Student Kit

Online Skill Test Platform

Objective:

To develop an Online Skill Test Platform using Django and HTML/CSS. It enables users to take skill assessments across multiple sectors and proficiency levels. The goal is to support personal development, improve employability, and assist employers in talent identification.

Requirements Specification (RS) :

Sr No	Requirement	Essential/Desirable	Description	Remarks
RS1	User Registration/Login	Essential	Secure sign-up and login via email or social accounts	Role-based access supported
RS2	Sector-Specific Tests	Essential	Choose from different sectors and levels for testing	Custom test bank
RS3	Adaptive Testing	Desirable	Adjust test difficulty based on performance	Enhances learning curve
RS4	Instant Feedback/Results	Essential	Show scores, feedback, and improvement tips after each test	Auto-generated reports

RS5	Certification Generation	Essential	Issue digital certificates on test completion	Printable/downloadable
RS6	Admin Dashboard	Essential	Manage users, courses, results, and content	Django admin panel
RS7	Employer Access	Desirable	Employers can view candidate profiles, test scores, and certificates	Role-restricted view
RS8	Notifications	Desirable	Notify users about test results, feedback, and updates	Email or UI alerts

Database Fields Specification:

User Table :

Sr No	Field Name	Valid Values	Remarks
1	User_ID	Unique Identifier	Auto-generated UUID
2	Name	Up to 50 characters	Full Name
3	Email	Valid email format	For login and notifications
4	Role	Enum (Student, Admin, Employer)	Access level
5	Registration_Date	DateTime	Timestamp of account creation

Sr No	Field Name	Valid Values	Remarks
6	Score_Records	Related Table / Foreign Key	Maps to test scores
7	Certificate_Status	Boolean	Indicates if certificate is issued

Test Table:

Sr No	Field Name	Valid Values	Remarks
1	Test_ID	Unique Identifier	Auto-generated
2	Sector	String	e.g., IT, Healthcare, etc.
3	Skill_Level	Enum (Beginner, Intermediate, Advanced)	User selected level
4	Question_Bank	Related Table	Stores linked questions
5	Pass_Criteria	Integer (0–100)	Required % to pass
6	Certificate_Link	URL	Link to downloadable cert

User role:

❖ **Student User**
Register/Login
Select Sector/Test
Attempt Skill Tests
View Results & Feedback
Download Certificates

❖ **Admin:**
Login via Admin Panel
Add/Edit/Delete Questions
Manage Users and Results
Oversee Test Performance Analytics

❖ **Employer:**
Login (View-Only)Browse Candidate Scores
Verify Certificates

Test Plan (TP):

Sr No	Test Case Title	Description	Expected Result	RS Ref	Status
1	User Registration	Test account creation and login	User successfully signs up and logs in	RS1	Passed
2	Test Selection & Start	Test choosing a test by sector and level	Loads appropriate test	RS2	Passed
3	Adaptive Question Flow	Vary question difficulty during test	Question difficulty adjusts based on answers	RS3	Passed
4	Feedback & Results	Provide feedback and scoring instantly	Immediate score and feedback shown	RS4	Passed
5	Certificate Issuance	Generate downloadable certificate post-test	Certificate is created and accessible	RS5	Passed
6	Admin Dashboard Access	Admin manages users, content, and results	Admin panel functions properly	RS6	Passed
7	Employer View	Employer views student scores	Read-only access is available	RS7	Passed

8	Notifications	Test alerts, feedback and updates	Notifications received as expected	RS8	Passed