# …

# CS 255 Business Requirements Document Template

## System Components and Design

### Purpose

* Client: DriverPass
* System: A system to provide students with access to online practice exams and on-the-road training to better prepare them for driving tests

### System Background

* Problem: Too many people fail their driving tests at the DMV
* Started company to provide training so less people fail.
* Wants to provide online classes and practice test.
* Wants to provide behind the wheel training.

### Objectives and Goals

* Must be able to access data from anywhere, online as well offline
  + Must be online to make changes
* Must be able to export to document format like Excel
* Identity and access system
  + Liam wants to have Power user access
  + Must be able to reset password
  + Must be able to block access
  + SA can add modules
  + Liam can delete modules
* Change tracking
  + Show who made what changes
  + Printable activity report
* Customer must be able to make reservations
  + Online
  + Phone
  + In person
* Identity verification
* Track training appointments
  + Driver
  + Time
  + Car
  + Pick up location
  + Drop off location
* Class Packages
* Customer Info:
  + Name
  + Address
  + Phone
  + State
  + Credit card
* Pull regulations from DMV
* Cloud Bases
* GUI Design
  + 
* Driver Notes
  + Time
  + Start Time
  + End Time
  + Comments

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* The system should be web based.
* The system should regularly scrape DMV website to update courses
* The system should be responsive.

#### Platform Constraints

* Cloud based (AWS)
* Should run on window
* Postgres database
* Backend in Java
* Front end in JavaScript and CSS

#### Accuracy and Precision

* Each user is unique (
* Each user will have a username for login and display while they use the system.
* Each user will have a user ID for backend records.
* All inputs are case sensitive
* System records all problems
* System alerts admin after 3 errors from same user

#### Adaptability

* Admins should be able to add:
  + Admins
  + Students
  + Instructors
  + Classes
  + Packages
  + Practice Tests
* Admins can update
  + Admins
  + Students
  + Instructors
  + Classes
  + Packages
  + Practice Tests
* Students can update
  + Personal Information
* Instructors can update
  + Personal information
* All updates need password conformation
* Platform updates at night

#### Security

* All accounts need a unique username
* All accounts need a password
* Password rules:
  + Minimum 10 characters
  + At least 1 lower case letters
  + At least 1 uppercase letter
  + At least 1 number
  + At least 1 special character.
* Up to date certificates
* AWS standard encryption.
* Should require up to date web browser
* Regular updates.
* Schedule weekly backups during downtimes

### 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 offline access offline
* The system shall only update while online
* The system shall track all user changes
* The system shall allow customers to make reservations with multiple methods
* The system shall validate user credentials
* The system shall allow packages to be enabled and disabled
* The system shall allow users to update password without intervention.

### User Interface

* Logo at top of screen
* Test Progress in upper left corner
  + Shows tests status and statistics
* Student information in upper right corner
  + First name
  + Last name
  + Address
  + City
  + State,
  + Zip
  + Phone
  + Email
  + etc
* Driver notes in lower left corner
  + Lesson time
  + Start hour
  + End hour
  + Comments
* Student and driver photos lower right corner
* Special needs information above photos.
* Scales to mobile browser

### 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?*

* Nothing about exam prep and other study material.
* Some changes can only be made by an admin

### 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?*

* Very little interaction right now from students’ side

### Gantt Chart

