# Adam Conger - CS 255 Business Requirements Document Template

Complete this template by replacing the bracketed text with the relevant information.

This template lays out all the different sections that you need to complete for Project One. Each section has guiding questions to prompt your thinking. These questions are meant to guide your initial responses to each area. You are encouraged to go beyond these questions using what you have learned in your readings. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length for the final document. Instead, the goal is to complete each section based on your client’s needs.

**Tip:** You should respond in a bulleted list for each section. This will make your thoughts easier to reference when you move into the design phase for Project Two. One starter bullet has been provided for you in each section, but you will need to add more.

## 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?*

* Create online resource and study aid for driver’s education students.
* Offer online classes and practice tests.
* Provide online scheduler resource for behind-the-wheel sessions.
* Client: Driver Pass; Owner: Liam

### 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?*

* Create online reservation system
* Establish mark presence in driver education
* Wants to track reservation information for students

### 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?*

* Requires input – customer contact info (measureable task)
* ‘Inventory’ amount for driving lesson packages (measureable)
* Users have different rights within system

## 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?*

* System will need to run web-based
* System will also need to update in real-time to reflect package inventories/times
* System would benefit from bi-annual software updates and monthly firmware updates.

#### 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?*

* Windows or Mac are ideal platform choices
* There will need to be a database tool that we can use for storing customer information

#### 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?*

* User roles: student, teacher, lead teacher, parent/guardian, and system admin.
* Usernames will require one capital letter, one lowercase, one number, six character minimum.
* Admins will get schedule alerts, system error alerts, data sync alerts

#### 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?*

* Changes to users can be made in initial software release
* Bi-annual software updates will focus on targeted update patches
* IT Admin will need to be able to simulate users to troubleshoot and access internal system architecture.

#### 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?*

* Users can use a Forgot Password feature to update.
* Users will be disabled after five failed login attempts.
* Functions requiring payment need a verified CVC code.
* User logins can have 2-Factor Authentication enabled

### 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 display all academic information for a student’s course load.
* The system needs to tell users when a scheduling error has occurred or a course is fully booked.
* The system will allow teacher users to view student information and grade students.
* The system will also allow lead teachers to roster classes with students and teachers.
* The system shall offer full access for a System Administrator user role.

### 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.)?*

* User Interface (UI) should show classes, profile, testing resources, appointment scheduler.
* UI will initially offer browser-only but will update to mobile access within year one.
* UI shall provide scheduling capabilities for users
* UI will differentiate between User Roles in ‘Accuracy and Precision’ section above.

### 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?*

* Our stakeholders will have a strong understanding of the technical functionality of the software.
* The stakeholders have a clear vision for package offerings and schedule structure (appointments are two hours and won’t suddenly change to 45 minute appointments)
* The initial software release will be consistent with current program offerings.

### 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?*

* There will be a challenge to simultaneously develop for desktop/laptop and mobile access.
* There can be anticipated development challenges with individual appointments versus package appointments (we don’t want a package to accidentally double book a teacher on a certain day).
* Stakeholders may need to realign feasible package offerings (we may not be able to initially accommodate 20 package types).

### 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.*

