# 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 name of the client is “DriverPass”
* They want to build a system which will help decrease the number of failing driving tests at the DMV
* They’ll do this by providing online practice tests, online classes & on-the-road training.

### 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 to decrease the number of failing driving tests at the DMV by providing driving lessons and online training
* The “DriverPass” system should be available through the Internet, in a web-based solution
* Components:
  + **Reservations** – Need the ability to create/modify/cancel reservations, both as an employee and as a customer
  + **Lesson Packages** – Need to have certain lesson packages made available for purchase
    - Currently, just need to be able to disable certain packages
    - In the future, the packages may be enhanced to be more flexible and allow more options
  + **Exportable Data** – Need the ability to download “DriverPass” data for offline usage
    - Spreadsheets first, for use with Excel, but potentially other formats
  + **Connection w/ DMV** – Need the ability to get a notification for when the DMV makes changes to their rules and policies, so “DriverPass” can make any necessary changes.

### 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?*

* Both employees & customers should be able to create, modify and cancel reservations through the “DriverPass” system
  + Multiple packages should be available for choosing lessons
  + Time & Day of a lesson should be selectable by the user
  + The driver and car for the lesson should be tracked
* The “DriverPass” system should be available on a web-based platform, accessible through the Internet
* Users should be able to download their “DriverPass” data for offline usage

## 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 DriverPass system should be both a web-based solution as well as a mobile application, so it can be accessed from any device
* The data should be returned to the user in a reasonable amount of time (< 3 seconds)
* The data should be updated immediately, as soon as users make any changes, so those changes can be viewed right away

#### 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 OSs, using the web browser
* The system should also be made available through mobile application stores to be used on phones and other mobile devices.
* A database will be required to hold the user and reservation info within DriverPass

#### 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 data in the system should be real-time, so that any updates to the data can be viewed by the users of the system at any time, and there should be no discrepancy between platforms.
* Notifications should be sent to admins and users whenever changes are made

#### 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?*

* Admins should have access to all data and be able to make changes to user details at any time
* Employees should have access to reservations data, and be able to make reservations on behalf of users

#### 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?*

* An account will have to be created and verified by email to access the DriverPass system
* Minimum password requirements should be put in place to limit hacking attempts

### 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 be available through a web-based platform on all devices
* The system shall allow users and employees to create reservations for DriverPass through the platform
* The system shall allow for the exporting of user and reservation data for offline usage (spreadsheet)

### 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 DriverPass dashboard should contain the following elements:
  + **Online Test Progress**
  + **User Information** – First/Last Name, Address, etc.
  + **Driver Notes**
  + **Other** – Special Needs / Driver Photo / Student Photo
* The mobile version should look different, to optimize for smaller devices, but should still contain all the above elements

### 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 users are old enough and qualified to take a driving test at the DMV
  + Others can still make an account, but will be unable to make a reservation
* Have internet access to use the DriverPass system (web based & mobile)

### 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?*

* One limitation is resources, as John seems to be the only developer on the team.
* If anything happens to the DriverPass servers, the system will become unavailable

### 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.*

Timeline

Description automatically generated