# CS 255 Business Requirements Document Template

## 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?*

The purpose of the DriverPass system is to provide training to students preparing for their driving license exams. The system will offer online classes, practice tests, and on-the-road training to improve students' driving skills and increase their success rate in passing the DMV tests.

### 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 aims to fill the void in the market for effective driver training. The high failure rate among driving test applicants, 65%, motivates the need for a reliable system that offers training and preparation.

### 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?*

* Increase the pass rate of students taking driving license exams.
* Online classes and practice tests to improve students' knowledge and skills.
* On-the-road training sessions for practical driving experience.
* User-friendly interface for easy scheduling and access to training resources.
* Ensure data security and flexibility in package customization.

## 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?*

* Web-Based cloud environment
* Feedback for load times over 3 seconds
* Updates should be once a month or more, as much is needed.
* 1-2 Second load time for 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?*

* Should run on computers and cell phones. I.E. Internet explorer, Safari, Google Chrome, etc.
* Back-end needs a database to store user information
* Back-end also needs a web server to process requests.

#### 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?*

* Case-sensitive passwords
* Different login for customers and employees.
* Admin gets reports of any problems.
* You must be signed in to access certain functions.

#### 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?*

* User changes will not change any code.
* IT admin needs database and web server 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?*

* Password is always required to login
* Users locked out after 5 wrong attempts.
* Two-factor auth can be used as extra security.

### 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 distinguish between user type; customer or administrator
* The system shall validate the users name and password when logging in
* The system shall allow users to reset their password
* The system shall allow five login attempts before locking out
* The system shall be able to create user accounts
* The system shall display items or packages for customers to purchase
* The system shall allow admins to oversee orders and manage them
* The system shall connect with DMV to be constantly updated with information
* The system shall allow customers to access all our learning tools

### 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.)?*

* Customers should be able to see and access;
  + Login/register page
  + Home page
  + User information
  + Package information
  + Online learning tools
  + Past tests progess/scores
* Admins should be able to see and access;
  + Customer information
  + Reset users passwords
  + See and manage order status’

### 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?*

* Users have constant internet access
* Users have a basic understanding of how a computer and web browser works.
* Customers will show up punctually to their lessons
* Drivers are always available and will be to their lessons
* Admins have background of administration, and have the skills to access website functions

### 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?*

* The number of cars available.
* Issues with internet connections
* Customers may only have experience in sedans or SUVs, and not the other one.
* Only so many packages can be sold with the amount of cars available.

### 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 screenshot of a computer

Description automatically generated