# CS 255 Business Requirements Document

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?*

* Purpose: Take advantage of a void in the market when it comes to training students for driving tests at their local DMV
* Client: DrivePass
* System capable of training customers with online classes and practice tests
* Also provide on-the-road training
* Work with DMV to update new rules, polices, and sample questions

### 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?*

* Must be able to provide online tests
* On-the-road training tests
* Capable to be accessed anywhere online
* Reservation creation by phone call, online, or visit office; must include date and time
* Track which user is matched with a certain driver, time, and car
* Driving appointment packages
* Fixable problem: More trained drivers, the safer the roads will be
* Components needed: Data accessibility, security, tracking, user record edits, registrations, runs on the cloud
* Interface: Logo, online test progress, student information, driver notes, special needs, driver photo, and student photo

### 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?*

* Must be a flexible system
* Have a reliable security measure
* Can be downloadable for offline usage
* Provide updates of reservations and cancellations
* Notifications provided for both user and driver
* Runnable on the cloud
* Provides test progress: Test name, time taken, and score
* Include status: not taken, in progress, failed, and passed
* General Information: first name, last name, address, etc.

## 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?*

* System needs to run in a web-based environment
* The system should run fast for users with no buffering
* Needs to have a regular update, as often as needed when it comes to DMV updating their rules, policies, and sample questions

#### 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?*

* Platforms that system must run on are major web and mobile browsers
* The back end will have a database that will store system data, logs, etc. as well as also managing database requirements and security

#### 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?*

* To distinguish between different users, they’ll need a user email and password as verification
* The inputs will be case-sensitive to improve security
* The system needs to inform the admin of a problem when the user has inputted their information incorrectly a number of times that exceeds an input limit

#### 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?*

* You can make changes to the user without changing code by having the system make modifications, code is still accessible for any additional requested changes to the system
* The system will adapt to platform updates by being notified of any requests on particular changes
* The IT admin will have access to all accounts, this includes users, employees, etc. and the system

#### 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?*

* User will need an email and password to login
* Data exchange and connection will be secured by responding to the cloud
* The system will lock users out after a number of failed attempts to login, this will prevent brute force attacks
* Password reset can be made with the corresponding email connected to the account that the user should only have access to

### 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 verify the user login information to have access to their account
* The system shall book appointments and reservations made by the user
* The system shall provide practice tests, classes, and driving lessons
* The system shall offer three different driving packages that the user can choose from
* The system shall show the driver the user will be paired with
* The system shall be user friendly, run fast, and efficient with no complications
* The system shall have security measures to keep the user’s information private and only accessible to them
* The system shall send an email to the user when requesting a password reset
* The system shall show all tests and additional work the user has completed and is working on
* The system shall have custom content based on the user’s personal data

### 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 include:
  + Logo
  + Home Page
  + Login/Sign-up button
  + Appointment/Reservation creation button
  + Test(s) and Test(s)Progress
  + Updated DMV information (based on user location)
  + User Information
  + Driver Notes
  + Special needs
  + Student Photo and Driver Photo
* Users who have access to a computer or mobile device
* To access interface, users must have access to a web or mobile browser

### 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?*

* User must have a stable internet connection
* User will need an email address to create and access their account
* Users need a computer or mobile device with a web or mobile browser access
* Users will have to manage their time and schedule to take tests, classes, etc.
* The system must be up to date based on any changes made by the DMV guidelines

### 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?*

* Time deadlines and budget limitations based on client needs
* DMV guidelines change every so often, so the system will need to have reoccurring updates to maintain the most recent guidelines
* User’s internet can impact the limitations of their access to the interface
* Employees will need to maintain work for specific features and needs from the time frame provided
* Making sure that the main web browsers will have access to the website

### 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.*

*A picture containing text, screenshot, software, number

Description automatically generated*