freelancers—possess valuable skills but lack access to affordable, personalized, and verified learning or mentorship opportunities.

Current platforms focus mainly on paid courses, static content, or one-way learning, leaving a major gap in peer-to-peer skill exchange.

### Key Challenges:

- High costs and subscription fees for skill development.
- Limited personalization and mentorship tailored to an individual's goals.
- Lack of a trusted, gamified system to verify and showcase real-world skills.
- Fragmented tools — learning platforms, freelance sites, and social networks operate in silos, with no unified ecosystem.
- No easy way to barter or exchange skills without involving money.

**Result:** Underutilized skills, low collaboration, and barriers for self-driven learning.

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## Proposed Solution – SkillSphereX

SkillSphereX is a **Salesforce-based, AI-powered Skill Exchange & Learning Platform** designed for both individuals and institutions. It creates a unified ecosystem where students, professionals, universities, training centers, and corporates can list skills, discover learning opportunities, and collaborate in a **credit-based, gamified environment**.

### How It Works

- **Skill Listings:** Users or organizations post skills they can teach (or mentor in) and skills they want to learn.
- **AI Smart Matching:** AI recommends the best matches between skill providers and skill seekers based on expertise, availability, and goals.
- **Credit-Based Economy:** Users earn credits for teaching/mentoring and spend credits to learn from others. Organizations can also allocate credits internally.

- **Gamification & Trust Scores:** Badges, leaderboards, and verified ratings build credibility and engagement.
- **Session Booking & Notifications:** Book live sessions (one-on-one or group), receive automated reminders, and track session history.
- **Dashboards & Analytics:** Salesforce dashboards provide real-time visibility of trending skills, credit usage, and engagement metrics.

## Why It's Different

Unlike traditional course platforms or freelance marketplaces, SkillSphereX creates a reciprocal, AI-powered learning network:

- Empowers individuals to upskill at minimal cost.
- Enables institutions (colleges, corporates, NGOs) to promote internal knowledge sharing.
- Builds verified skill profiles and encourages community collaboration.

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## Phase 1: Problem Understanding & Industry Analysis

### Requirement Gathering

- Identify requirements from **learners, mentors, universities, corporates, and NGOs**.
- Key needs: **AI-powered skill matching, credit-based skill exchange, session scheduling, gamification, dashboards, and feedback tracking**.

### Stakeholder Analysis

- **Learners / Students:** Access affordable, verified skills and mentorship.
- **Mentors / Skill Providers:** Share skills, earn credits, and gain recognition.
- **Institutions / Corporates:** Monitor skill engagement, encourage internal knowledge sharing.
- **Administrators:** Manage users, approve skills, oversee credit transactions, generate reports.

### Business Process Mapping

- **Current:** Skills exchanged informally via social media, messaging apps, or offline workshops → No tracking, low trust, no credit system.
- **Future:** Users list skills → AI suggests matches → Sessions booked → Credits exchanged → Feedback collected → Dashboards updated automatically.

### Industry Use Case Analysis

- Peer-to-peer skill exchange is emerging in EdTech and corporate learning.
- Existing platforms focus on paid courses; SkillSphereX enables a **reciprocal, credit-based, AI-powered learning environment**.

## AppExchange Exploration

- Explore Salesforce apps for **scheduling, gamification, and reward management**.
  - For MVP, **custom objects** like **Skill, Session, CreditTransaction, Rating/Badge** suffice.
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## Phase 2: Org Setup & Configuration (SkillSphereX-specific)

- **Salesforce Edition:** Developer/Enterprise edition for custom objects, automation, and integrations.
  - **Company Profile Setup:** Configure org with locale, currency, fiscal year, and business hours relevant to the platform.
  - **User Setup & Licenses:** Roles: Admin, Learner, Mentor, Institution Manager.
  - **Profiles & Roles:**
    - **Admin:** Full access to objects, dashboards, and settings.
    - **Mentor:** Manage skill listings, sessions, and received ratings.
    - **Learner:** Browse skills, book sessions, track credits, provide feedback.
    - **Institution Manager:** Monitor internal engagement, assign credits, generate reports.
  - **Permission Sets:** Additional permissions for session approvals, AI recommendations, dashboard analytics.
  - **Org-Wide Defaults (OWD):**
    - **Skills & Sessions** → **Private** (related users only)
    - **CreditTransactions** → **Private** (Admin + involved users)
  - **Sharing Rules:** Enable collaboration between mentors and learners in same organization/community.
  - **Login & Security Policies:** IP restrictions, MFA, session timeout.
  - **Sandbox & Deployment:** Test AI matching, credit logic, session automation before production deployment.
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## Phase 3: Data Modeling & Relationships

- **Objects:**
  - **User:** Name, Email, Role, Credits.
  - **Skill:** Name, Category, Level, Availability, Provider (Lookup).
  - **Session:** Date, Time, Skill, Learner, Mentor, Status.
  - **CreditTransaction:** From, To, Credits, Reason, Date.
  - **Rating/Badge:** Rating Score, Badge Type, Issued To.
- **Relationships:**
  - User ↔ Skill (Lookup)
  - Skill ↔ Session (Master-Detail)
  - User ↔ Session (Lookup for Learner & Mentor)
  - Junction objects for many-to-many relationships if needed.

- **Layouts & Schema:** Page layouts and schema builder optimize usability and relationships.
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## Phase 4: Process Automation (Admin)

- **Validation Rules:** Ensure required fields like Skill Name, Session Date, Credits.
  - **Workflow Rules:** Trigger notifications on session booking or credit allocation.
  - **Process Builder:** Automate credit allocation post-session.
  - **Approval Process:** Skill verification submitted by mentors.
  - **Flow Builder:** Automate session booking, record-triggered credit updates, scheduled leaderboard calculation.
  - **Email Alerts & Custom Notifications:** Session reminders, approval notifications.
  - **Field Updates & Tasks:** Auto-update session status, create follow-up tasks.
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## Phase 5: Apex Programming (Developer)

- **Apex Classes:** Handle AI skill matching, credit calculation.
  - **Apex Triggers:** Update credits, badges, validate skill ratings post-session.
  - **SOQL/SOSL Queries:** Retrieve top skills, active sessions, leaderboard data.
  - **Collections (List, Set, Map):** Bulk process multiple session/credit records.
  - **Scheduled & Queueable Apex:** Weekly leaderboard updates, notifications.
  - **Future Methods:** Asynchronous email or SMS notifications.
  - **Test Classes:** Ensure trigger coverage, validate Apex logic.
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## Phase 6: User Interface Development

- **Lightning App Builder:** Create SkillSphereX app.
  - **Record Pages:** Customized layouts for Users, Skills, Sessions, CreditTransactions.
  - **Tabs:** Role-specific tabs for Learner, Mentor, Admin, Institution Manager.
  - **Home Page Layouts:** Dashboard snapshots of skills, credits, sessions.
  - **Utility Bar:** Quick actions like Book Session, Add Skill.
  - **Lightning Web Components (LWC):** Skill listing, filters, leaderboards.
  - **Apex with LWC:** Dynamic data fetching for skills and sessions.
  - **Events in LWC:** Notify users about bookings and session status.
  - **Navigation Service:** Smooth transitions between objects and pages.
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## Phase 7: Integration & External Access

- **Named Credentials:** Secure AI API integration, external services.
- **External Services:** Connect with certification databases, learning resources.

- **Web Services (REST/SOAP):** Expose endpoints for external portals to create skills or sessions.
  - **Callouts:** Fetch data from external skill verification systems or payment gateways.
  - **Platform Events & Change Data Capture:** Notify mentors, learners, admins about session creation, updates, credit transactions in real-time.
  - **Salesforce Connect:** Integrate external learning or credential databases.
  - **API Limits, OAuth & Authentication:** Secure integration and data access.
  - **Remote Site Settings:** Allow callouts to trusted external systems.
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## Phase 8: Data Management & Deployment

- **Data Import Wizard:** Import users, skills, sessions, credits from CSV/Excel.
  - **Data Loader:** Bulk import legacy skills, sessions, transactions.
  - **Duplicate Rules:** Prevent redundant skills or sessions.
  - **Data Export & Backup:** Weekly backup of all objects and transactions.
  - **Change Sets:** Deploy custom objects, workflows, flows, automation from sandbox to production.
  - **Managed vs Unmanaged Packages:** For scalability and integration.
  - **ANT Migration Tool / VS Code & SFDX:** Version control, deployment automation.
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## Phase 9: Reporting, Dashboards & Security Review

- **Reports:**
    - **Skill Popularity Report:** Trending skills among learners.
    - **Active Learners & Mentors Report:** Engagement tracking.
    - **Credit Transaction Report:** Track earned/spent credits.
  - **Dashboards:**
    - **Leaderboard Dashboard:** Top mentors and learners.
    - **Weekly Engagement Dashboard:** Session bookings and completions.
    - **AI Match Insights Dashboard:** Performance of AI recommendations.
  - **Dynamic Dashboards:** Role-specific views for Admins, Mentors, Learners, Institution Managers.
  - **Sharing Settings & Field Level Security:** Protect sensitive data like credit balances, personal info.
  - **Session Settings, Login IP Ranges & Audit Trail:** Monitor access, ensure security compliance.
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## Phase 10: Final Presentation & Demo Day

- **Pitch Presentation:** Showcase SkillSphereX highlighting AI-powered skill matching, credit system, gamified learning.

- **Demo Walkthrough:** Skill listing → AI matching → Session booking → Credit allocation → Badges → Dashboards.
  - **Feedback Collection:** From mock stakeholders and peers.
  - **Handoff Documentation:** Include object schema, flows, triggers, LWCs, deployment steps.
  - **LinkedIn/Portfolio Project Showcase:** Share project demo, screenshots, and architecture diagrams.
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### Key Performance Indicators (KPIs)

- Number of sessions booked and completed.
  - Credits earned and spent by users.
  - AI match success rate (sessions matched vs completed).
  - User engagement: Active learners, mentors, and institutions.
  - Top trending skills per category.
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### Future Scope

- Integration with external certification platforms.
  - Mobile app version for on-the-go skill exchange.
  - Advanced AI recommendations for learning paths.
  - Corporate internal knowledge-sharing module.
  - Social learning features (groups, forums, collaborative projects).
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