**Funamentals of Software Engineering**

**Project Assignment**

**Iteration 0** (Documentation)

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**Submitted to:** Zunaira Anjum

**Project Title:** TutorConnect

**Type:** Web Application

**Problem Statement:** Many students face challenges in finding personalized and reliable tutoring services tailored to their specific needs. The existing tutoring platforms lack certain features, such as a comprehensive review system and advanced scheduling options, hindering an optimal learning experience.

**Problem Solution and Scope:** TutorConnect aims to address these challenges by creating a web application that connects students with tutors seamlessly. The platform will offer a user-friendly interface, advanced scheduling features, a robust review system, and personalized learning plans. The scope of the project includes the development of essential features for effective tutoring while maintaining a secure and user-friendly environment.

**Basic Features:**

1. **Advanced Scheduling System:**
   * Enables students to schedule tutoring sessions based on their availability and preferences, and allows tutors to manage their calendars efficiently.
2. **Comprehensive Review and Rating System:**
   * Provides a transparent review and rating system for students to share feedback about tutors, fostering accountability and helping future users make informed decisions.
3. **Personalized Learning Plans:**
   * Allows tutors to create customized learning plans for individual students, tracking progress and adapting strategies to meet specific learning needs.
4. **Real-time Messaging and Collaboration Tools:**
   * Facilitates direct communication between tutors and students through an integrated messaging system, enhancing collaboration and clarifying doubts in real-time.
5. **Secure Payment Gateway:**
   * Implements a secure payment system for seamless transactions between tutors and students, ensuring a fair and transparent payment process.
6. **Resource Library:**
   * Provides a repository of educational resources, including documents, videos, and interactive materials, to supplement tutoring sessions.
7. **Modular Breakdown and Iterations:**

***Iteration# 1***

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| --- | --- | --- |
| **Module** | **Deliverables** | **Features** |
| User Authentication | User registration, login, and profile creation | Secure user authentication, profile management |
| Scheduling System | Basic scheduling system for students and tutors | Student and tutor calendar integration, session scheduling |
| Messaging System | Basic messaging system between users | Real-time messaging, notification system |
| Resource Library | Initial version of the resource repository | Upload/download educational resources, basic categorization |

***Iteration# 2***

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| --- | --- | --- |
| **Resource Library** | **Initial version of the resource repository** | **Upload/download educational resources, basic categorization** |
| Advanced Scheduling | Enhanced scheduling features and calendar management | Time zone support, recurring sessions, reminders |
| Review System | Full-fledged review and rating system | User reviews, star ratings, tutor and student feedback mechanisms |
| Personalized Learning | Introduction of personalized learning plans | Customized study plans, progress tracking |

***Iteration# 3***

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| **Payment Integration** | **Secure payment gateway integration** | **Seamless and secure transactions, automated payment processing** |
| UI/UX Enhancement | Interface improvements and user experience refinement | Responsive design, intuitive user interface, accessibility improvements |
| Optimization and QA | System optimization, bug fixes, and quality assurance | Performance optimization, thorough testing and debugging |
| Finalization | Deployment and launch of the complete platform | Full-fledged TutorConnect platform with all features, ready for public use |

**b. Roles Assignment:**

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| **Name** | **Role** |
| Ali | Team Lead, Developer, Architecht, Requirement Analyst |
| Daniya | Developer, Tester, Documentator |
| Insharah | Developer, UI designer, Tester |