

Personalized Skill Development Platform

Project Proposal - EPGP-SPEM Capstone Project

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A. Introduction of the Problem Statement

In today's rapidly evolving job market, professionals face a significant challenge in identifying and closing the **skills gap** between their current capabilities and those demanded by employers. According to the World Economic Forum, by 2025, **85 million jobs** may be displaced by automation, while **97 million new roles** may emerge. This creates an urgent need for **continuous upskilling** and **reskilling** across industries.

The current professional development landscape suffers from three critical pain points:

1. **One-size-fits-all learning approaches:** Most training programs offer standardized content that fails to address individual skill gaps, learning styles, or career aspirations. This results in inefficient learning journeys where professionals waste time on skills they already possess or don't need.
2. **Fragmented learning resources:** High-quality learning content exists but is scattered across numerous platforms, making it difficult for learners to create coherent development paths. Professionals struggle to identify which combination of resources will effectively build their target skills.
3. **Lack of validated skills acquisition:** Traditional learning often lacks mechanisms to verify that learners have genuinely acquired practical skills that employers will recognize. Certifications and course completions frequently fail to translate to demonstrated workplace capabilities.

Our target customer personas include:

- Priya, a 32-year-old software developer with 8 years of experience who wants to move into an engineering management role but lacks proven leadership skills.
- Rahul, a 40-year-old marketing executive who sees his industry becoming increasingly data-driven and needs to develop analytical capabilities to remain competitive.
- Ananya, a 28-year-old finance professional who wants to transition into fintech but doesn't know which specific technical skills to prioritize.

These professionals are **time-constrained**, **results-oriented**, and need learning experiences that are directly applicable to their work environments.

B. Approach to Solve the Problem

Our solution is an **AI-driven Personalized Skill Development Platform** that provides tailored learning pathways based on individual skill gaps and career goals:

1. **Skills Assessment and Gap Analysis:**
 - Create a comprehensive skills taxonomy mapped to various career paths.
 - Develop an AI-powered assessment that combines self-rating, knowledge tests, and professional profile analysis.
 - Generate personalized skills gap reports with clear prioritization based on career objectives.
2. **Personalized Learning Path Generator:**
 - Build an AI recommendation engine that creates customized learning roadmaps.
 - Curate and aggregate high-quality resources from across the learning ecosystem.
 - Break complex skills into manageable micro-learning modules with clear progression.
3. **Progress Tracking and Practical Application:**
 - Implement a system for monitoring learning completion and comprehension.
 - Create structured practice opportunities to demonstrate skill application.
 - Enable peer and expert feedback on practical skill demonstrations.
4. **Skills Validation System:**
 - Develop skill validation assessments that prove practical competency.
 - Create digital credentials that verify acquired capabilities.
 - Build a professional portfolio showcase for demonstrating skills to employers.

Our solution differentiates itself through true personalization at scale using AI, integration of fragmented learning resources into coherent pathways, focus on practical application, and validated skill acquisition. By providing professionals with precision-targeted development paths and validated skill credentials, we eliminate wasted effort and accelerate career transitions across multiple industries and role types.