**High-level description of the project purpose**

A website of a survey style for pupils to rate and comment on two different computer aided design software packages is to be created. The website should have a home page with information describing the two CAD softwares and internal links a login page for teachers, another for a pupil to register and another for a pupil to login. Login and register should have both client and server side validation. The data in the pupil registration form will be saved to a table in a database. Both The login pages will be compared to the data in the corresponding table to validate them depending if it is a pupil or a teacher.

If the incorrect login details have been entered an error message shall be shown. Once logged in as a pupil they can take the survey anonymously and submit what they think of the CAD packages by filling in the form and selecting relevant radio buttons etc (this will all be validated at client side). The submissions will be saved on another server side database. When logged in as a teacher, they are able to see the submissions made by pupils and how many are in favour of using each package as various parts of the Database shall be shown as a report by using SQL operations to show how many votes are for each package. On the information page there is a text description of the two CAD packages with the advantages and disadvantages of each. There will also be external links to websites where a user can learn even more about the CAD packages and more external links to where they can be bought. CSS will be used to style the pages with very subtle colours as the pupils may find bright colours childish. A consistent layout shall also be achieved by using an external style sheet linked to all the pages.

**Scope and constraints of the project**

**!!!Finish scope once all other parts of requirement spec are completed!!!**

**Schedule-**the project must be completed and delivered by 21st of March 2017

**Resources-**the people included is myself with total work duration of 80 hours and there are no funds going into the project. The equipment used is a PC computer, a USB pen-drive (server) and a printer. Code Academy and various other websites shall be used to increase my knowledge of the areas required.

**Description of the end users**

There will be two types of end users - teachers and pupils.

**Pupil-**A pupil will be a novice user between the ages of 11 and 18 of any gender. They will have an interest in graphic design so will have a basic understanding of computers. They will be given instructions by their teachers how to login to the website and how to complete the survey so instructions will not be needed in the website itself.

**Teacher-**A graphic communication teacher can be classed as an advanced user as the majority have a vast knowledge of a computer system and often website design and layout. The field is primarily male dominated as in a graph released by [www.gov.scot](http://www.gov.scot) in 2003, 91% of technical teachers a male and have an age range from 25 to 65 years.

**User requirements**

**Functionality Required by the Project**

**Inputs to the system**

1. Register as pupil

* First name
* Surname
* Date of birth
* Teacher Name
* Username
* Password
* Confirm Password

1. Login as pupil

* Username
* Password

1. Login as teacher

* Name
* Password

1. Survey input

* Question 1 input
* Question 2 input
* Question 3 input
* Question 4 input
* Question 5 input
* Final decision question

**System processes**

1. Validate Pupil register inputs
   * First name **(Client side - Presence check)**
   * Surname**(Client side - Presence check)**
   * Date of birth**(Client side - restricted choice-calendar, presence check)**
   * Teacher Name**(client side - restricted choice)**
   * Username**(Server side - Unique)**
   * Password**(Server side - Unique, Presence check-letters and numbers)**
   * Confirm Password**(Server side - Input=Password input)**
2. Store Validated values
3. Store Validated values
4. Validate pupil login
   * Username**(Server side - Unique, Presence in database)**
   * Password**(Server side - Unique, Presence in database)**
5. Validate teacher login
   * Teacher Name**(Client side - Restricted Choice)**
   * Password**(Server side - Unique, Presence in database)**
6. Validate Survey Inputs

* Q1, Do you feel you are confident using both CAD packages **(Client side - Radio buttons, range check, restricted choice)**
* Q2, Which feature do you find most easy to operate on AutoCAD as opposed to Inventor **(Client side - Radio buttons, range check, restricted choice)**
* Q3,Which feature do you find most easy to operate on Inventor as opposed to AutoCAD**(Client side - Radio buttons, range check, restricted choice)**
* Q4, What feature do you feel could improve AutoCAD**(Client side -Presence Check, Length Check)**
* Q5,What feature do you feel could improve Inventor**(Client side -Presence Check, Length Check)**
* Final Question, Which package do you Prefer**(Client side - Radio buttons, range check, restricted choice)**

1. Store Validated values
2. Process Survey Inputs

* Calculate Number of surveys completed**(Total surveys completed)**
* Calculate number of people who feel they know both CAD packages well**(Total number of Yes inputs to Q1)**
* Find which feature people find easiest on Auto Cad **(Count number of each option for Q2 and find max)**
* Find which feature people find easiest on Inventor **(Count number of each option for Q3 and find max)**
* Store each input to Q4 to an array
* Store each input to Q5 to an array
* Calculate the number of people who prefer AutoCAD/Inventor **(count number of each option for final question)**
* Find what package the majority of people prefer **(count number of each option for final question and find max)**

**Outputs to the system**

1. Display message to successful registration
2. Display message to successful login
3. Display questionnaire form to logged in Pupil
4. Display outputs of the survey