# CS 255 Business Requirements Document

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?*

* DriverPass wants a computer system that helps students pass their driving test. They want it to include online practice tests and lessons with driving teachers. The company hopes this will help students learn better than just reading old test questions.

### 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 found that most students fail the driving test because they don’t get enough practice. They need a new system that helps with both online test practice and real driving lessons. The system should let students take tests, book lessons, and let teachers check how students are doing.

### 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?*

* This system should help more students pass their driving test. Students should be able to take practice tests, set up lessons, and see how they are doing. Teachers should be able to see student progress and help them get better. The system should be easy to use and save information for everyone.

## 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 should work on phones, tablets, and computers. It should load quickly about two seconds. The practice test questions should be updated often so they stay current.

#### 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 should work on Windows or Linux. It needs to store data using a database, which is like a big digital notebook that saves information.

#### 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?*

* Each user should have their own account. The system must tell the difference between a student, a teacher, and an admin. If someone tries to log in too many times and fails, the system should send a warning.

#### 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?*

* Admins should be able to add or remove users without needing to change the code. The system should keep working even when browsers or phones update. The IT team should be able to manage everything easily.

#### 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?*

* People should log in with a secure password. All data must be sent safely. If someone tries to break in, their account should get locked. If someone forgets their password, they should get help to reset it.

### 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 should let students sign up and log in.
* The system should give students practice questions.
* The system should let students book lessons with teachers.
* The system should let teachers mark how well students do.
* The system should send reminders to students about lessons or tests.

### 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.)?*

* Students, teachers, and admins will use different parts of the system. Students will take practice tests and schedule lessons. Teachers will see their schedules and student progress. Admins can manage all the users and settings. People will use this through their phone or computer browser.

### 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?*

* We believe all users have the internet and a device to use the system. DriverPass will give us the driving test questions. Teachers will use the system on their phones or computers.

### 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?*

* We can’t build everything at once. We don’t have enough money or time to make super advanced features. For now, it will only work in English.

### 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.*

