# 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 client is DriverPass.
* The purpose of this project is to create a program for students to access online practice driving exams and also to provide on-the-road training for students to help them prepare for their driving tests.
* DriverPass would like the student to be able to take online classes, take practice exams, schedule on-the-road training, track reservations, display student notes from training sessions, display student information, notifications of cancellations with detailed info, and need to be able to access data online from anywhere via computer or mobile phone.

### 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 wants a system to help students prepare for their driving tests since many fail on their first tries.
* The system needs to be accessible both online and offline.
* Changes can only be made while online to avoid duplicate data.
* To avoid upkeep, the system needs to run off the Cloud.
* The system needs to be linked with the DMV so that any pertinent updates are received and the system stays in compliance.
* Users should be able to schedule driving appointments online by creating an account, as well as being able to call and schedule one.
* DriverPass wants to offer different packages for the user and be able to keep track of what driver each student is paired with along with which vehicle.
* Keep track of where each student needs to be picked up and also dropped off.
* It needs to keep track of all billing information including first and last name, address, phone number, credit card number, expiration date, and security code.
* The system needs to be flexible so that new modules can be added as needed or old ones removed or disabled.
* Students should be able to access online study materials and also track what each student has done so that they know when they are ready for their test.

### 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?*

* When completed, this system will prepare students to take and pass their driving test by:

1. Allowing students to reserve, modify and cancel on-the-road training
2. Take classes and practice tests online.
3. Allow specific employees the ability to modify the system if needed.

* To achieve this, the system design will need to do the following:

1. Collect requirements.
2. Create Use Case diagrams.
3. Build activity diagrams for each Use Case.
4. Research User interface designs.
5. Build Class diagram.
6. Build Interface.
7. Link the database to the interface.
8. Build business logic.
9. Test the system.
10. Deliver system to customer.

## 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 needs to run on a web based system with cloud access.
* The system should be updated every time new information is updated on the DMV.
* The system should be fast enough to show real time results and allow customers to access the website without any complications.

#### 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 run on all major desktop and mobile platforms, with cloud access so that the system can be accessed from anywhere on any device.
* The back end will require a database to store user credentials and info along with the different packages available.

#### 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 will have a user name and password.
* Both user name and password will be case sensitive.
* The system should send a message immediately whenever a glitch is detected.
* If a user is having trouble, there should be a link to contact admin of which then admin will be notified immediately.

#### 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?*

* Admin will be able to make changes to user info without changing code.
* IT will need full access in order to keep everything updated and fix any problems that arise.
* Platform updates will be done as the need for new modules and features come up.

#### 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?*

* The user will need a unique user ID and password to log in.
* After a set amount of invalid log in tries, the account will be locked and user will be given the option to reset their log in info.
* The cloud will securely handle the connections and data exchanges between the client and server.

### 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 validate user credentials when logging in.
* The system shall allow clients to create and modify their account.
* The system shall let clients make reservations.
* The system shall allow clients to modify their reservations.
* The system shall let clients to view driving packages and schedules.
* The system shall allow admins to hide driving packages currently unavailable.
* The system shall provide online classes and practice exams.
* The system shall show the customer the driver they are paired with.
* The system shall show clients the available driving packages.
* The system shall provide customized access based on the user and their specified privileges.
* The system shall show the work and tests already completed for each client.

### 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 user will be able to interact with the interface via any device with an internet connection and internet browser.
* The interface should be easy to use and appealing to look at.
* Multiple different users will be using the interface: clients, the boss, IT, and secretary.
* Clients will be able to update their info, take classes, schedule and change appointments, and view all classes and driving schedules available.
* The boss, Liam, will have full access to the interface, as will Ian in IT. Liam’s secretary will have admin access to be able to update customer info and manage appointments.

### 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?*

* Budget was not discussed so it is assumed there will be enough to cover the necessary expenses for the planned system.
* We are assuming that students have a device that can access the internet and that it is up to date.
* We also assume each student has a valid email address for communication.

### 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?*

* Because this will be available for mobile and regular browsers, having the screen display correctly on each could be a limitation.
* Budget could be a limitation since this was not discussed.
* Time frame to complete project may not be enough.
* Size of team available to complete project.

### 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.*

