# 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 system is to provide DriverPass students with an online and on-the-road training experience that improves their chances of passing the driving test. The system will allow students to register for classes, complete practice exams, track their progress, and schedule behind-the-wheel lessons. It will also support DriverPass administrative staff by providing tools to monitor students, handle scheduling, and manage payments.

### 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?*

DriverPass identified a major gap in driving education tools: most students fail because they rely only on memorization of written exams. The current process at DriverPass is manual and limited. There is no online registration, no scheduling platform, and no way for students to take practice exams or track progress. DriverPass needs a centralized system that integrates online learning with in-person lesson scheduling.

### 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 main objectives of the system are:

* Allow students to sign up online, take practice tests, and schedule driving lessons.
* Track lesson completion, practice exam scores, and payment status.
* Provide administrators and instructors with access to student records and scheduling tools.
* Integrate online payment processing for packages and individual lessons.
* Support communication between students and DriverPass staff.

According to Satzinger, Jackson, and Burd (2016), successful system development projects should focus on measurable, clear goals that directly reflect user needs.

## 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 support at least 1,000 concurrent users without significant slowdown.
* Practice exam results and schedule updates must load within 3 seconds.

#### 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 online platform must work on desktop and mobile browsers (responsive design).
* Compatible across major operating systems, including Windows, macOS, iOS, and Android.

#### 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?*

* Scheduling data must update in real time to prevent double-booking of instructors or vehicles.
* Exam scoring must correctly record all student responses without manual review.

#### 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 be flexible enough to add future course offerings like motorcycle training.
* System settings, such as lesson times and locations, should be editable by administrators without needing IT involvement.

#### 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?*

* Student data must be encrypted in storage and during transmission.
* The system must require secure login for students, instructors, and administrative staff.

### 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 for accounts using email, password, and personal information.
* The system shall allow students to enroll in online courses and schedule driving lessons.
* The system shall allow students to complete online practice exams with automatic scoring.
* The system shall store student practice test results and driving lesson history.
* The system shall allow students to make payments online for course packages and individual lessons.
* The system shall allow administrators to view, edit, and delete student records.
* The system shall allow administrators to assign instructors to students and manage lesson schedules.
* The system shall send automated email reminders for upcoming lessons and payment due dates.

### 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.)?*

There will be three main types of users:

* Students: Can create accounts, enroll in programs, schedule lessons, take practice tests, view progress, and make payments.
* Administrative Staff: Can manage student records, payments, course packages, and scheduling.
* Instructors: Can view assigned students, lesson times, and track lesson completion.

Students will interact with the system primarily through a user-friendly online dashboard. Administrators and instructors will access a more detailed interface for managing students and lessons.

The interface must be designed for simplicity, reflecting key principles of usability described by Satzinger, Jackson, and Burd (2016), focusing on clear navigation and minimizing the number of steps needed to complete tasks.

### 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 have reliable access to the internet and basic familiarity with online systems.
* Instructors will have mobile devices available to access schedules on the go.
* Payments will be handled through an external payment processing service that DriverPass selects.
* DriverPass will provide support for students who need technical assistance with registration or course access.

### 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?*

* DriverPass will not initially offer mobile apps; access will be through mobile-friendly web browsers only.
* The system will be developed for English language users only at launch, with possible future language support.
* Only pre-approved lesson locations and times will be available for scheduling at the start.

### 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 project

AI-generated content may be incorrect.*

**References**

Satzinger, J. W., Jackson, R. B., & Burd, S. D. (2016). *Systems analysis and design in a changing world* (7th ed.). Cengage Learning.