SKILL FORGE

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Abstract—**Skill Forge is a personalized e-learning platform that enables learners to create custom learning paths through a simple drag-and-drop interface. By selecting specific course modules, users can tailor their educational experience to focus on their unique learning objectives. Each module includes diverse resources, such as video lectures, PDFs, and quizzes, that support comprehensive skill development. Skill Forge's standout feature is its dynamic assessment system, which adapts question difficulty and generates targeted reinforcement content based on the learner's responses. This system identifies areas for improvement and provides specific explanations to strengthen understanding. With real-time progress tracking and adaptive recommendations, Skill Forge offers a responsive, data-driven learning experience designed for meaningful, personalized growth.**

Index Terms—**Custom paths, adaptive tests, skill growth, Personalizedlearning, progress tracking, focused content, smart learning .**

I.INTRODUCTION

SkillForge is a personalized e-learning platform that empowers learners to create custom learning paths using a simple drag-and-drop interface. By selecting relevant course modules, users can focus on their specific learning goals, making the learning experience more efficient and engaging. The platform integrates video lectures, PDFs, and quizzes to support skill development. A key feature is its dynamic assessment system, which adapts to learner performance and provides targeted content to reinforce weak areas. With real-time progress tracking, adaptive recommendations, and tailored content, SkillForge delivers a personalized, data-driven learning experience that fosters meaningful growth and deeper understanding.

II. OBJECTIVE

The objective of SkillForge is to create a personalized and adaptive e-learning platform that allows learners to design custom learning paths based on their unique needs and preferences. By providing a flexible drag-and-drop interface, diverse learning resources such as videos, PDFs, and quizzes, and dynamic assessments, SkillForge aims to enhance skill development by offering targeted content and reinforcement. The platform's adaptive assessment system helps identify knowledge gaps and provide tailored content to address them, while real-time progress tracking and personalized learning recommendations ensure continuous engagement. Ultimately, SkillForge seeks to provide an efficient, engaging, and impactful learning experience that empowers learners to take control of their educational journey and achieve meaningful growth.

III. PROBLEM STATEMENT

Traditional e-learning platforms often fail to offer personalized learning experiences, leading to disengagement and inefficient skill development. Learners are typically restricted to fixed learning paths and lack adaptive systems that address individual progress or weaknesses. SkillForge seeks to solve this problem by enabling users to create customized learning paths, supported by dynamic assessments that provide targeted content based on performance. This approach aims to enhance engagement, improve learning outcomes, and allow learners to take control of their educational journey.

IV. EXISTING SYSTEM

Current e-learning platforms typically follow a one-size-fits-all model, offering fixed courses with limited customization options. These platforms often provide basic learning resources, such as videos, text, and quizzes, but lack flexibility in adapting to individual learner needs. While some systems offer progress tracking, they rarely offer dynamic assessments that adjust based on learner performance or provide targeted content for reinforcing weak areas. Additionally, most platforms do not support the creation of personalized learning paths or allow learners to select specific content based on their goals. As a result, many learners face challenges in engaging

with material that is either too advanced or too basic for their needs, leading to suboptimal learning experiences and outcomes.

V. PROPOSED SYSTEM

SkillForge, offers a personalized and adaptive e-learning experience, allowing learners to create custom learning paths using a drag-and-drop interface. It provides a variety of learning resources, such as videos, PDFs, and quizzes, tailored to individual preferences. SkillForge features dynamic assessments that adjust based on learner performance, providing targeted content to address weak areas. With real-time progress tracking and adaptive recommendations, the platform ensures learners remain engaged and receive content that matches their evolving needs, fostering an efficient and effective learning journey.

VII. CONCLUSION

SkillForge offers a transformative approach to e-learning by providing personalized, adaptive learning paths that cater to individual needs and preferences. Through its dynamic assessment system, real-time progress tracking, and targeted content generation, the platform ensures that learners receive the support they need to overcome weaknesses and master concepts effectively. By empowering learners to take control of their educational journey, SkillForge promotes deeper engagement, better skill development, and improved learning outcomes. This innovative system has the potential to redefine e-learning by creating a more flexible, efficient, and impactful learning environment for users.

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