# 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, they would like a system that can give online and local services for upcoming drivers that can better prepare them for the driver’s test. They want to offer online classes, practice tests, and in-person training for driving (Which will have different driving lesson packages). The system should also be able to access DriverPass’s data and information from anywhere, and track employee records.

### 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 problem is too many people fail their driving test.
* The system should be able to hold all customer’s data/information, reservations, customer’s progress, driver comments. Employees should be able to make schedules and modify reservations. Track employee’s work and have a schedule for customer sessions.
* A web interface is needed for this system, customer registration will be needed to make accounts, reservations via phone call, and online services for customers to make scheduled sessions, access practice test, classes.

### 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?*

* Let users create an account.
* Let students choose from the 3 packages.
* Different levels of access based on if their students, admin, IT, etc.
* Scheduling services for driving lessons.
* Track user statuses.
* Online classes offering both material and quizzes.
* Keep track of the vehicles used for the driving lessons.
* Tracking ability where all operations made to the system are logged (who added what, deleted what, and when, etc.)
* Automate scheduling.
* Flexibility offering users the ability to register for their courses either online or through an agent (secretary) at the company.
* Data can be edited or modified online.
* System must run off the web, with interface.
* Track all employee and customer data.
* Users can make reservations for customers through phone call or on the system.
* Receive notifications from the DMV on any updates regarding new rules, or policies.

## 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 run on a web-based platform, with access to the cloud.
* The system should run efficiently and fast enough for the users to have access to all of DriverPass features.
* There should be regularly or as needed system updates as well as maintenance updates to ensure the DriverPass guidelines/rules are up to date with the DMV’s. Also to ensure user’s data is kept up to date, and there are no bugs in the system.

#### 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 platforms such as Windows, Unix, Apple, etc.
* DriverPass wants to use cloud, so there should be a back end required to store system and user information at.

#### 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?*

* All users should have their own unique login information username/password, and distinct ones based off if there are customers or employees.
* It should be case-sensitive for better security.
* The system should inform the admin after a certain number of wrong inputs when trying to login, to ensure the security risk can be stopped.

#### 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?*

* IT admin can add/remove/modify and should have access to code make sure everything is running smoothly.
* The system should have an ability to automatically update to any of the platforms, so it can run on the most current version.

#### 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?*

* For all users, it will be required for them to log in with an username and password.
* The use of the cloud will be used to secure the connection or data exchange between the client and server.
* If there is a brute force hacking attempt on an account, the IT admin should be able to block that account until the user can contact IT.
* If the user forgets their password, there should be a way for the user to recover or reset their password via email or phone number.

### 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 track all user activity, including employee reservations, cancelations, modifications, and customer appointments, payments, etc.
* The system shall allow packages for customers to purchases, there be 3 packages currently, but others will be provided soon.
* The system shall allow users to reset their passwords.
* The system shall allow user’s to be contacted by secretary/admin/instructors.
* The system shall display student’s progress such as grades or reports.
* The system shall allow new customers to add their customer details for registration.
* The system shall allow resources that are up to date with the DMV’s guidelines and rules.

### 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 needs of the interface are a home page, account registration page, login/verification page, package information, access course material, instructor feedback, contact information page, practice test, grade scores, student info page, DriverPass lesson dates/ open schedule.
* The different users for this interface are the customer’s (students), IT admin DriverPass boss, secretary.
* The students will need to be able to see course materials, practice test, progress/grades, appointments, packages, etc.
* The IT admin and DriverPass boss will need to be able to see customer registration, the ability to modify or remove packages. Block customer/employee accounts, allows users to reset their password. See the scheduled appointments, track all data across the website.
* The secretary will need to be able to schedule appointments, modify, or cancel 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?*

* There will be 24/7 access to this website with 24/7 feedback, registration, and scheduling.
* The interface will be easy to access for all users.
* Drivers will be available for student appointments.
* Admin have the right set of skills to run this system.

### 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 has 10 cars there will need to be staff to maintain these vehicles.
* Electricity is needed to run this web-based server and will be needed for all devices.
* Slow internet could play a huge factor of the system running slow, which can cause several problems within the website.
* Budget could play a factor for the certain skillsets needed for staff to run this system and provide the correct services to students.
* With only 10 cars this could affect scheduling because of limited resources and possibly staff.

### 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.*

