# CS 255 Business Requirements

Justin Murray

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?*

DriverPass wants the system to do the following:

* Provide online training for students to pass the written test.
* Properly schedule students for driving lessons.

### 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?*

* The DriverPass is a system for people going to take their driver test and need extra training beforehand.
* This gives hands-on training with an instructor as well as online classes detailing the only driving process and access to practice tests.

### 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 main goals of the system is to provide access to stats and reports of the account offline and allow access and changes while online. This system is to provide training for people going to take their driver test by giving online classes and practice tests as well as real live training. This system should also be able to track their reservations, cancelations and when they book and appointment as well as setting then with the driver available.

## 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 System is web-based
* The system should provide a fast response time for all critical functions and run seamlessly for better user experience
* The system should be updated in a timely manner whenever new patches, features, and security fixes are ready for integration with downtime being scheduled in advance
* The system should be able to handle current users adequately with room for more new users.

#### 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?*

* Since the system is going to be web-based it should support multiple platforms such as mobile(ios), desktop (windows), and tablets(amazon fire)
* The System Interface should adapt between mobile friendly and desktop versions automatically
* The backend would need to have a database to store the logs and user information

#### 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?*

* Each user will have their own user-name that is associated with their authorization level
* The system should only allow for a user-name to be used one
* User-names and passwords should be case sensitive
* The system should send out a daily report with all errors and any critical to function or security should have an immediate notification to the admin

#### 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 should be up to date with any changes or updates made to the platforms and browsers it is available on
* The system should be easily customizable
* The system should support third party integration
* The IT team or admin should have access to the database and server to check status and run the overall 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?*

* The system should have user authentication
* The system should have all its data communication encrypted
* The user creates a case sensitive password for account upon creation
* The user should have an option to reset their password using verified contact info, phone/email
* The system should lock accounts after a number of failed attempts to prevent brute force
* The system should have all data storage encrypted
* The system should have some warning and defense against unauthorized access

### 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 all credentials attempting access of the system
* The system shall lock any user accounts after 3 incorrect password attempts, requiring a password reset
* The system shall track the progress of customers
* The system shall supply results of progress to the customer and administration team.
* The system shall notify the administration team of changes to schedule or appointments from customers

### 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 system should give customers access to see all important information about classes provided and lessons/tested they have booked for driving
* The system should allow the status of this test taken to be viewed by admins and customers
* The system should give admin users access to scheduling and appointment making for tests
* The system should have a proper interface set up for each platform that it is listed as operatable with
* The system needs a registration and login portal
* The system should have a analytic report available to users

### 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?*

* I assumed that the user has internet access to be able to access the interface.
* I assumed the user has access to an email in order to create account and reset password if needed
* I assumed that the user will have a basic understanding of the interface

### 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?*

* A big limitation on this development is the short timeframe
* A limitation is created by the use of a third-party system and having seamless use.
* Another limitation is creating all the frontend design to be compatible with all the major web browsers
* There is a limitation to the accuracy because changes to the DMV regulations or browsers can occur at any point, need for speedy updates

### 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.*

[Insert chart]

A diagram with different colored squares

Description automatically generated