# 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 demonstrate the competencies such as the principles, methods, and techniques of systems development.
* --and take advantage of a void in the market when it comes to training students for the driving test at their local department of motor vehicles (DMV).

### 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?*

* Problem: Frequent failed driving tests at the DMV; there is a need for better driver training.
* The system should include online registration pages, a lesson reservation feature, and online tests.
* There should be a type of dashboard that allows DriverPass to access student information, along with the ability for students to access their own information.
* Want the system to help the client access data from anywhere, online as well offline.
* Want to access data online from any computer or mobile device. The client needs to be able to download the reports and some information that he can work on at home, using Excel, for example.
* For running the system successfully need have several components: these are Administration (to control various accounts), Secretary account (user can take appointments, walk ins), User account (students can manage), Drivers (who provide lessons to students) etc.

### 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 owner needs to have full access over all accounts to reset passwords or block accounts for termed employees.
* Track changes in the system and put the information into activity reports to see system modifications.
* Customers need to be able to make, modify and cancel driving lesson reservations through their online account based on the day and time they prefer.
* The secretary should be able to book lessons for customers as well.
* Track which user is matched up with a certain driver, time and car.
* The system should offer packages to clients and DriverPass should be able to disable packages.
* Registration: Customer calls or uses an online input form to give DriverPass their information, including first and last name, address, phone, state, credit card info (number, exp, security code), pickup location, drop-off location (same as pickup).
* Customers should be able to reset their password.
* System should connect to the DMV and send any updates through a notification to DriverPass.
* Cloud-based.
* There should be online test progress displaying the name, time taken, score, driver notes and status of the customer’s tests: “not taken”, “in progress”, “failed”, or “passed”.
* There should be a page for contacting DriverPass and contacting the student.

Measurable Tasks/Goals:

* Collect Requirements
* Create Use Case Diagrams
* Build Activity Diagrams for Each Use Case
* Research User Interface Designs
* Build Class Diagram
* Build Interface
* Link DB to Interface
* Build Business Logic
* Test System
* Deliver System

## 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 environments that the system needs to run in are web-based and mobile.
* The system should run fast so that users are able to complete their training in a timely manner.
* The system should be connected to the DMV and updated when new rules, policies, or sample questions are released. The DriverPass team should also be notified of any updates.

#### 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 will run a Windows operating system.
* There is a database needed to house information like user credentials, test scores, and completion progress of courses/lessons/tests.

#### 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 unique user ID with a password, which will be case-sensitive.
* The system should inform the admin of failed login attempts; that is, if a user attempts to log into the system with incorrect information three or more times.

#### 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?*

* Changes to the user should be able to occur without changing any code.
* The admin should have the ability to add new users and to remove users when they’ve terminated. They should also be able to remove and add lessons/courses.
* The system should adapt to weekly updates received from Microsoft.

#### 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?*

* To login, a user should have to enter a username and password.
* Encryption, authentication, and authorization should be used to secure the connection and data exchange between the client and server.
* If the user forgets their password, there should be a “reset password” option that sends an email to the user’s email account with a link to a password reset.

### 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 changes in the system and put the information into activity reports to see system modifications.
* The system shall track which user is matched up with a certain driver, time and car.
* The system shall connect to the DMV and send any updates through a notification to DriverPass.
* The system shall offer packages to clients and DriverPass should be able to disable packages.

### 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 should be online test progress displaying the name, time taken, score, driver notes and status of the customer’s tests: “not taken”, “in progress”, “failed”, or “passed”. Both the student and DriverPass admin should have access to this.
* There should be a page for contacting DriverPass and one contacting the student.
* The system should include online registration pages, a lesson reservation feature, and online tests.
* There should be a type of dashboard that allows DriverPass to access student information, along with the ability for students to access their own information.
* Customers need to be able to make, modify and cancel driving lesson reservations through their online account based on the day and time they prefer.
* The secretary should be able to book lessons for customers as well.
* The users will interact with the interface via mobile and a browser.
* Customers should be able to reset their password.
* The owner needs to have full access over all accounts to reset passwords or block accounts for termed employees.

### 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?*

* One assumption is that the user will have access to a computer or mobile phone with internet.

### 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?*

* There is obviously some type of budget for the system, which will limit both the time spent on building the system and the features that can be installed. Depending on the budget, DriverPass may need to prioritize the features they’d like to include.
* The system will stop functioning if an internet connection is lost on the user’s end.

### Gantt Chart

