# 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?*

* DriverPass aims to address the high failure rate of driving tests (over 65%) by providing comprehensive online practice tests and on-the-road training
* The system should handle customer registration, appointment scheduling, progress tracking, and DMV integration for updated regulations

### 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 wants to provide online practice tests, educational materials, and scheduled driving lessons to better prepare students for DMV tests
* The system needs web-based scheduling, progress tracking, driver feedback, and automatic DMV updates while supporting three different training packages

### 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 enable online registration for three training packages (6, 8, or 12 hours), web-based appointment scheduling with specific drivers and vehicles
* Progress tracking with test scores and lesson history, activity reporting with user accountability, and role-based access for different user types

## 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 must be web-based and cloud-hosted, accessible from any computer or mobile device
* It should support real-time appointment scheduling and automatically receive DMV updates when new regulations are available

#### 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 be web-based and accessible through standard browsers on any operating system with cloud-hosted infrastructure
* It requires a robust database backend and DMV system integration with data export capabilities to Excel format

#### 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?*

* The system requires role-based authentication for owner, IT officer, secretary, and customers
* Customer information must include personal details, payment information, and pickup/drop-off locations with all system changes logged with user identification and timestamps

#### 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 officer needs full administrative access for password resets and account management
* The owner should be able to disable training packages without developer intervention, and the system must adapt to DMV changes through automated integration

#### 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 requires secure user authentication with encrypted data transmission for financial information
* Customers must be able to reset forgotten passwords automatically, with IT officer override capability and role-based access controls

### 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 customers to register online and schedule 2-hour driving lessons with specific drivers and vehicles
* The system shall provide access to online practice tests and educational materials based on selected packages
* The system shall allow customers to modify or cancel appointments and enable drivers to input lesson feedback
* The system shall track customer progress and generate activity reports with user accountability
* The system shall automatically receive DMV updates and support three training packages with different service levels
* The system shall allow office staff to schedule appointments on behalf of 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 requires a web-based interface accessible through browsers on computers and mobile devices
* The customer dashboard should display test progress with scores and status, while a driver notes section shows lesson details and comments
* The system needs registration forms, appointment scheduling interfaces, and administrative controls for the IT officer
* The owner dashboard should provide reporting capabilities, and the secretary interface should handle customer communications and scheduling

### 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 design assumes customers have reliable internet access and basic computer literacy
* It assumes DMV systems provide APIs for regulatory updates and that cloud hosting ensures adequate security and backup
* The system assumes payment processing integration is available and that driving instructors have devices to input feedback

### 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?*

* Package customization requires developer intervention and cannot be done by business users
* System functionality depends on internet connectivity and cloud service availability
* Integration with DMV systems depends on their cooperation, and the system is limited to 10 cars and drivers as per the current business model

### Gantt Chart

*A white board with colorful boxes

AI-generated content may be incorrect.*