# 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?*

* Client: DriverPass
* Create an application/webpage for people who want to learn how to drive, so they can schedule driving practice or take online examinations and track their progress and view feedback on their work. The goal is to provide all the appropriate tools for beginner drivers to learn what they need to learn in order to pass their driving test.

### 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 application/site should be accessible from anywhere which includes mobile phones, so the beginner drivers can schedule or access course material from anywhere
* Ability to sign up for different packages based on customer want/need
* Ability to track drivers matched with students so they can keep track of who is with who
* Ability to receive notifications on any changes that are made to scheduling and who made those changes with the ability to print that information
* Ability to keep track of everything and track data from anywhere manageable from a program such as excel
* Ability to cancel, make, modify appointments
* Cloud connectivity
* Easy security which doesn’t require much or any man power
* Problem to be fixed: students are failing driving tests at alarming rates, through the use of this program they should be able to drastically increase their chances of success on written and driving portions of the DMV drivers test.

### 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 system should be fully accessible to students to book driving sessions, take online prep exams/courses(if chosen in options selection), view their feedback, schedule, change or modify appointments, access the system information from anywhere, and have accessibility options to make taking the courses easier. Something such as different languages, text reader, etc. might take some time to set up, but it would increase the range of students that the courses could help.

## 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?*

* Cloud based system
  + Website
  + Mobile app/compatibility
* Monthly Updates and reminders
* Fast system which doesn’t have strenuous system requirements for ease of use and accessibility on the go

#### 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 app/website should be accessible on all major systems/browsers. The idea is to make this material accessible to everyone who wants to use it.
* Back end will require databases to store important information and data
* Security shall be built in to this application so that the client doesn’t have to manage it themselves

#### 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?*

* Different users shall be distinguished as Drivers, Admin, Students, employees with modifiable accessibility based off roles
* Thes system shall report all issues via notification/daily reports in the system to the administrator
* users who encounter issues/errors shall receive an error notification which they can use to contact support

#### 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 program/site should allow the main administrator to change the accessibility/permissions of different roles without changing code.
* The IT administrator will need high level access in order to change and modify code as needed in order to keep the site/program up to date

#### 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 user will require a unique username and case sensitive password to log in
* Two-factor authentication can be used as an additional security practice for log in security
* If the user forgets their password they should have security questions set up in order to receive an email to reset their password
* In order to prevent brute force hacking, limited log in attempts can be made so the account locks until the customer can verify their identity and reset their 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 notify users and administrator of changes made in the schedule
* The system shall provide practice examinations and feedback to the students
* The system shall send emails with password reset instructions to verified users who forgot their password
* The system shall verify log in with 2 factor authentication
* The system shall keep track of driver schedules for students to schedule and modify times
* The system shall lock out accounts with multiple failed log in attempts

### 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.)?*

* User interface for students should match provided drawing
* User interface should be useable by students to schedule driving lessons, take practice exams, view feedback/exam results
* User interface should allow drivers to view their schedules, view pick up and drop off locations, provide feed back for students who had a driving lesson.
* User interface should allow admin to modify role privileges, view/print reports, allow admin to disable course options
* User interface should be available for students and drivers through mobile application or PC
* User interface for admin should be available on PC and possibly mobile

### 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 biggest assumption is that users will have a device to access material
* Students will have an email and ability to connect to the web via mobile network or cable/wifi 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?*

* Biggest limitation is going to have compatibility over all mobile devices/systems/browsers
* Fast functionality on all devices
* 15 week timeframe to create and perfect the system

### 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 diagram with different colored squares

Description automatically generated with medium confidence*