Project Name:
Syaqa - Moroccan Driving Learning Platform

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1. Problem Statement

Learning traffic laws and driving rules in Morocco is often a challenge for many candidates. Access to traditional training is limited by several factors:

- Lack of schedule flexibility
- Need to travel to a training center
- Absence of digital solutions suitable for structured and in-depth learning

Today, most e-learning platforms for driving are designed primarily for smartphones, limiting the user experience for those who prefer or require a more suitable environment for in-depth learning (large screen, ergonomic interface, keyboard/mouse navigation).

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2. Solution

Our platform offers a PC/Mobile experience with:

- Interactive courses
- Quizzes
- Practical tests
- Interface optimized for large screens
- Intuitive navigation
- Immersive and structured learning for preparing for the Moroccan driving license exam.

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3. Key Features

User Roles

✅ **Students**: Online registration, document submission, courses, exams, lesson bookings, schedule tracking, discussions.
✅ **Instructors**: Posting course videos, managing practical sessions.
✅ **Admins**: Validating registrations, moderating content, managing exams, tracking progress and reports.

Registration & Documents

- **Online Registration**: Via email + document upload (e.g., ID card, medical certificate).
- **Deadline Notifications**: Reminders for document submission.
- **Admin Validation**: Accepting or rejecting submissions.

Learning Center

- **Library**:
    - Traffic signs (visual examples + explanations)
    - Road code (legislative texts + summaries)
    - Driving techniques (video tutorials)
    - Legal advice
- **Courses**: Downloadable videos and PDFs.

Evaluations

- **Quizzes**: Multiple-choice tests automatically corrected + explanations.
- **Mock Exams**: Simulations of official tests.
- **Progress Tracking**: Scores and activity history.

Practical Lessons

- **Booking**: 1-3 hour time slots with an instructor.
- **Schedule Tracking**: Calendar integration.

Communication & Support

- **Messaging**:
    - Discussions between students
    - Q&A between students and instructors
- **Notifications**: Automated SMS/emails
- **Reporting**: Technical issues or inappropriate behavior.

Administrative Tools

- **Content Moderation**: Approve/reject/delete.
- **Dashboard**: Scores, progress, exam preparation.
- **Exam Management**: Planning and validating dates.

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4. Technical Requirements

Frontend (React.js)

- **Student Portal**: Course dashboard, exams, schedule.
- **Instructor Portal**: Content publishing interface.
- **Admin Portal**: Moderation, analytics.

Backend (Laravel)

- **Access Control**: Role-based permissions.
- **APIs**:
    - Document upload/validation.
    - Lesson booking and scheduling.
    - Real-time messaging via WebSocket/Firebase.

Database (PostgreSQL)

- **Secure Storage**: Document and data encryption.
- **Tables**:
    - `users` (students, instructors, admins)
    - `documents` (student files)
    - `lessons` (instructor content)
    - `bookings` (practical sessions)

Integrations

- **Payments**: Practical lesson fees
- **SMS/Email**: Twilio or Moroccan API.

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5. Example Workflow

1. **Student Registration**: Ahmed registers, uploads his ID card, and has 7 days to submit his medical certificate.
2. **Admin Validation**: After verification, Ahmed's account is activated.
3. **Learning**: Ahmed studies the road code, takes quizzes, and books a lesson with Fatima.
4. **Practical Lesson**: Fatima confirms the booking, and Ahmed attends the session.
5. **Exam**: Ahmed proposes a date, and the admin validates it.
6. **Support**: Ahmed reports a video issue, and the admin resolves it within 24 hours.

Conclusion

Syaqa aims to modernize driving education in Morocco by providing a comprehensive, interactive, and adaptable digital platform for all learners.