MODERN APPLICATION DEVELOPMENT

QUIZ MASTER APP - V1

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Description

The project is a **Flask-based Quiz Management System** where admins can create/manage quizzes and track user performance. Users can attempt quizzes, view scores, and analyze their progress. It includes authentication, role-based access, and analytics.
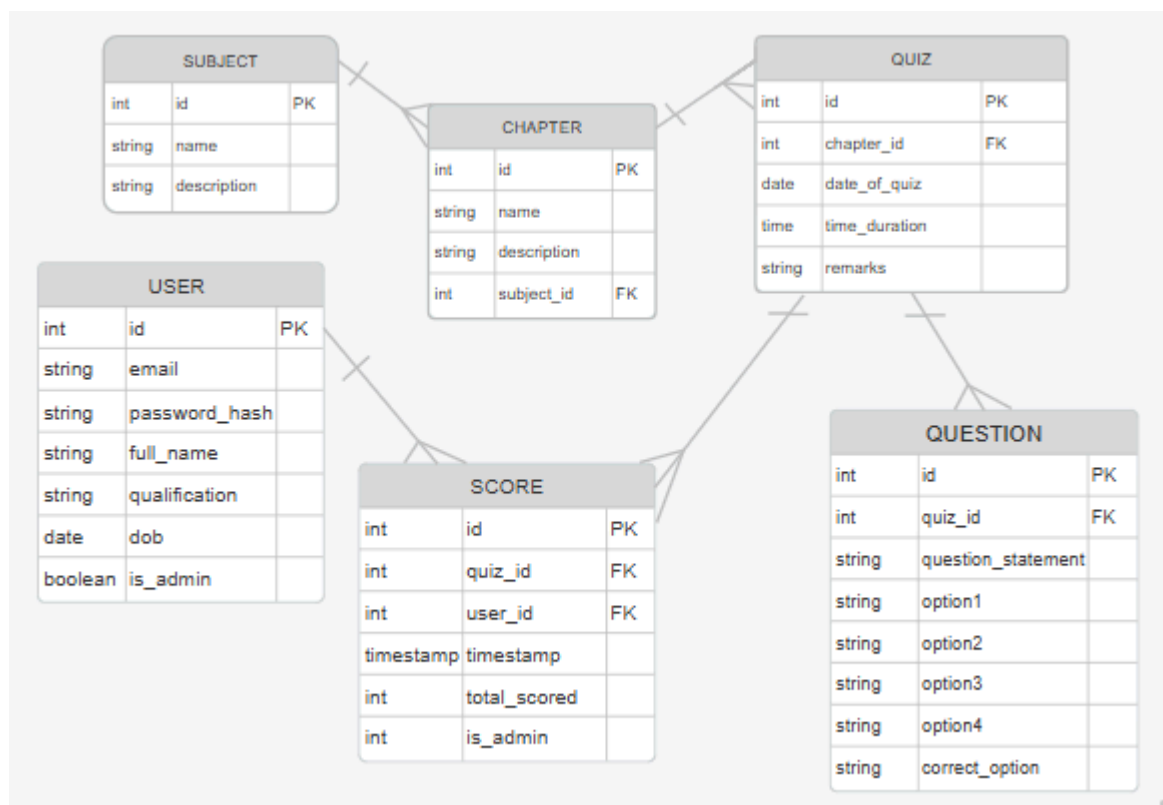
Technologies Used

Flask: For handling requests, rendering templates, and defining routes for the application.

Flask-SQLAlchemy: For defining models, performing queries, and committing changes to the database.

Jinja2 + CSS + JavaScript: For templating, which provides flexibility in HTML documents and styling.

DB Schema Design

API Endpoints

1. / - Landing Page
2. /login - User Login
3. /register - User Registration
4. /admindash - Admin Dashboard
5. /admindash/subject/new - Create New Subject
6. /admindash/chapter/new/<int:subject_id> - Create New Chapter
7. /admindash/quiz/new - Create New Quiz
8. /delete_subject/<int:subject_id> - Delete Subject
9. /update_subject/<int:subject_id> - Update Subject
10. /delete_chapter/<int:chapter_id> - Delete Chapter
11. /admindash/chapter/edit/<int:chapter_id> - Edit Chapter
12. /admindash/quiz/delete/<int:quiz_id> - Delete Quiz
13. /edit_quiz/<int:quiz_id> - Edit Quiz
14. /user - User Dashboard
15. /view_quiz/<int:quiz_id> - View Quiz Details
16. /quiz/<int:quiz_id> - Take Quiz
17. /quiz/<int:quiz_id>/submit - Submit Quiz
18. /quiz-scores - View User Scores
19. /quiz_stats - User Quiz Statistics
20. /admin/quiz_stats - Admin Quiz Statistics
21. /logout - Logout

Architecture and Feature

The Quiz Management System is an innovative platform connecting users with learning opportunities through a comprehensive quiz ecosystem.

Admin Features:

- **Quiz Creation:** Develop quizzes across subjects and difficulty levels
- **Performance Analytics:** Generate detailed reports and system insights
- **Dashboard Control:** Comprehensive platform oversight and management

User Features:

- **Quiz Attempts:** Complete quizzes with real-time scoring
- **Performance Tracking:** View detailed learning progress and achievements
- **Profile Management:** Maintain personal learning history

Key Capabilities:

- Secure authentication
- Automated scoring
- Comprehensive analytics
- User-friendly interface

DemoVideoLink: :

https://drive.google.com/file/d/1SZC_I6EYPjCcx7KuPPnlArLX9sqH3x23/view?usp=sharing