



Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

Student Kit

Quiz Portal

Objective

The aim is to develop a Quiz Portal using Spring Boot, Angular, and MySQL. It allows efficient management of quizzes, students, and exam results. The goal is to provide a seamless assessment platform with real-time performance tracking and user-friendly interfaces for both students and administrators.

| Sr No. | Requirement | Essential/Desirable | Description | Remarks |
|--------|------------------------------|---------------------|--|--|
| RS1 | User Registration | Essential | Allow admins to add new users (students and admins) with personal and role-based details. | Includes fields like name, ID, email, password, and role. |
| RS2 | Quiz Creation and Management | Essential | Enable admins to create, edit, and delete quizzes, including adding questions and options. | Supports multiple question types (MCQs, true/false, etc.). |
| RS3 | Quiz Attempt | Essential | Allow students to attempt quizzes within a given time frame. | Tracks time and auto-submits on timeout. |
| RS5 | Role-Based Access | Essential | Different dashboards and permissions for admin and student users. | Admins manage quizzes. |
| RS6 | Student Dashboard | Desirable | Provide a dashboard for students to view their quiz history and scores. | User-friendly interface. |

| | | | | |
|-----|-----------------|-----------|--|---------------------------|
| RS7 | Admin Dashboard | Essential | Admin can view all quiz attempts, manage quizzes, and monitor overall portal activity. | Overview of system status |
| RS8 | Notifications | Desirable | Notify employees about leave approval or attendance status. | Email or UI-based alerts |

Requirements Specification (RS) :-

Database Fields Specification :-

User Table

| No. | Field Name | Range of Valid Values for the Field | Remarks |
|-----|------------|---|---|
| 1 | User_ID | Unique Identifier | Unique Identifier (Primary key, auto-generated or UUID) |
| 2 | Full_Name | Up to 50 characters | Up to 50 characters (Full name of the user) |
| 3 | Email | Valid email format | Valid email format (Used for login and notifications) |
| 4 | Role | Enum (Admin, Student) (Determines access level) | Enum (Admin, Student) (Determines access level) |

Test Plan (TP) :-

| Se No. | Test Case Title | Description | Expected Result | Requirement in RS Table | Results |
|--------|-------------------|--|--|-------------------------|---------|
| 1 | User Registration | Test the admin process of registering a new user (student or admin). | Admin can successfully add a new user profile. | RS_1 | Passed |

| | | | | | |
|---|-------------------|--|--|------|--------|
| | | | | | |
| 2 | Quiz Management | Test adding, editing, and deleting quizzes by admin. | Quizzes are managed correctly. | RS_2 | Passed |
| 3 | Quiz Attempt | Test students attempting quizzes within the time limit. | Quiz is attempted and recorded accurately. | RS_3 | Passed |
| 4 | Result Generation | Test automatic score calculation and display. | Scores are calculated correctly. | RS_4 | Passed |
| 5 | Role-Based Access | Test different access levels for admin and student users. | Admin and students see only their respective dashboards. | RS_5 | Passed |
| 6 | Student Dashboard | Test student dashboard for viewing quiz history and scores. | Student dashboard displays accurate information. | RS_6 | Passed |
| 7 | Admin Dashboard | Test admin dashboard functionalities and controls. | Admin can view and manage all data effectively. | RS_7 | Passed |
| 8 | Notifications | Test sending and receiving system alerts (e.g., quiz results). | Notifications are delivered correctly to students. | RS_8 | Passed |