# 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 Driver Pass would like to create a support system for student drivers.
* A website with the purpose of providing students with practice exams to test their knowledge and act as on-the-road training system for real world experience.

### 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 would like to address and fix the problem of student drivers failing their driving exams.
* To fix this problem, DriverPass would like to provide online classes and practice exams. They would also like to provide a method for on-the-road training.
* There should security in place to guarantee the protection of the user’s information but provide the user with the ability to allow others to access their information if they choose.
* There should be a method for tracking any on-the-road experiences as well as the ability to cancel or modify these training reservations.
* This website would be accessible allowing the user to access their data from anywhere provided they had a stable internet connection.

### 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 this website is complete, it should be a secure method for taking driving practice exams, booking on-the-road reservations, modifying, or canceling reservations across each of the three packages available and tracking progress towards the students’ goals in drivers training.

## 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?*

* In order for the application or system to be accessible from anywhere, it would need to be a web based to ensure cross-platform support. Then the basics would be covered such as iPhone, Android, Mac, PC. Anything with a web browser.
* This application should support most of the common web browsers, such as internet explorer, chrome, safari and mozilla firefox.
* This application should be regularly updated to account for web browser updates thus, ensuring that the application and its features to be constantly accessible.

#### 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?*

* As stated above, the application will be web based to support a variety of platforms.
* This application will need a secure database to manage its students and instructors. For appointments, classes, and schedules, this can be less secure if need be.

#### 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 standard method for distinguishing between users in a database has been the unique username accompanied by a password. This method should suffice. This will of course be case sensitive and no one username may be the same as another already made.
* This system should inform the admin of users experiencing problems logging in for schedule changes, package changes and anything that prohibits the ability for users to make changes to their own program.

#### 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 ability to make changes to users (Add/Remove/Modifying) will require code, however, can be easily made upon request. Some restrictions may apply if using third party databases.
* Platform changes will need to factor in web browsers rather than platforms. For example, changes for safari will need to be made for both IOS safari and MacOSX safari, as with other web browsers as well. These changes will need to be made before new updates for supported web browsers rollout.
* The IT admins will need access to the source code in order to make necessary changes and be made aware of any new driving laws and guidelines as well as new testing materials.

#### 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?*

* Users will be required to input a password upon account creation to ensure the security of their account.
* The user will be notified when their connection is unsecure.
* Admins will be notified if a user’s account has encountered suspicious behavior such as repeated incorrect password entries.
* If a user has forgotten their secure password, they may choose to receive an email which would redirect the user to a link and required to answer 3 security questions. If answered correctly, the user will be redirected to a page to reset their password which can not be the old password.

### 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 display account information.
* The system shall allow information to be changed.
* The system shall display progress through the package and program they selected.
* The system shall display online practice exams for driving tests.
* The system shall be updated with the newest laws and regulations.
* The system shall be updated and maintained by IT admins as often as needed for ease of use.
* The system shall support secure communications between client and server.

### 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.)?*

* Because the platform can be anything with a web browser, the user interface can be a keyboard and mouse, a touch display or even a game controller.
* The users for this interface would be the students undertaking the courses, the instructors and even the administrators.

### 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?*

* Users though, highly unlikely, may not have a device capable of accessing a web browser.
* Just as unlikely, users may not know how to use their device.
* While made user friendly, the systems functionality could be made to complicated for some users.
* Users may have a learning disability that makes it difficult to read.

### 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?*

* Optimization for mobile devices is must, due to network limitations for mobile devices.
* In the off chance that bugs arise during development, either the schedule for development will be pushed back or the budget will be impacted by hiring on additional help.

### 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.*

