# 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 project is to build up a system for the company DriverPass, which aims to solve the problem that the high failure rates in passing driving tests are for a lack of good preparation. In order to meet their need, DriverPass wants the system to prepare students for online practical exams, help track progress, and finally get behind the wheel out on the road. Moreover, the system must give different user roles such as the owner, IT officer, secretary and clients access to information in different ways, and it should also be secure. The system will also need to communicate with the DMV (department of Motor vehicle) in order to keep up to date on all changes in driving laws and rules.

### 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 aims to fill a gap in the market by providing a better way for students to prepare for driving tests. Currently many students fail due to poor resources, relying only on previous test materials. The new system should offer a combination of online practice exams along with DMV-compliant materials, lesson scheduling and progress tracking – an all-round approach to driver learning. To accomplish this, the system will consist of several different parts, including the online examinations module (questions and answers), a scheduler for driving lessons or course dates; user role management functionality; and secure cloud-based storage that ensures data access anytime.

### 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?*

* After all, the intention is to create a system that will enable users to register, book time for and manage their driving lessons in a smooth and easy way. Administrators can supervise the third-party accounts, manage training packages, and ensure the system’s security. What’s more, the owner and the IT person need to be able to direct inquiries; such as providing specific reports for activities during a certain period or receiving messages whenever there are updates from DMV. Measurable tasks for the system include allowing real-time progress checks, matching user permission levels to roles within a company or license and supporting add or hinder training package types.

## 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?*

* That system is something that can be visited with a standard browser from a computer, pad or mobile phone. It must work rapidly: pages must load in three seconds under typical conditions and responsiveness levels similar to Baidu‘s on lines is ideal A real-time update will have to be put on all documents, as well as at least daily backup of data for disaster recovery and such.

#### 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?*

* Also,the system should operate across common platforms and browsers. These include desktop operating systems such as Windows and macOS, mobile OSs including Google Android and Apple iOS or browser apps such as Chrome, Firefox and Safari. The back-end should use a cloud database that supports real-time data access and reduces downtime.

#### 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?*

* The System will require individual credentials for each user or each application in order to distinguish between users. Input validation will ensure data consistency. Any problems such as invalid data or suspicious actions that are found during validation process should be reported to management. The system will maintain a record of live user actions such as making, changing or cancelling reservations.

#### 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 must provide IT administrators with the capability of adding, removing or changing user accounts without having to alter the code that lies underneath it. It also needs to let updates to underlying platforms flow seamlessly through its packages such as when one wants to disable certain training tools.

#### 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 system will enforce strong password policies that require a minimum of eight characters and a combination of alphabetic, numeric and other symbols. It will encrypt all of its data exchanges with SSL encryption. For repeated brute-force hacking attempts, we will lock an account after five failed login attempts and send notifications of this to administrators. There will even be an automated password reset function included.

### 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.”*

* User credentials need validation by the system when the user logs in to get secure access. Customers should benefit from scheduling, modifying and canceling lessons online. Their performance in online practice tests will be followed up by the system and feedback from teachers given to them. Another possibility is for administrators with the system laws to manage role assignments, generate reports and integrate DMV updates into training content. Reservation details, drivers, vehicles, and the class schedule can all be brought into one smooth operational workflow in this way to help ensure smooth operation for all.

### 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 mobile -friendly user interface needs to be intuitive and accessible to all users will also support this function. Customer care staff will require a dashboard showing their progress, account management and lesson scheduling capabilities. Secretaries input customer data and make reservations can use the interface.IT personnel are responsible for monitoring system operation, while the owner needs access to reports and business insights. This interface should operate on both mobile and browser platforms, giving users a single experience.

### 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?*

* The system assumes that all clients will have basic digital literacy in using the system. More so, all clients are assumed to have reliable internet services to support the web-based functions. All updates by the DMV will be availed in a format compatible with the system's notification and content integration process.

### 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?*

* At first, the capacity of the system is bound to be limited by costs. Taking these fundamentals for instance, automatic online updates of software packages may subsequently be included. No doubt system alterations will be under the complete control of IT administrators.However, if anything is complex non-developers can still expect that an outside hand is needed or at least valuable. Scalability could become an issue as demand from users exceeds the initial capacity of a system which was never designed with expansion in mind on such lines; hence new investment will have to made.

### 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.*

