# CS 255 Business Requirements Document Template

Raymond Sauter

CS255

## 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 Has realized an opening in the market in that there are very few tools to help new drivers pass the driving test.’
* DriverPass has decided they would like us to help them create a system in the form of a web app that will provide students with online examinations and have the ability to book in person on the road training with an instructor.

### 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 would like to help aid student drivers and fix the problem of new drivers failing there tests.
* Driverpass would like to do this by providing online practice exams, classes, and the ability to book on the road training through the system.
* The system should allow you to access data from anywhere if there is an internet connection.
* The system should also have the right security features in order to grant access to different users, and the things they have access to do using the system.
* The system should track all reservations, cancelations, modifications, and offer three different packages to choose from for on the road training.

### 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 this system is completed, it should be a fully functional website that allows customers to book, modify, and cancel on the road driver training.
* When the system is complete it should also allow customers to take practice tests, and classes online.
* The system should only be able to accessed by employees if further modifications need to be made to the system.

## Requirements

### Nonfunctional Requirements

*The system should browser based in the form of a website constructed of HTML transmitted from a cloud server. Server should be fast enough to allow a number of different users to access the system at once. The system should be able to be updated in any point in the future that the client wants to add new features.*

#### 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 environment should be web based operating in the browser capable of running on any of the major browsers like chrome and safari this will make it perform fast and it should be able to be updated anytime the user sees fit

#### 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 a cloud server operating on a Linux platform.
* The system will be using the cloud to manage all the security, which will also take care of the databases required for the back end.

#### 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 should be able to create a username and password when first accessing the website. The input should be case-sensitive. Also, the system should have multi-factor authentication to make it more difficult to hack into an account.
* The system should inform the admin immediately of any problems, glitches, or bugs with the website to get it back up quickly.

#### 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 will allow you to make modifications to users and allow you to remove users without changing the code.
* The system will slowly be introduced into platform updates as a need comes for more features. When drivers pass decides, they would like to add new features to the website, platform updates will begin.
* The IT admin will have full access to the system in order to make any changes necessary or remove former employees who should no longer have access.

#### 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 username and password to log in, along with multifactor authentication.
* The cloud will be responsible for the data exchange between the client and server.
* The system should disable the account after four incorrect logins to prevent brute force attacks.
* If a user forgets their password, they will be prompted to enter the email they used to set up their account, and a password reset link will be sent to that address.

### 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 book reservations when made by the user.
* The system shall provide practice tests, and classes.
* The system shall show the driver the customer is paired with.
* The system shall offer three different driving packages.
* The system shall run fast and efficiently.
* The system shall provide custom access based on the user and their privileges.
* The system shall show the tests and work the user has already completed.

### 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 interface must provide the customer the option to make reservations for driving appointment packages, take online classes and tests.
* The interface must allow driver pass employees to go in and make changes, and update the system as needed.
* The user should be able to interact with the interface from a mobile phone, laptop, computer, or any device that is capable of internet connection.

### 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?*

* We were not given a budget for the system. Due to this, we are making assumptions that all the stuff we are using to build the system will be within the budget. That includes using the Linux environment and using the cloud.
* We are also assuming we have easy access to all of this technology

### 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?*

* We have roughly five months to build this system and were not given a budget.
* The limitation I see is building the Infrastructure and the code for the system to operate in that amount of time .

### Gantt Chart

A picture containing chart

Description automatically generated