**E-Learning Platform**

**1. Introduction**

This document outlines the specifications for the development of an E-Learning Platform. The platform aims to provide a comprehensive online learning experience for students and educators.

**2. Purpose**

The purpose of this E-Learning Platform is to facilitate remote learning, improve access to educational resources, and enhance the overall learning experience. It should support various types of content, assessments, and user interactions.

**3. Functional and Non-Functional Requirements**

*3.1Functional Requirements*

* User registration and authentication.
* User profiles for students, educators, and administrators.
* Course creation, management, and publishing.
* Content upload and organization.
* Assessment and quiz creation.
* Progress tracking and reporting.
* Search and recommendation engine.
* Admin dashboard for user and content management.

*3.2 Non-Functional Requirements*

* Scalability to accommodate a growing user base.
* High availability and reliability.
* Secure data storage and transmission.
* Performance optimization for quick content loading.
* Cross-browser compatibility.
* Data backup and recovery mechanisms.

**4. User Roles**

* Student
* Educator
* Administrator

**5. System Architecture**

We will use the following tech stack for the project.

* Frontend 🡪Html,CSS, Javascript,Jquery,React(Framework).
* Backend 🡪PHP, My SQL , Custom Database, Python, Machine Learning.
* Deployment 🡪 Netlify, PHP Local Host.

**6. User Interface Design**

* Home Page🡪 Recommended Courses, Ongoing Courses, Latest Courses.
* Course Pages🡪Content, Course Material, Assignments and quizzes.
* Profile Page🡪User details, Course completed, Course in progress.
* Login & Registration Page🡪User name, password, features like forget password.

**7. Performance**

* Front End Optimization
* Database Optimization
* Code Optimization
* Scalability
* Content and Resources Organization

**8. Maintenance and Support**

* Regular Maintenance
* Version control
* Bug Tracking
* Backup and Recovery
* User Communication
* Feedback Loop
* Customer Support

**9. Conclusion**

This E-Learning Platform Specification Document provides a comprehensive overview of the platform's features, requirements, and expectations. It serves as a foundation for the development, testing, and deployment of the platform. Any future changes or enhancements should be documented and managed accordingly.