# Chris Richards

Christopher.richards4@snhu.edu

# 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?*

* DriverPass is a company that specializes in driver training and preparation for DMV driving tests. They have identified a void in the market in terms of driving training and testing preparation.
* DiverPass would like the system to be web or cloud based.
* DriverPass would like their system to allow for users to sign up and be paired with driving instructors, as well as provide online classes and practice tests for their users.
* DriverPass would like the modules within the system to be customizable, though this may be a future enhancement.
* DriverPass would like the system to allow for online reservations as well as allow a secretary to enter reservation information when a user calls.

### 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?*

* Currently, DriverPass, nor their competitors, have an online user portal for instructor reservation or online driving classes. DriverPass would like to take advantage of this void in the market.
* The system should be web or cloud based. DriverPass does not want to have to worry about maintenance or security. This should be a managed service so DriverPass can worry about the business and not infrastructure.
* The system should allow for user management, such as resetting a password when a user forgets it. There should be some sort of logging of when changes are made to allow for audits of user and reservation changes.
* The system should have a web portal to allow users to reserve driver instruction sessions. Users should also be able to call DriverPass to reserve driver instruction sessions. DriverPass will need to be able to track which driver matches to which user to facilitate scheduling.
* Users should be able to register for one of three available packages. DriverPass would like to be able to modify or add packages, though this may be a future update. Packages should at minimum be able to be enabled and disabled for registration.
* User information such as name, address, telephone number and credit card information. This should be stored, encrypted within a database.
* DriverPass would like to be able to download reports that are available offline for review.
* The system should automatically notify DriverPass when DMV rules and regulations change.

### 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 complete, the system will allow a user to log on to or call DriverPass to sign up for one of the three packages provided. The user will then be able to schedule time with a trainer based on the package chosen. The user will also have access to online classes that are provided by the package they registered for. DriverPass will be able to manage user accounts when needed, audit changes to the system, and download reports to review online or offline.

Project Measurables:

* Use case and activity diagrams – 8 business days
* User interface design – 9 business days
* Class diagrams – 9 business days
* Designs finish and meet with customer – March 11th
* Interface implementation – 12 business days
* Business logic – 22 business days
* System delivery - 2 business days
* Project completion – April 16th

## 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 will be web-based.
* The system will be cloud-based.
* Security and backup are required to be taken care of automatically. DriverPass does not want to have to worry about this.
* Reports are required to be accessible online with the option to be downloaded for offline use.

#### 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?*

* With the system being cloud-based and web-based, an internet connection is required for the system to operate.
* A database for user data, payment information and scheduling will be required.
* The system will need to be updated with the most recent requirements from the DMV.

#### 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?*

* User data will be role-based and include roles for upper management, information technology, secretarial positions as well as client roles.
* The secretarial role will need to be able to create user accounts and set up billing.
* The information technology role will need to be able to modify user accounts.
* The upper management role will need access to reporting.
* The client will need to be able to reset their own password if forgotten.
* The system will receive notification if there are updated DMV requirements.

#### 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 IT admin will need access to mark modules as unavailable if no longer offered.
* Modules cannot be created or removed at this time without a developer or system admin to perform the operation.

#### 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?*

* Security and backups will be automated.
* Data encryption between client and server will be established for all user sessions.
* User passwords will be reset by the user after user verification or by the IT admin.

### 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 allow users to choose from three different packages.
* The system shall allow users to schedule appointments online or via telephone.
* The system shall pair drivers with clients based on availability.
* The system shall have a client specify drop-off and pick-up locations for appointments.
* The system shall allow access to online training and tests if a client has purchased these items.
* The system shall display progress of online tests and training to the client.

### 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 user interface will show the online test progress for the client.
* The user interface will show driver notes for the client.
* The user interface will show client demographic information.
* The user interface will list any special needs of the client.
* The user interface will show a photo of both the driver and the student.

### 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?*

* It is to be assumed that each user will have access to a computer or phone to schedule appointments.
* It is assumed that each user will have a credit card to provide for billing for services and packages purchased.
* It is assumed the user will have internet access to visit the system.

### 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?*

* Since modules cannot be created or removed without development from a developer or system admin, there will be a time and budget constraint on new modules.
* If internet access is lost for any reason, clients will not be able to access the system via the web and will need to resort to scheduling appointments by telephone.
* Likewise, if internet access is lost for any reason, DriverPass will not be able to schedule appointments via the system and may have to revert to offline reports that have been downloaded.

### 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.*

*Chart, waterfall chart

Description automatically generated*