Functional Requirements Specification (FRS) Document

Project Title: DODO Platform

Company: QuantumNique Tech

Document Version: 1.0

Date: June 23, 2025

1. Introduction

1.1 Purpose:

The purpose of this document is to define the functional requirements for the "DODO" platform, a web-based platform designed for educational testing, assessment, and interactive challenges.

1.2 Scope:

DODO is an online system that supports user registration, test creation, interactive quizzes, result analytics, and admin management. It is targeted towards students, educators, and organizations aiming to assess knowledge and skills.

1.3 Intended Audience:

- Product Managers
- Development Team
- QA/Testers
- Stakeholders

1.4 Definitions and Acronyms:

- UI: User Interface
- DB: Database
- FRS: Functional Requirements Specification

2. System Overview

The DODO platform consists of three major components:

- Frontend Web Interface: For students and admin interaction
- Backend Server: Handles business logic and database interactions
- Database Layer: Manages all user, assessment, and performance data

3. Functional Requirements

- 3.1 User Registration and Authentication
- Users can register using email and password
- Users can login and logout
- Password reset functionality

3.2 User Roles and Permissions

- Admin: Manage users, tests, and view analytics
- Student/User: Take tests, view results, participate in challenges

3.3 Dashboard

- User dashboard showing recent tests, scores, and progress
- Admin dashboard with user metrics and test management options

3.4 Test Creation and Management

- Admin can create, edit, delete tests
- Multiple types of questions supported (MCQ, True/False, Short Answer)

3.5 Quiz Participation

- Students can attempt quizzes within a time limit
- Questions shown one at a time
- Progress indicator and submit button

3.6 Leaderboard and Challenges

- Real-time leaderboard during challenges
- Challenge modes with scoring criteria

3.7 Reports and Analytics

- Students can view past performance reports
- Admin can export user result data in CSV

3.8 Notifications

- Email alerts for test assignments and results

4. Non-Functional Requirements

- Performance: System should handle 1,000 concurrent users
- Security: Encrypted passwords, secure API access, role-based access
- Scalability: System must be scalable to add more users and test types
- Availability: 99.9% uptime with fallback on server failure

5. Assumptions and Constraints

System will be accessed via modern web browsers Hosted on cloud infrastructure (e.g., AWS, Azure) Users must have stable internet access

6. Future Scope

Integration with third-party LMS Mobile app support AI-driven test recommendations

7. Approval

Name Role Signature Date

[Your Name] Product Manager 2025-06-23

[Dev Lead] Development Lead

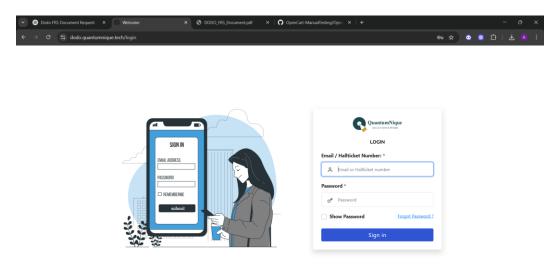
[QA Lead] QA/Test Engineer

End of Document

Updated Functional Requirements with Screenshots

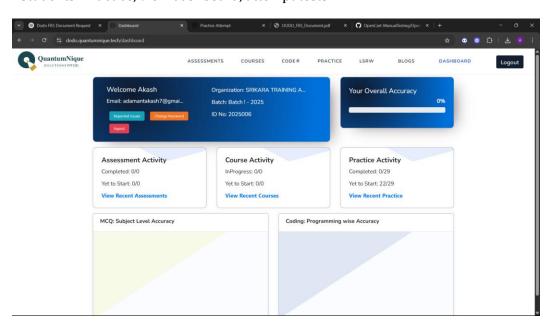
3.1 User Registration and Authentication

- Users can log in using email or hall ticket number and password.
- Login interface has 'Show Password' and 'Forgot Password?' features.



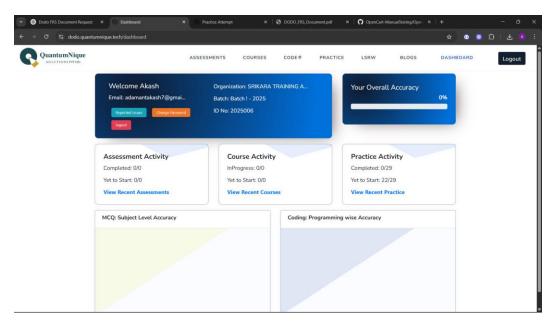
3.2 User Roles and Permissions

- Admin: Manages users, courses, tests, analytics
- Students: Practice, view dashboard, attempt tests



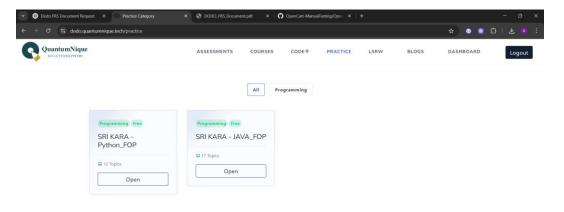
3.3 Dashboard

- Displays course activity, practice history, assessment status, and user info.
- Shows student email, batch, and ID prominently.



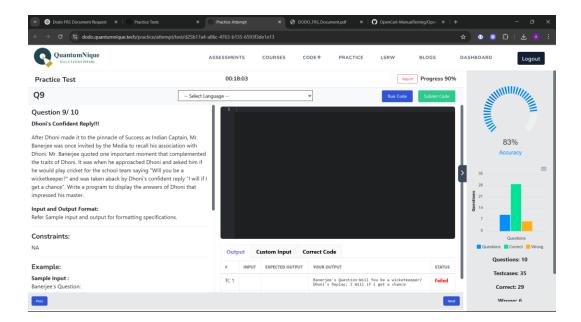
3.4 Test Creation and Management

- Admin can create and configure test content.
- Various test categories such as Python_FOP and Java_FOP.



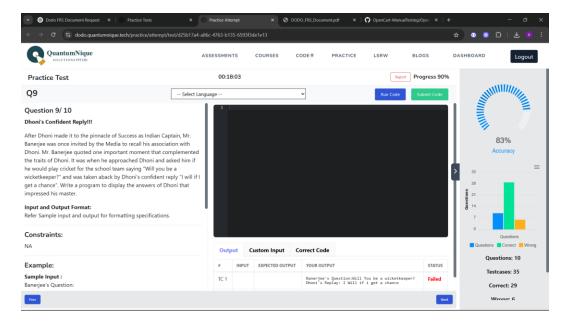
3.5 Quiz Participation

- Questions are shown one at a time with a timer and coding space.
- Inputs, expected output, and result (pass/fail) shown clearly.
- Language selection available before code run.



3.6 Leaderboard and Challenges

- A visual accuracy meter and progress bar during the test.
- Displays question stats (attempted, correct, wrong).



3.7 Reports and Analytics

- Students can view coding accuracy, attempts, and detailed test reports.
- Graphical representation of progress provided.

