**Project Name:  
Syaqa - Moroccan Driving Learning Platform**

## **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).

## **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.

## **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.

## **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.

## **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.