

Functional Requirements:

1. User Management:

.User Registration: Allow users (students) to register with a unique username and password.

.User Authentication: Implement secure authentication mechanisms for user logins.

2.Question:

.Question Types: Support various question types, including multiple-choice, true/false, short answer, and essay.

.Randomization: Provide the option to randomize question order and answer choices within exams.

3.Exam Taking:

.Secure Authentication: Ensure secure login sessions for exam takers.

.Timer Controls: Display a countdown timer during exams and automatically submit exams when the time limit is reached.

4.Scoring and Grading:

.Automated Scoring: Implement automated scoring based on predefined criteria for each question type.

5.Results and Reporting:

.Result Generation: Generate detailed reports for administrators, including overall exam statistics.

.Feedback Mechanism: Allow students to view feedback on their performance.

6.Security Measures:

.Data Encryption: Encrypt sensitive user data and exam information.

.Secure Browser: Implement a secure browser mode during exams to prevent cheating.

.User Activity Logging: Log user activity during exams for auditing purposes.

7.Administration and Monitoring:

.Administrator Dashboard: Provide an administrator dashboard for real-time monitoring of ongoing exams.

.Helpdesk System: Implement a helpdesk system for users to report issues or ask questions.

Non-Functional Requirements:

1.Performance:

.The system support a specified number of concurrent users without significant performance degradation.

.Response time for user interactions within acceptable limits.

2.Scalability:

.The platform scalable to accommodate a growing number of users and exams.

.Scalability measures in place to handle peak usage times, such as exam periods.

3.Reliability:

.The platform available and reliable during scheduled exam times.

.Implement measures for system recovery in case of failures.

4.Usability:

.The user interface intuitive and user-friendly for both administrators and exam takers.

.Provide clear instructions and guidance throughout the platform.

5.Accessibility:

.Ensure the platform complies with accessibility standards to accommodate users with disabilities.

.Support for screen readers and keyboard navigation implemented.

6.Data Backup and Recovery:

.Regularly back up exam data to prevent data loss.

.Implement a robust data recovery mechanism in case of data corruption or loss.

7.Security Compliance:

.Adhere to relevant data protection and privacy regulations.

.Implement security measures to protect against unauthorized access and data breaches.

8.Compatibility:

.Ensure compatibility with various web browsers (Chrome, Firefox, Safari, etc.).

.Support multiple devices, including desktops, laptops, tablets, and mobile phones.

9.Training:

.Develop training materials for administrators and students to ensure effective platform usage.

.Conduct training sessions as needed during the onboarding process.

10.Maintenance:

.Establish a plan for ongoing support, maintenance, and updates.

.Provide timely support for user inquiries and issues.

