**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?*

* Client is DriverPass
* DriverPass wants a tool that trains students to pass drivers tests without failing
* To provide students with access to online practice exams and on-the road training
* DriverPass wants me, as the systems analyst, to design the system

**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 the system to teach students to pass the drivers tests
* 65% of students fail the drivers license exam and better driving training is needed
* System is to be accessed from anywhere - both online and offline
* Security in the form of giving the employees different rights and roles
* System tracking as in knowing who made a reservation, cancelled, or modified it
* Customers can make reservations online for driving lessons with the day and time
* Customer can create and then have an online account
* Identify the driver that the customer is scheduled with, including driver, time, and car
* DriverPass has 10 cars and customer can choose between three packages
* System should be flexible such as updating or removing driving packages
* Get information about updates in policies from DMV
* Visual appearance conforms to what is shown drawn on paper

**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 will have taught students to pass their driving tests
* Student has created an account, studied road rules, passed practice exams
* Student has acquired permit and reserved road lessons, has taken road lessons
* Student passes the on-the-road driving exam

**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?*

* Online and offline; web-based, preferrably the cloud
* System should run quickly so that customers do not get frustrated in learning process
* System should be kept up-to-date regularly, such as changing DMV rules and policies

**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?*

* All the platforms - Windows, Unix, etc.
* Minimal technical problems, running off of the web - prefferably the cloud
* May require a developer or systems analyst to add or remove modules

**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?*

* Users are Liam the big boss of DriverPass, IT officer Ian, secretary, and the customers
* Perhaps input should not be case-sensitive, to make it easier to work with
* DMV sends updates when there are new rules and policies
* System should inform admin of problems right away

**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?*

* If the system is object-oriented then the user can be changed or removed easily
* System adapts to updates when perhaps the developer adds or changes modules
* IT admin needs full access to online accounts to reset them or block 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?*

* User needs an account and a password, the account has lots of personal information
* Data is secured through the cloud which follows best security practices
* If password is forgotten, Ian resets the password
* Information on the cloud can be hacked, although it has extensive security protection
* If website is breached, it should be fixed as soon as possible to minimize damage
* If account is hacked, they should have a password reset

**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 new customers to create an account and login
* The system shall allow customers to read and download PDF of drivers manual
* The system shall allow customers to take practice driving tests
* The system shall allow customers to schedule driving lessons
* The system shall allow password resets
* The system shall be secure, simple, easy-to-access, and work at fast speeds
* The system shall be updated regularly as the DMV updates rules and policies

**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.)?*

* Users are the DriverPass owner, IT officer, secretary, and the customers
* Needs of interface are secure, simple, easy to access, and work at fast speeds
* Online test progress tests taken, progress, time taken, score, status
* Student or secretary inputs personal information, takes test, jots down notes, etc
* Student can access system from all devices including mobile app, browser, etc

**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?*

* Student will want to study drivers manual as well and maybe save it as PDF
* Student may want coaching or live support
* Student may want additional hours of road lessons to be fully prepared
* Students may still fail and take multiple attempts before they pass
* Some students may attempt to access the site without proper qualifications

**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?*

* Unexpected bugs may occur that cost lots of time to fix
* There may be insufficient budget, requiring focus on the most important features
* Technology may be outdated and even require working with older tools
* May not have the neccessary resources to accomplish the intended goal

**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.*

