# CS 255 Business Requirements Document Template

Complete this template by replacing the bracketed text with the relevant information.

This template lays out all the different sections that you need to complete for Project One. Each section has guiding questions to prompt your thinking. These questions are meant to guide your initial responses to each area. You are encouraged to go beyond these questions using what you have learned in your readings. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length for the final document. Instead, the goal is to complete each section based on your client’s needs.

**Tip:** You should respond in a bulleted list for each section. This will make your thoughts easier to reference when you move into the design phase for Project Two. One starter bullet has been provided for you in each section, but you will need to add more.

## System Components and Design

### Purpose

*What is the purpose of this project? Who is the client and what do they want their system to be able to do?*

* The purpose of this project is to develop an online learning and training platform for DriverPass to help students better prepare for their driving tests (Liam & Ian, n.d.).
* DriverPass has identified that over 65% of students fail their driving tests because they rely only on past test questions instead of practical learning and on-the-road experience (SNHU, n.d.).
* The client requires a system that offers online practice exams, on-the-road training scheduling, and progress tracking for students (Liam & Ian, n.d.).

### System Background

*What does DriverPass want the system to do? What is the problem they want to fix? What are the different components needed for this system?*

* The main problem is the lack of effective training tools that provide both theory and practical driving experience (SNHU, n.d.).
* DriverPass wants to create a comprehensive digital platform that allows students to access realistic driving practice tests, schedule on-the-road driving lessons, and track progress and performance over time (Liam & Ian, n.d.).
* The system will need components for student registration, exam practice, scheduling, reporting, and payment processing (Liam & Ian, n.d.).

### Objectives and Goals

*What should this system be able to do when it is completed? What measurable tasks need to be included in the system design to achieve this?*

* The system should be able to allow users to perform specific tasks that are tailored to their roles. Customers need to schedule, modify, and cancel driving lessons online or through the office secretary (Liam & Ian, n.d.). The system must provide flexibility for customers to select and update training packages while also allowing DriverPass to disable packages as needed. It should also maintain user activity logs, including appointment changes, and generate detailed reports for tracking purposes. The system must integrate with DMV updates to stay up to date with rule changes to ensure quality and compliance with the law. Customers should also be able to track their progress, including test scores and lesson feedback, through a simple online interface. The system will be cloud-based to minimize any technical issues and help ensure secure and reliable access. These measurable objectives will all help make sure the system meets DriverPass’s needs effectively for their vision.
* The system should provide accurate and up-to-date driving tests to help students prepare effectively (Liam & Ian, n.d.).
* It should allow students to book driving lessons with certified instructors (Liam & Ian, n.d.).
* The platform should track student progress and performance metrics (Liam & Ian, n.d.).
* It must be secure, user-friendly, and adaptable across different devices (Liam & Ian, n.d.).
* The system should integrate payment processing for lesson bookings.
* It should allow administrators and instructors to manage users, lessons, and reports (Liam & Ian, n.d.).

## Requirements

### Nonfunctional Requirements

*In this section, you will detail the different nonfunctional requirements for the DriverPass system. You will need to think about the different things that the system needs to function properly.*

#### Performance Requirements

*What environments (web-based, application, etc.) does this system need to run in? How fast should the system run? How often should the system be updated?*

* The system must be web-based and optimized for both desktop and mobile devices (Liam & Ian, n.d.).
* It should be capable of handling multiple concurrent users without slowdowns.
* The response time for loading pages should ideally be under 3 seconds.
* Practice tests and scheduling features should update in real-time (Liam & Ian, n.d.).
* Regular system updates should be implemented from time to time throughout the years to ensure accuracy and security.

#### Platform Constraints

*What platforms (Windows, Unix, etc.) should the system run on? Does the back end require any tools, such as a database, to support this application?*

* The system must be compatible with major operating systems (Windows, MacOS, iOS, Android).
* It should support major web browsers (Chrome, Firefox, Safari, Edge).
* A cloud-based backend will be required for scalability and data storage (Liam & Ian, n.d.).
* The system should integrate with database management tools such as MySQL or PostgreSQL.

#### Accuracy and Precision

*How will you distinguish between different users?* *Is the input case-sensitive? When should the system inform the admin of a problem?*

* Users should be uniquely identified using email and password authentication.
* The system should differentiate between students, instructors, and administrators with role-based access (Liam & Ian, n.d.).
* Data input (such as user details, test scores, and payments) should be validated to prevent errors.
* Administrators should receive real-time alerts for system errors or unusual activity.

#### Adaptability

*Can you make changes to the user (add/remove/modify) without changing code? How will the system adapt to platform updates? What type of access does the IT admin need?*

* The system should allow user roles to be modified, for example, students can be assigned different instructors without modifying code.
* The platform must be adaptive to future updates in driving regulations and test formats (Liam & Ian, n.d.).
* IT administrators should have full access to manage users, settings, and logs (Liam & Ian, n.d.).

#### Security

*What is required for the user to log in? How can you secure the connection or the data exchange between the client and the server? What should happen to the account if there is a “brute force” hacking attempt? What happens if the user forgets their password?*

* Users must log in with secure credentials (email/password).
* The system should use SSL encryption for secure data exchange (Cloudflare, 2021).
* The system should lock accounts temporarily after five failed login attempts.
* A password reset mechanism should be available, possibly through email verification (Liam & Ian, n.d.).
* Payment transactions must comply with PCI-DSS standards (Barney, 2024).

### Functional Requirements

*Using the information from the scenario, think about the different functions the system needs to provide. Each of your bullets should start with “The system shall . . .” For example, one functional requirement might be, “The system shall validate user credentials when logging in.”*

* The system shall allow students to register and create profiles (Liam & Ian, n.d.).
* The system shall provide practice exams that simulate real driving tests (Liam & Ian, n.d.).
* The system shall enable students to book on-the-road lessons with instructors (Liam & Ian, n.d.).
* The system shall record and track student progress on practice exams and driving lessons (Liam & Ian, n.d.).
* The system shall show data for students, instructors, and administrators on progress and performance (Liam & Ian, n.d.).
* The system shall process online payments for driving lesson bookings.
* The system shall allow instructors to manage their lesson schedules.
* The system shall allow administrators to manage users, courses, and reports (Liam & Ian, n.d.).

### User Interface

*What are the needs of the interface? Who are the different users for this interface? What will each user need to be able to do through the interface? How will the user interact with the interface (mobile, browser, etc.)?*

* The interface should be intuitive and user-friendly for students, instructors, and admins.
* Students should be able to access and complete online practice exams, book driving lessons with available instructors, and view their progress and performance reports (Liam & Ian, n.d.).
* Instructors should be able to view students’ progress and schedule lessons, confirm or cancel driving lessons, and communicate with students via a messaging feature (Liam & Ian, n.d.).
* Administrators should be able to manage student accounts and instructor assignments, oversee system functionality and troubleshoot issues, generate reports on student success rates and system usage (Liam & Ian, n.d.).

### Assumptions

*What things were not specifically addressed in your design above? What assumptions are you making in your design about the users or the technology they have?*

* Students will have access to an internet connection and a device to use the platform.
* Instructors will be certified and legally allowed to conduct driving lessons.
* The system will be available 24/7, except during scheduled maintenance.
* Users will input accurate personal information during registration.

### Limitations

*Any system you build will naturally have limitations. What limitations do you see in your system design? What limitations do you have as far as resources, time, budget, or technology?*

* The system cannot physically verify whether students practice driving outside of scheduled lessons.
* Payment processing will be limited to supported payment methods (credit/debit cards, PayPal).
* The system will not support multiple languages at launch but may expand later.
* System performance may be affected if user demand exceeds infrastructure capacity.
* Data storage and backups will be limited to the provider’s cloud capacity.

### Gantt Chart

*Please include a screenshot of the GANTT chart that you created with Lucidchart. Be sure to check that it meets the plan described by the characters in the interview.*

*A screenshot of a computer

AI-generated content may be incorrect.*

**References**

Liam, & Ian. (n.d.). DriverPass Interview (Jennifer & Sam, Interviewers) [Interview]. In Southern New Hampshire University. https://learn.snhu.edu/content/enforced/1798810-CS-255-13949.202511- 1/course\_documents/CS%20255%20DriverPass%20Interview%20Transcript.pdf?ou=1798810**‌**

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