

2014

Milestone 3

WEB601

REBEKAH ROSSITER

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Introduction

This report contains all three milestones for WEB601. It contains all of the processes that I have gone through to complete my website. This has been requested by Todd Cochrane and is due on Friday 21st November at 9am.

Milestone One

Introduction

Around the world is a darts game that is mainly used for practice and aiming purposes, but can be a fun game if played with another person. This is what my website is about. The purpose of this report is to show my understanding of the processes that I have undertaken in creating this website. As the project is indicative this is the first step of my work. This has been requested by Todd Cochrane and is due on Friday 5th September at 9am.

Findings

Project Brief

This website will contain instructions on how to play around the world using a dart board. It is based for intermediate aged children.

The site will start with a welcome page that will have an introduction as well as an equipment list. There will be a log in and register section so that progress through the tutorials can be tracked and score boards can be saved. There will then be a link to an introduction tutorial on setting up and getting prepared e.g. where to stand, how to aim for the board etc...

After that there will be instructions on how to play around the world. This will include pictures showing examples.

At the end there will be a scoreboard that has two columns – one for each player – their name should go at the top. Under that there will be the numbers 1 – 20 listed down both columns. This should be interactive so that the children can mark off numbers once they have achieved them. There will be an option to continue the previous game or start a new one. There will be a save button so that the game can be continued at a later stage.

At the bottom of each page there will be a notes box for anything that the child wants to keep a note of.

There will be a navigation bar that can take children to stages during the tutorials or the scoreboard in case they want to have another look at a certain part of it or have finished the tutorial previously. There will also be a marker pointing to a stage of a tutorial if a child is part way through in case they want to continue from that point.

The colour themes will be based on the colours of a dart board. These are black, yellow, green and red.

The aim of the game is to be the first one to hit every single number on the board as well as the bulls-eye. You go for the numbers numerically for example you start on 1 and then go to 2 up to 20. You cannot continue onto another number until you have hit the number you are aiming for. Once you have hit 20 you try for the bulls-eye. The winner is the first person to hit all the numbers and the bulls-eye.

Information Architecture

Goals

The goals of the ATW website are;

- Teach around the world
- Visitors learn how to play around the world
- Offer a scoreboard
- Visitors use the scoreboard

User Experience

The users are expected to be;

- Intermediate aged children
- Parents
- Teachers
- Darts Players

Scenarios

Intermediate aged children

Tim is an 11 year old boy who goes to Nelson Intermediate. He wants to learn how to play around the world but has no knowledge of the subject.

Tim loads the website. He reads the introduction then examines the equipment list to make sure that he has the required equipment. He then goes to the tutorials page. From there Tim clicks on the link for the first tutorial. Tim decides that he wants to record some notes for himself. He goes to the top of the screen and click register. From there he is prompted for his details. Once he is registered, he goes back to tutorial 1 and adds some notes at the bottom of the page. Tim then continues through the rest of the tutorials. Once Tim is finished he decides that he wants to use the scoreboard, so he navigates to that page and starts to play.

Parents

Susan is a 35 year old mum who lives in Timaru. She wants to see how her daughter is progressing through the tutorials. She also wants to make sure that the website is suitable for her daughter to be using. Her daughter's name is Kate.

Kate directs her mum to ATW website and logs in. Susan takes over but gets Kate to sit next to her so that she can explain some things to her. They go through all of the pages and look at the notes that Kate has written. Susan then goes to the scoreboard to see how interactive it is. Susan then logs out and says to Kate that she is happy for her to continue using the website.

Teachers

Grant is a 30 year old teacher. He teaches at in intermediate in Nelson called Broadgreen Intermediate. He has heard from an old school mate that there is this website that has popped up for learning how to play around the world. He is told that it is for intermediate aged children, has tutorials and an interactive bit as well. This piques his interest, so he decides to have a look for himself.

Grant loads the webpage and decides to create an account. After creating an account he reads the introduction and the equipment list that are on the home page. He then reads the small blurb about the tutorials and after being satisfied with these he click start. He is taken to a page that has several links to tutorials with a brief explanation of what each one entails. He decides to start from the beginning. He clicks start and is taken to the first tutorial which has pictures and easy to understand instructions. After this he breezes through the others but still checking the language that is used. On the last tutorial there is a button that takes him to the interactive scoreboard. He is pleasantly surprised that it is interactive and very easy to use. After flicking through the site again he logs out.

Grant then decides that he wishes to use this site with his class. So then he takes the link to his boss to discuss the suitability and is told that he will know the decision the following week. The following week Grant is called into his boss's office for a meeting where he is given the thumbs up for using the website.

Darts Players

June is a 45 year old professional darts player who lives in Wellington. She is already registered to the ATW website as she regularly uses the scoreboard when practicing for competitions. Today that is what she is going to do again.

June logs into the ATW website and heads straight to the scoreboard. She decides that she is going to play herself and grans two sets of darts so that she doesn't confuse herself. She starts playing and marks off the numbers as she hits them. Once she has finished she decides to play a few more rounds before logging out

For the competitive analysis please refer to Appendix A.

Content and Functions

The content inventory is all of the 'stuff' that is going to be on the website. This includes all web pages and what is going to be on them.

The content has been named and grouped as follows:

- Pages
 - Main Page
 - Tutorial Page
 - Tutorials

- Scoreboard Page
- Contact Page
- Information
 - Instructions
 - Equipment List
 - Headings
 - Images
- Interaction
 - Scoreboard
 - Buttons
 - Notes text boxes

For content inventory please refer to Appendix B.

Site Structure

“Life’s journey is a bicycle ride down the hill” The structure of the site is based on going through the tutorials so this metaphor seems to make sense.

The site structure listing is as follows:

Section 1	Welcome		
Section 2	Tutorials		

Section 2.1	Tutorial 1
Section 2.2	Tutorial 2
Section 2.3	Tutorial 3
Section 2.4	Tutorial 4

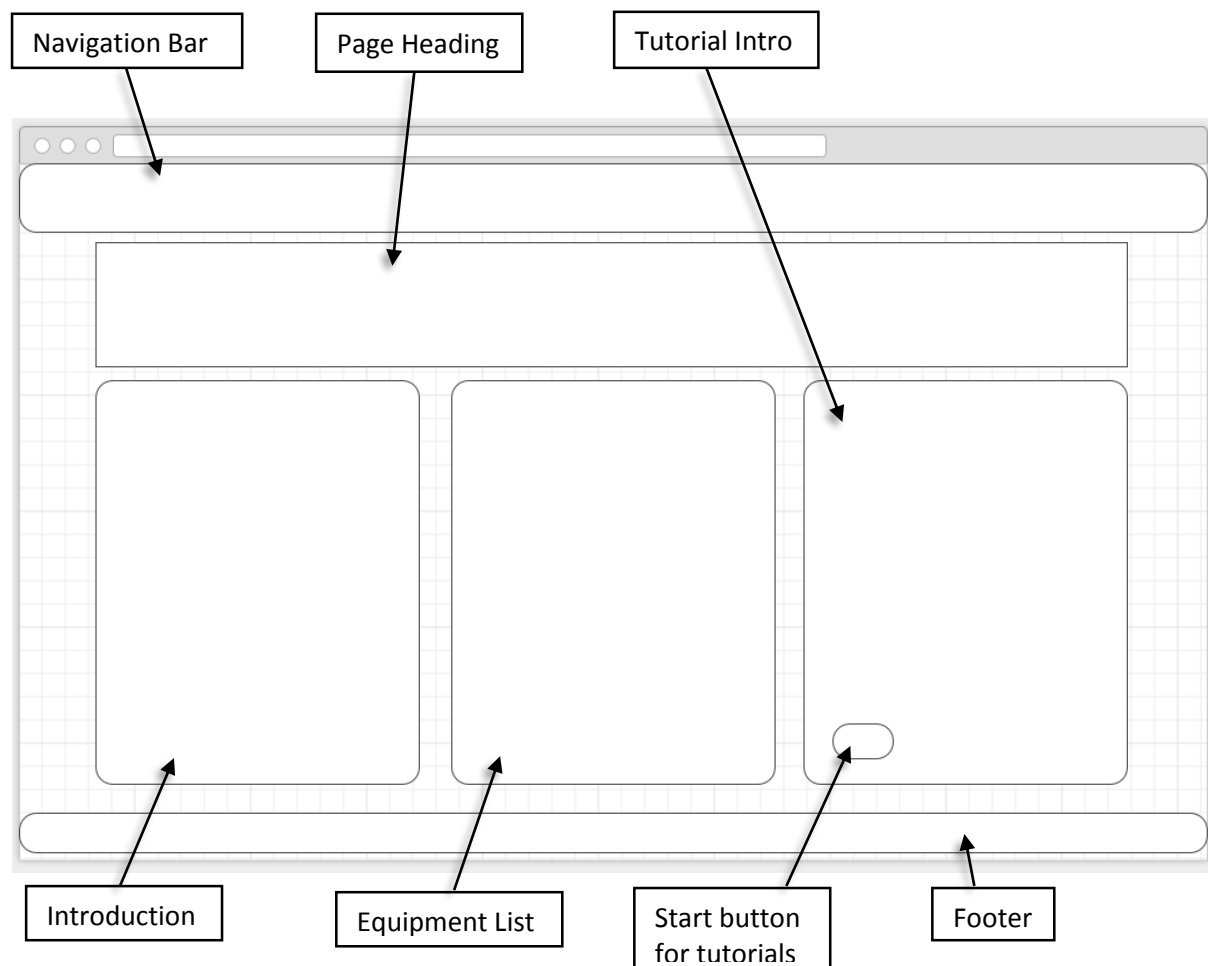
Section 3	Scoreboard
Section 4	Contact
Section 5	Register
Section 6	Login

The navigation will be a menu at the top of the page with a possible list underneath tutorial.

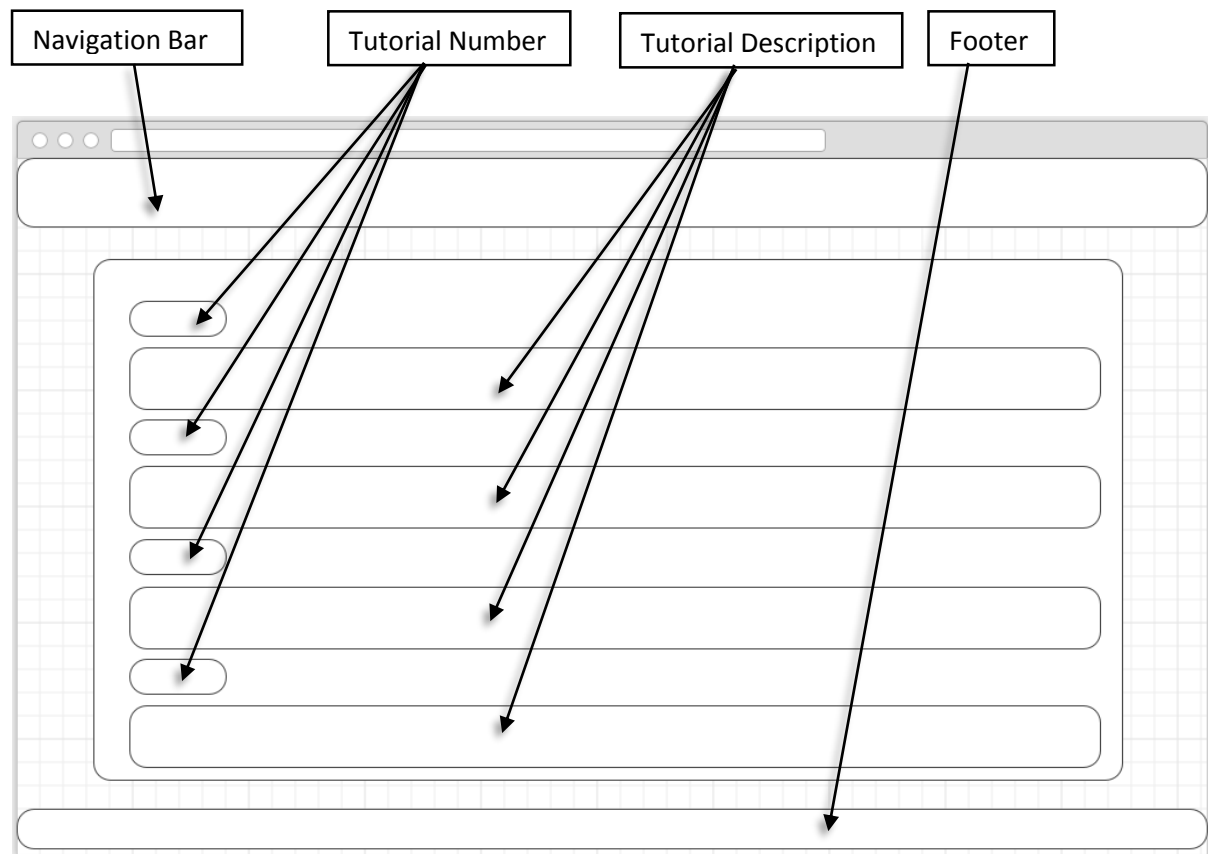
Visual Design

The layout sketches (wireframe layouts) are as follows:

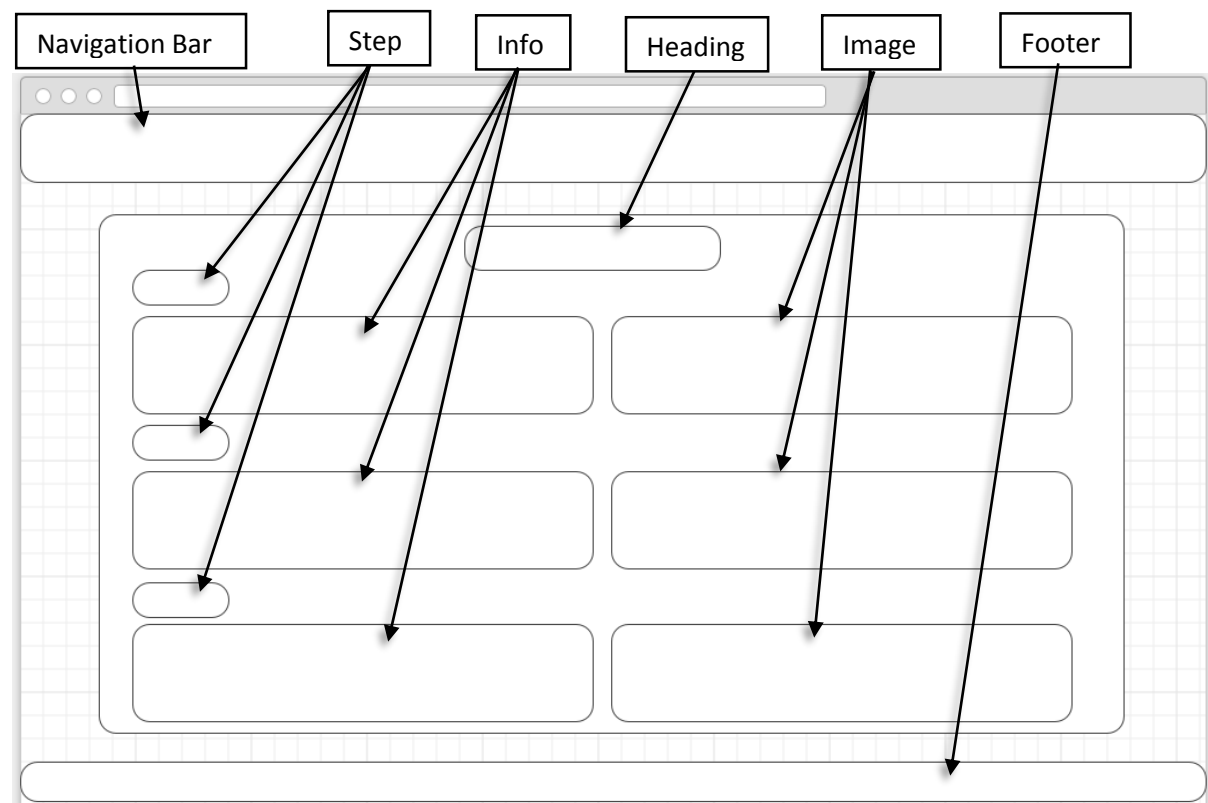
Welcome (Home Page)



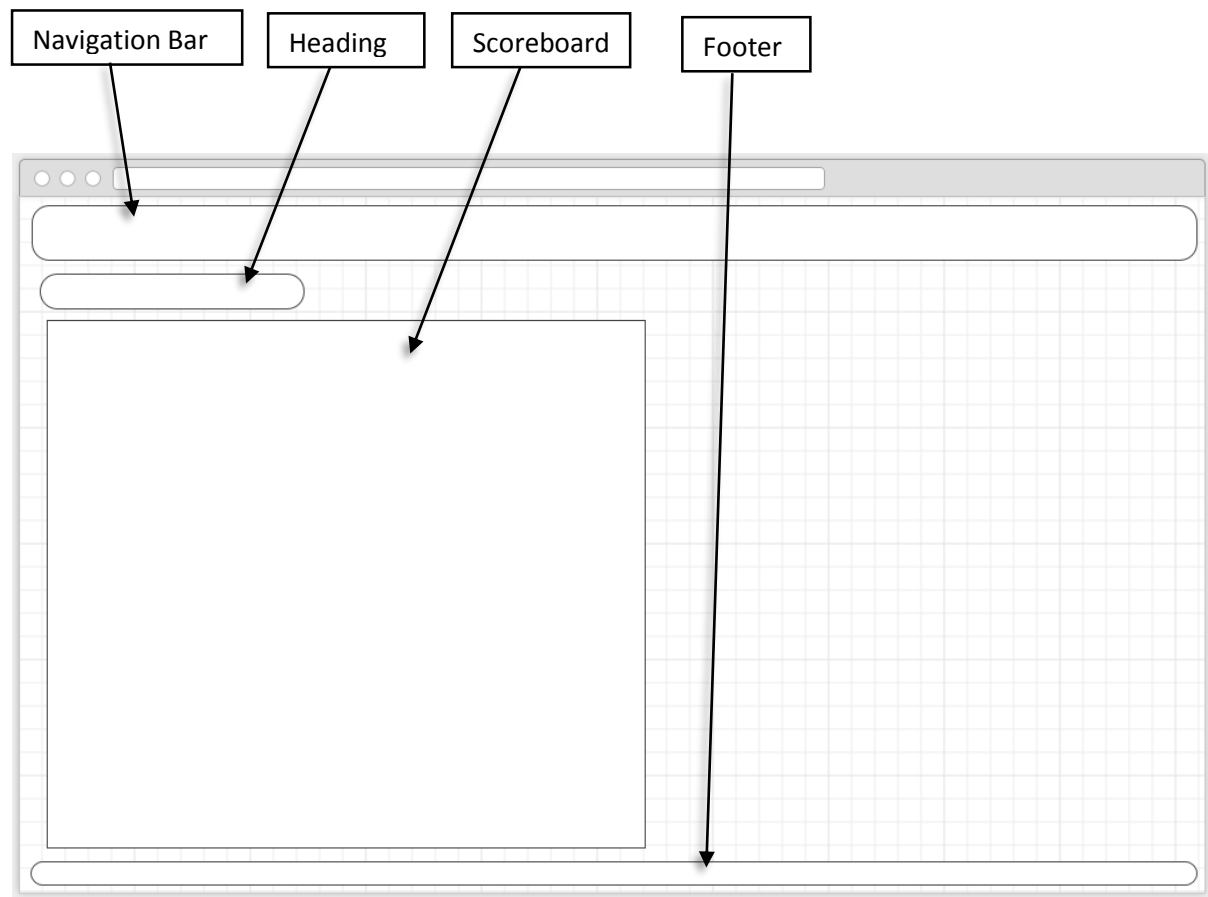
Tutorials



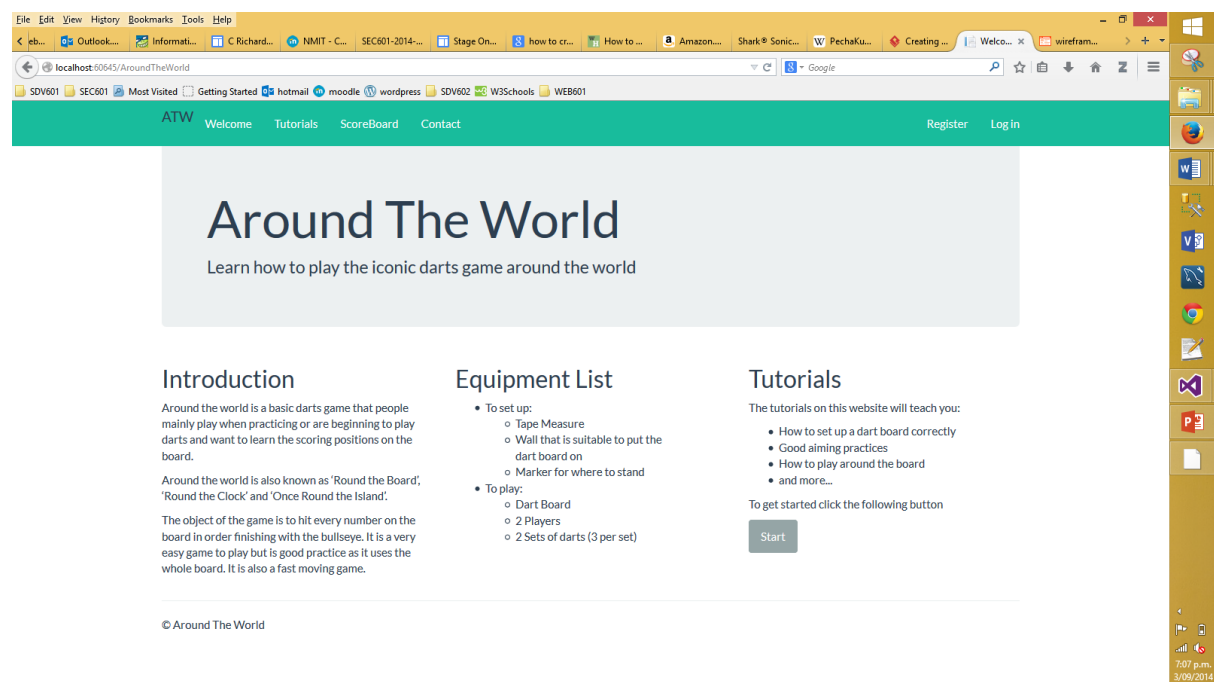
Tutorial page (e.g. tutorial 1)

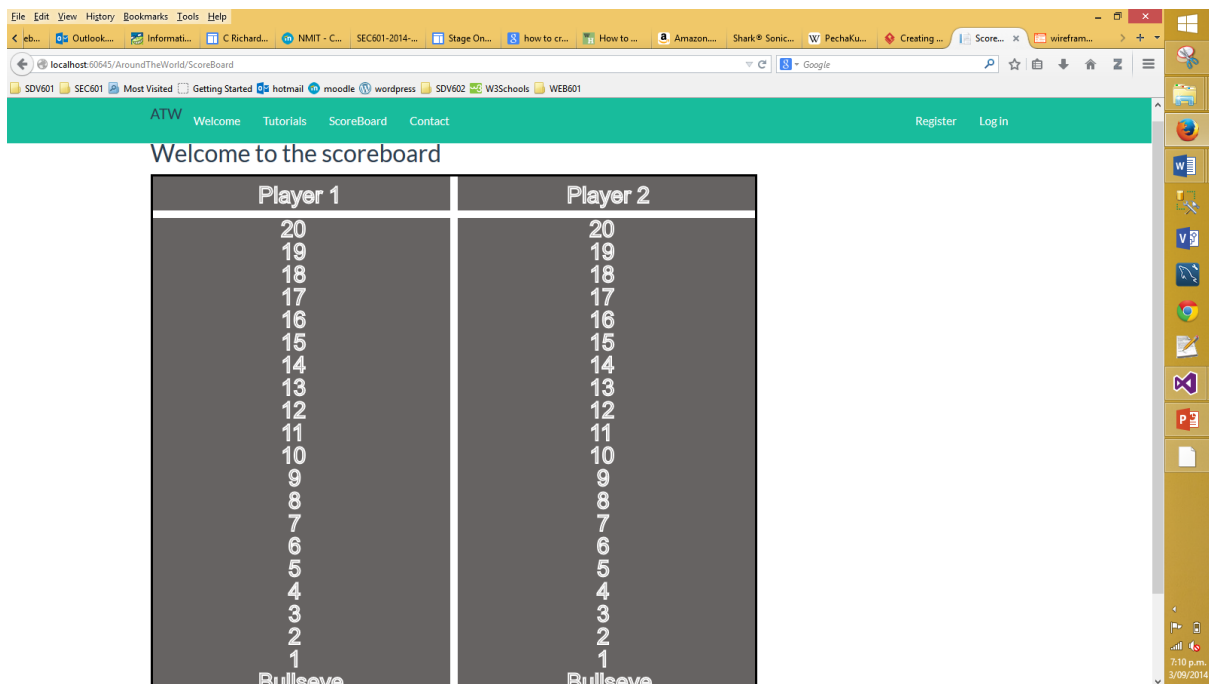
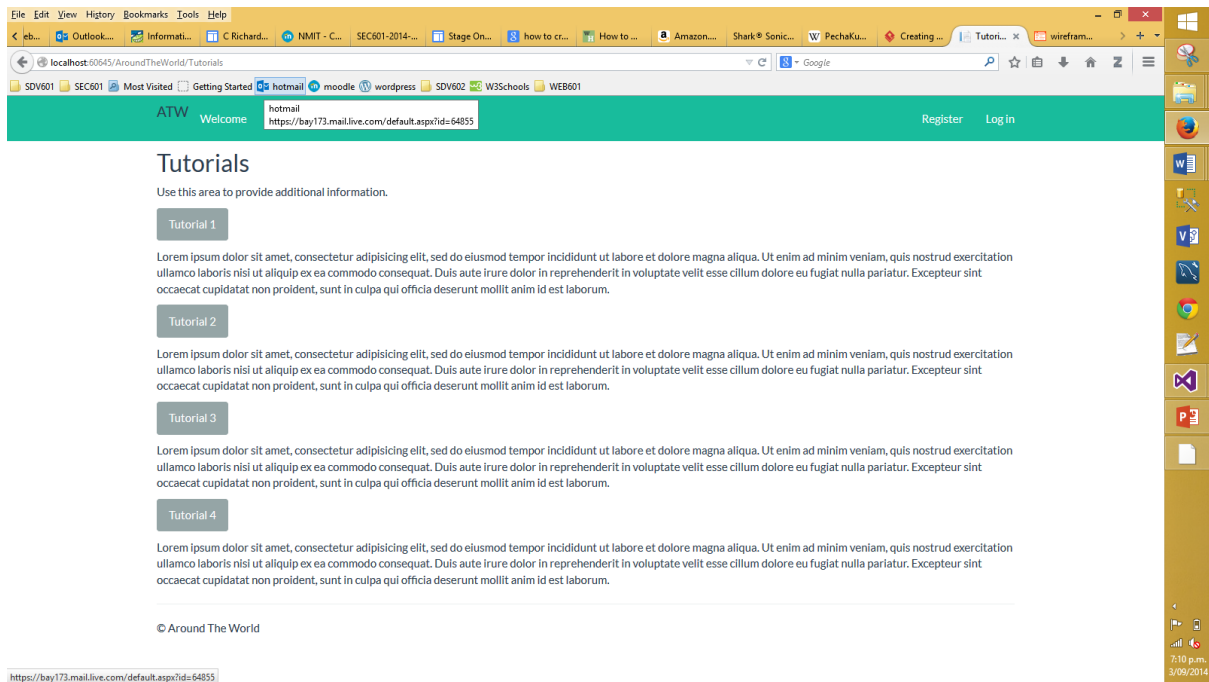


Scoreboard



The mock-ups are as follows:





Appendix A – Competitive Analysis

Site 1 = <http://www.mostdartgames.com/clock.html>

Site 2 = http://www.ehow.com/how_4525054_play-around-clock-dart-game.html

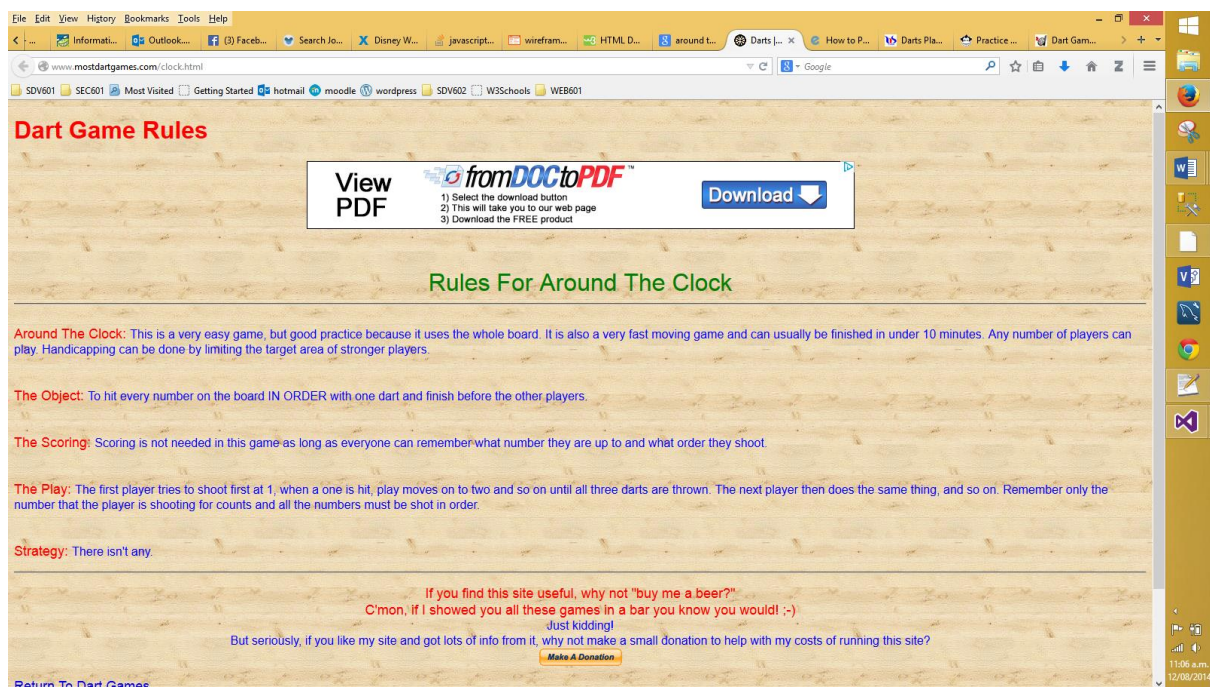
Site 3 = http://www.chinadart.com/darts_playing_rules_round_the_world.htm

Site 4 = <http://www.monkeysee.com/play/10143-practice-dart-games-counting-and-around-the-world>

Site 5 = <http://www.darting.com/Darts-Rules/Round-the-World/>

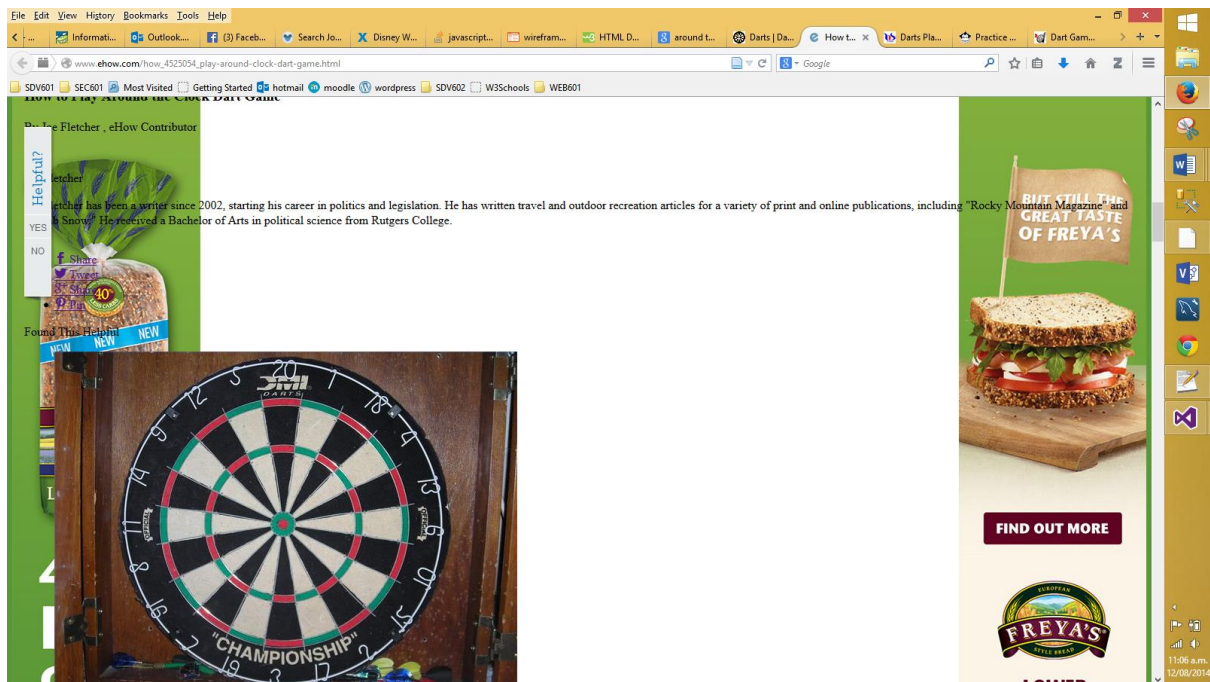
	Site 1	Site 2	Site 3	Site 4	Site 5
General Site Features					
Site design (1-10)	2	3	5	4	5
Easy navigation (1-10)	10	10	10	10	10
No of pages	1	1	1	1	2
Suitable layout (1-10)	1	1	5	4	5
Look and feel (1-10)	1	1	4	4	5
Personalization					
Personal start page					
Images		X			
Easy to understand language					X
Equipment List					X
Suitable for children					

Site 1



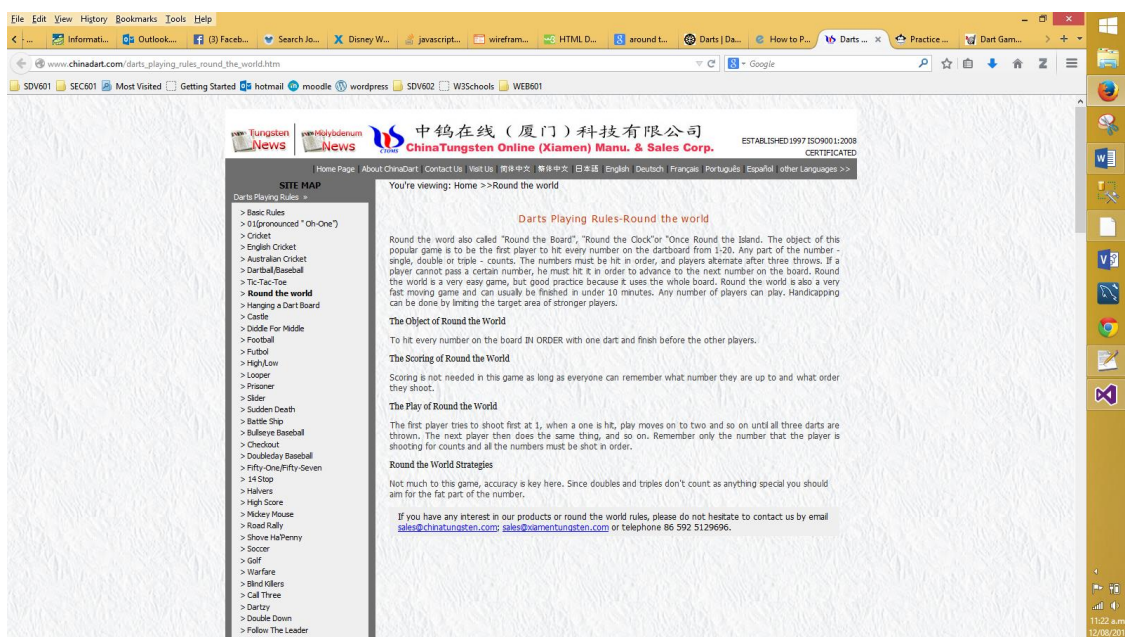
Pros	Cons
<ul style="list-style-type: none"> • Won't get lost (1 page) • Has headings • Good main heading • Simple-ish URI to remember 	<ul style="list-style-type: none"> • Not very informative • Confusing use of colour

Site 2



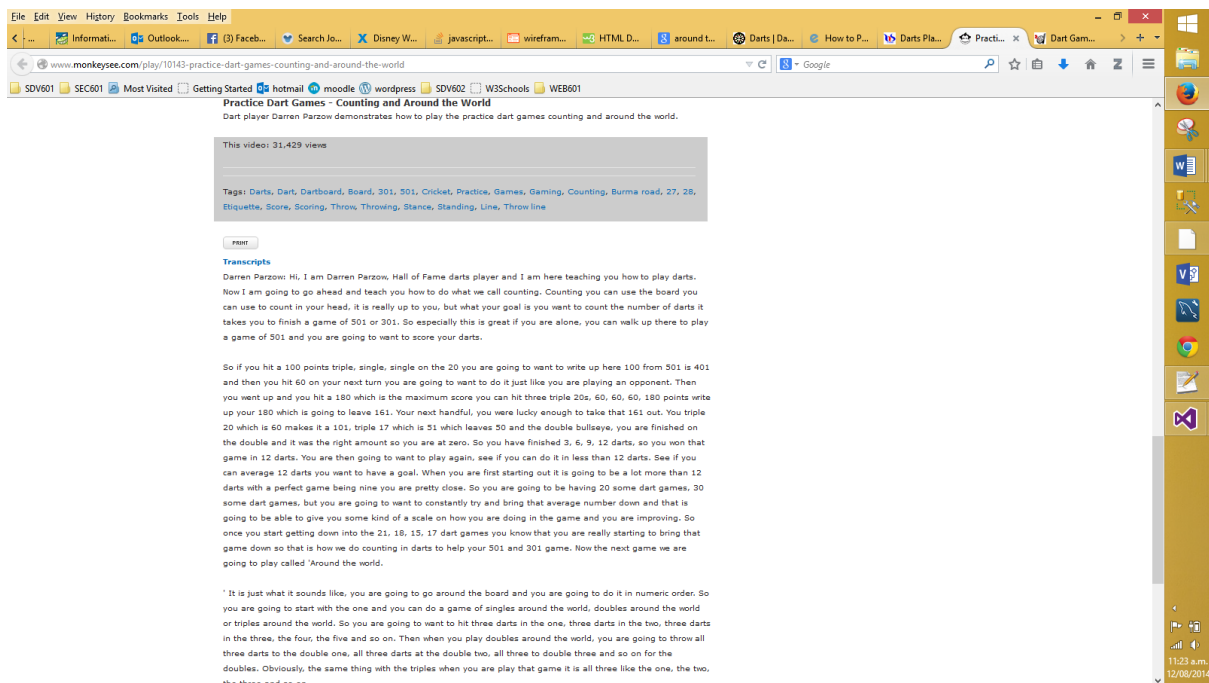
Pros	Cons
<ul style="list-style-type: none"> Won't get lost (1 page) 	<ul style="list-style-type: none"> Too much advertising Hard to read due to overlapping ads No explanation You don't realise where the instructions are Very confusing Hard URL to remember

Site 3



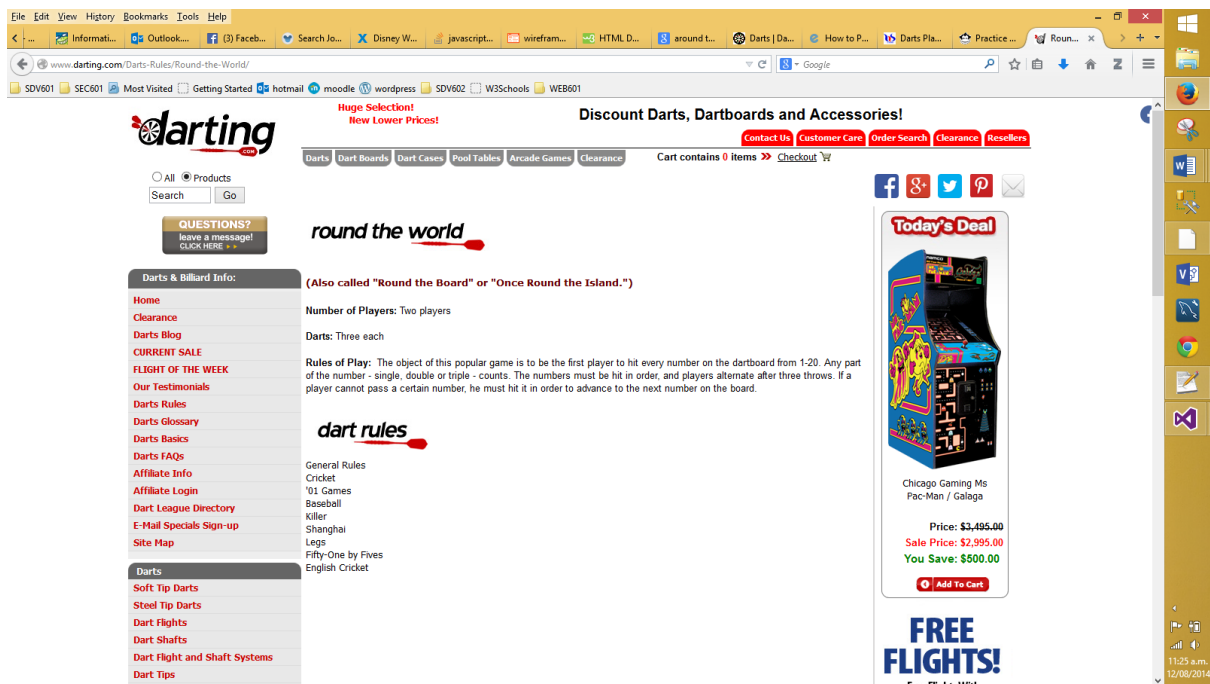
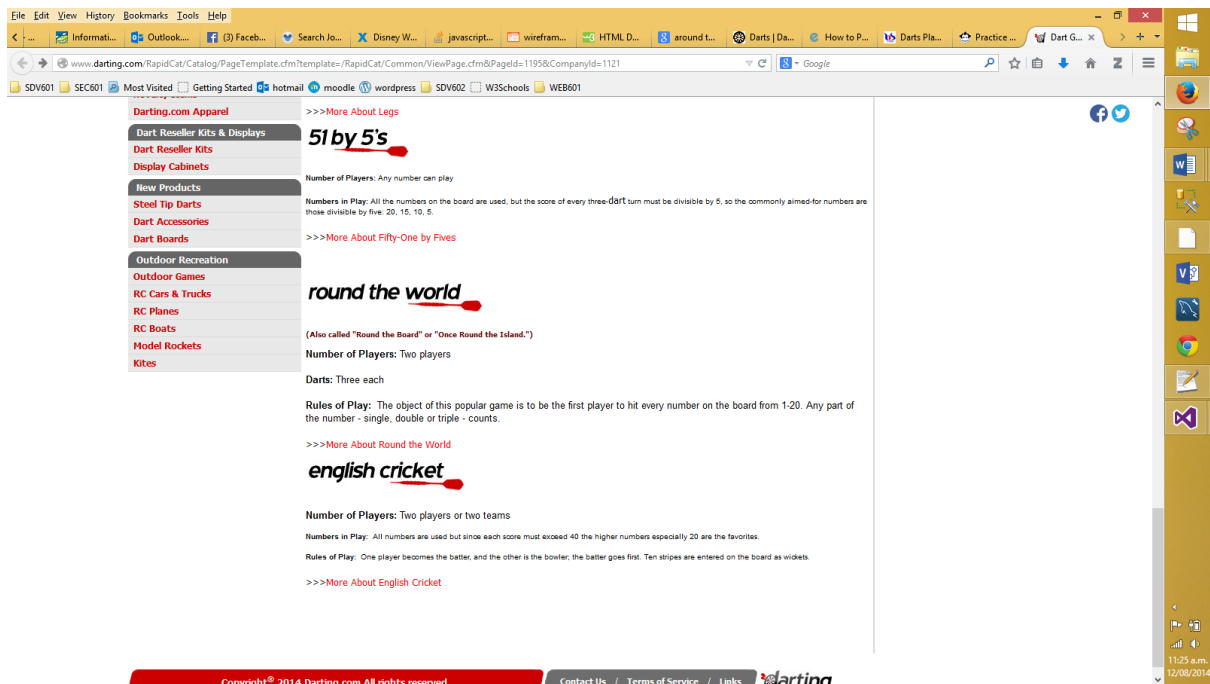
Pros	Cons
<ul style="list-style-type: none"> • Won't get lost (1 page) • Basic layout • Good headings • Has links to other games • Multiple language choices 	<ul style="list-style-type: none"> • Background makes the text a little hard to read • Not in a language suitable for children to understand • Hard URL to remember

Site 4



Pros	Cons
<ul style="list-style-type: none"> • Won't get lost (1 page) • Basic layout • Has links to other how to's 	<ul style="list-style-type: none"> • Have to scroll down before you find any information • Text is small and hard to read • No obvious headings • No obvious structure in text

Site 5



Pros	Cons
<ul style="list-style-type: none"> • Basic layout • Good use of white space • Has an equipment list • Easy to understand • Obvious headings • Includes rules for other games 	<ul style="list-style-type: none"> • Not much information • No images to aide user

Appendix B – Content Inventory

Content Elements	Functional Requirements
Main page	Register 4
Tutorial Page	Log in 5
Tutorials (<i>maybe 5 – unsure at the moment</i>)	Interactive scoreboard 2
Scoreboard Page	Navigation 1
Contact Page	Form for contact page 7
Notes on each page	Log out 6
Equipment List	Save notes 3
Instructions	
Headings	
Buttons	
Images	
scoreboard	

Coding

Around the world controller

```
public class AroundTheWorldController : Controller
{
    //
    // GET: /AroundTheWorld/
    public ActionResult Welcome()
    {
        ViewBag.Message = "Welcome";
        return View();
    }

    // GET: /AroundTheWorld/Tutorials/
    public ActionResult Tutorials()
    {
        ViewBag.Message = "Beginning of tutorials";
        return View();
    }

    // GET: /AroundTheWorld/ScoreBoard/
    public ActionResult ScoreBoard()
    {
        ViewBag.Message = "ScoreBoard";
        return View();
    }

    //
    // GET: /AroundTheWorld//Tutorials/Tutorial1/
    public ActionResult Tutorial1()
    {
        ViewBag.Message = "Tutorial1";
        return View();
    }

    // GET: /AroundTheWorld//Tutorials/Tutorial2/
    public ActionResult Tutorial2()
    {
        ViewBag.Message = "Tutorial2";
        return View();
    }
}
```

There are five methods that display a title and return a view

Welcome View

```
@* This creates the big box at the top of the page that is below the navigation *@
<div class="jumbotron">
    <h1>Around The World</h1>
    <p>Learn how to play the iconic darts game around the world</p>
</div>
```

As stated in the comment the code creates the box at the top of the page. There is a heading and a paragraph.


```

@* This creates the row *@
<div class="row">
  @* This is the first column *@
  <div class="col-md-4">
    <h2>Introduction</h2>
    <p>
      Around the world is a basic darts game that people mainly play when practicing or are beginning to play darts
      and want to learn the scoring positions on the board.
    </p>
    <p>
      Around the world is also known as 'Round the Board', 'Round the Clock' and 'Once Round the Island'.
    </p>
    <p>
      The object of the game is to hit every number on the board in order finishing with the bullseye. It is a very
      easy game to play but is good practice as it uses the whole board. It is also a fast moving game.
    </p>
  </div>

```

As stated in the comment the code creates a row on the page. Inside that row is the first column on the page. There is a heading and three paragraphs.

```

@* This is the second column *@
<div class="col-md-4">
  <h2>Equipment List</h2>
  <ul>
    <li>To set up:</li>
    <ul>
      <li>Tape Measure</li>
      <li>Wall that is suitable to put the <br>
        dart board on</li>
      <li>Marker for where to stand</li>
    </ul>
    <li>To play:</li>
    <ul>
      <li>Dart Board</li>
      <li>2 Players</li>
      <li>2 Sets of darts (3 per set)</li>
    </ul>
  </ul>
</div>

```

Also inside that row is the second column on the page. There is a heading and two unordered lists.

```

@* This is the third column *@
<div class="col-md-4">
  <h2>Tutorials</h2>
  <p>
    The tutorials on this website will teach you:
    <ul>
      <li>How to set up a dart board correctly</li>
      <li>Good aiming practices</li>
      <li>How to play around the board</li>
      <li>and more...</li>
    </ul>

    To get started click the following button
  </p>
  <p><a class="btn btn-default" href="http://localhost:60645/AroundTheWorld/Tutorials">Start</a></p>
</div>

```

Also inside that row is the third column on the page. There is a heading and two paragraphs. Inside the first paragraph is an unordered list. Inside the second paragraph is a button.

Tutorials View

```
<h2>@ViewBag.Title</h2>
|
|
|<p>Use this area to provide additional information.</p>

|<p><a class="btn btn-default" href="http://localhost:60645/AroundTheWorld/Tutorial1">Tutorial 1</a></p>
|<p>
|  Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim
|  ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit
|  in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia
|  deserunt mollit anim id est laborum.
|</p>
|<p><a class="btn btn-default" href="http://localhost:60645/AroundTheWorld/Tutorial2">Tutorial 2</a></p>
|<p>
|  Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim
|  ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit
|  in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia
|  deserunt mollit anim id est laborum.
|</p>
|<p><a class="btn btn-default" href="http://go.microsoft.com/fwlink/?LinkId=301865">Tutorial 3</a></p>
|<p>
|  Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim
|  ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit
|  in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia
|  deserunt mollit anim id est laborum.
|</p>
|<p><a class="btn btn-default" href="http://go.microsoft.com/fwlink/?LinkId=301865">Tutorial 4</a></p>
|<p>
|  Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim
|  ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit
|  in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia
|  deserunt mollit anim id est laborum.
|</p>
```

There are nine paragraphs. Inside four of them are buttons.

Scoreboard View

```
<h2>Welcome to the scoreboard</h2>

@**@

<canvas id="ScoreBoardCanvas" width="800" height="700" style="border:3px solid #000000;">
</canvas>

] <script>
    var canvas = document.getElementById('ScoreBoardCanvas');
    var ctx = canvas.getContext('2d');
    @*var width = "800";
    var height = "600";
    var imageObj = new Image();

    imageObj.onload = function () {
        ctx.drawImage(imageObj, 0, 0, width, height);
    };
    imageObj.src = "@Url.Content("~/Content/index.jpg")";*@

    // Background
    ctx.fillStyle = "#666362";
    ctx.fillRect(0, 0, 800, 700);

    // centre lines
    ctx.beginPath();
    ctx.strokeStyle = "#FFFFFF";
    ctx.lineWidth="10";
    ctx.moveTo(0, 50);
    ctx.lineTo(800, 50);
    ctx.moveTo(400, 0);
    ctx.lineTo(400, 800);
    ctx.stroke();
```

There is a heading and a canvas. There was an image but it would not let me draw lines on top of it so as you can see I created a background. Then there is the code for the centre lines.

```
// Player 1 and 2
ctx.lineWidth = "2";
ctx.font = "30px Arial";
ctx.strokeText("Player 1", 140, 35);
ctx.strokeText("Player 2", 550, 35);
```

This code writes the words player 1 and player 2

```
// Numbers
ctx.strokeText("20", 170, 80);
ctx.strokeText("20", 580, 80);
ctx.strokeText("19", 170, 110);
ctx.strokeText("19", 580, 110);
ctx.strokeText("18", 170, 140);
ctx.strokeText("18", 580, 140);
ctx.strokeText("17", 170, 170);
ctx.strokeText("17", 580, 170);
ctx.strokeText("16", 170, 200);
ctx.strokeText("16", 580, 200);
ctx.strokeText("15", 170, 230);
ctx.strokeText("15", 580, 230);
ctx.strokeText("14", 170, 260);
ctx.strokeText("14", 580, 260);
ctx.strokeText("13", 170, 290);
ctx.strokeText("13", 580, 290);
ctx.strokeText("12", 170, 320);
ctx.strokeText("12", 580, 320);
ctx.strokeText("11", 170, 350);
ctx.strokeText("11", 580, 350);
ctx.strokeText("10", 170, 380);
ctx.strokeText("10", 580, 380);
ctx.strokeText("9", 180, 410);
ctx.strokeText("9", 590, 410);
ctx.strokeText("8", 180, 440);
ctx.strokeText("8", 590, 440);
ctx.strokeText("7", 180, 470);
ctx.strokeText("7", 590, 470);
ctx.strokeText("6", 180, 500);
ctx.strokeText("6", 590, 500);
ctx.strokeText("5", 180, 530);
ctx.strokeText("5", 590, 530);
ctx.strokeText("4", 180, 560);
ctx.strokeText("4", 590, 560);
ctx.strokeText("3", 180, 590);
ctx.strokeText("3", 590, 590);
ctx.strokeText("2", 180, 620);
ctx.strokeText("2", 590, 620);
ctx.strokeText("1", 180, 650);
ctx.strokeText("1", 590, 650);
ctx.strokeText("Bullseye", 140, 680);
ctx.strokeText("Bullseye", 550, 680);
```

This code write all of the numbers in both columns.

Stakeholders Feedback

This is the feedback that I received from potential stakeholders on the views that I had created.

1. Stakeholder A
 - Looks good
 - Navigation is easy to use
 - Scoreboard is a great idea
2. Stakeholder B
 - Looks good
 - Would be happy for my child to use it
 - Functionality of scoreboard sounds good
 - If I can use it, an intermediate-aged child can
3. Stakeholder C
 - Looks alright
 - Good navigation
 - Looks simple and easy to use
 - Looks like content will be alright

Conclusion

I have started learning how to code using the MVC structure. It is a very different approach but after doing a little bit of coding I have discovered that it isn't too bad. With the information architecture I have found the metaphor exploration the hardest part. In my coding there are a few 'things' that have 'DISABLED' next to them as they will be implemented at a later stage.

Milestone Two

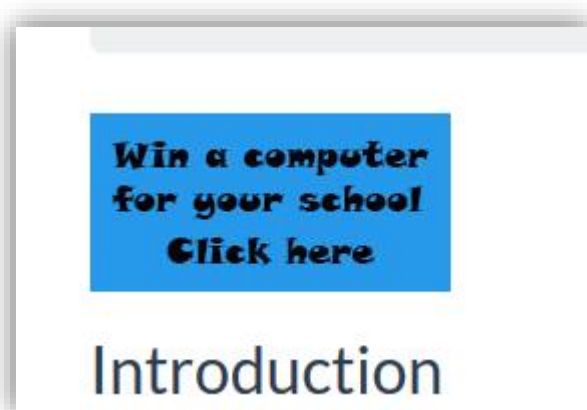
Introduction

Around the world is a darts game that is mainly used for practice and aiming purposes, but can be a fun game if played with another person. This is what my website is about. The purpose of this report is to show my understanding of the processes that I have undertaken in creating this website. As the project is indicative this is the second step of my work. This has been requested by Todd Cochrane and is due on Friday 24th October at 9am.

Computer Competition

Access

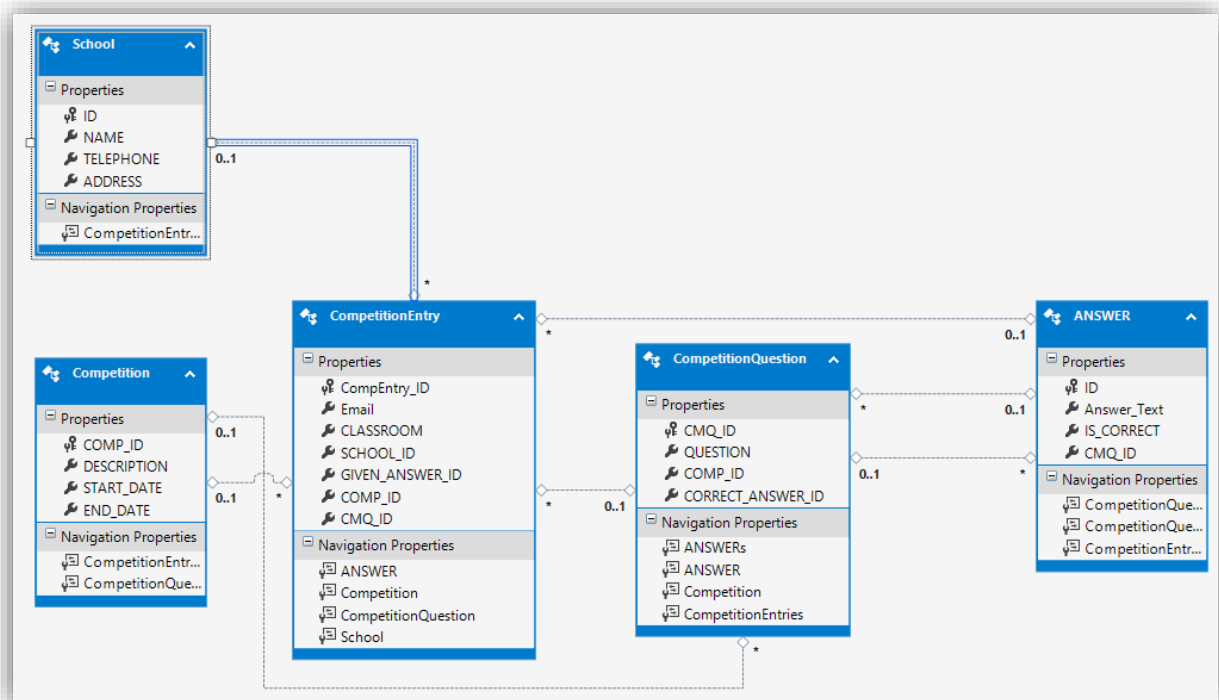
To access the competition page, we were set the task of creating some sort of graphic to act as a link to the page. My first step was to create the graphic. I made it very simple and created it in Paint. Below is a screenshot of the image that I made. As you can see I am not a 'graphics' designer.



Database

Next I needed to create a database for the competition using SQL Server. The database is called COMPETITION. I ended up using the one that Todd provided the class. I did have one that was working but my setup was a bit more complicated and his one seemed to be a bit easier to use for this project.

In Visual Studio I had to set up a data connection with the database and called it COMPETITIONEntities. I then had to create a model to be able to use the database. I just left it with its default name Model1. This is what was automatically created:



ViewModel

The next step was to create a new model that would use Model1 with any appropriate views. The code in ViewModel was again supplied by Todd. I had my own code but seeing as I decided to use his database it seemed appropriate to use his code and just make suitable changes.

```

1  using System;
2  using System.Collections.Generic;
3  using System.Linq;
4  using System.Web;
5  using System.ComponentModel.DataAnnotations;
6
7  namespace MvcAroundTheWorld.Models
8  {
9      public class ViewModel
10     {
11         public COMPETITIONEntities db = new COMPETITIONEntities();
12
13         public void SaveEntry()
14         {
15             CompetitionEntry.CMQ_ID = CompetitionQuestion.CMQ_ID;
16             CompetitionEntry.COMP_ID = COMP_ID;
17             CompetitionEntry.GIVEN_ANSWER_ID = SelectedAnswer;
18             db.CompetitionEntries.Add(CompetitionEntry);
19             db.SaveChanges();
20         }
21
22         public List<string> GetSuggestion( string pStrSuggestion)
23         {
24             List<string> result = new List<string>();
25             var suggestedNames = db.GetSuggestion(pStrSuggestion);
26             foreach (var a in suggestedNames)
27             {
28                 result.Add(a);
29             }
30             return result;
31         }
32     }

```

This void matches the contents of the page to database and saves it.

This list contains and adds suggestions for the page.

```

33 public ViewModel()
34 {
35     var result = db.GetQuestion().First();
36     CompetitionQuestion = new CompetitionQuestion();
37     CompetitionQuestion.CMQ_ID = result.CMQ_ID;
38     CompetitionQuestion.QUESTION = result.QUESTION;
39     COMP_ID = result.COMP_ID;
40     var resultAnswers = db.GetAnswers(result.CMQ_ID).ToList();
41
42     //ANSWERS
43     Answers = new List<ANSWER>();
44     foreach (GetAnswers_Result a in resultAnswers)
45     {
46         ANSWER Ans = new ANSWER();
47         Ans.CMQ_ID = result.CMQ_ID;
48         Ans.Answer_Text = a.Answer_Text;
49         Ans.IS_CORRECT = a.IS_CORRECT;
50         Ans.ID = a.ID;
51
52         Answers.Add(Ans);
53     }
54 }
55
56 public ANSWER Answer { get; set; }
57 public Competition Competition { get; set; }
58 public CompetitionQuestion CompetitionQuestion { get; set; }
59 public CompetitionEntry CompetitionEntry { get; set; }
60 public School School { get; set; }
61
62 public Int32 SelectedAnswer { get; set; }
63 public Int32 COMP_ID { get; set; }
64 public virtual List<ANSWER> Answers { get; set; }
65 }
66

```

This create a variable called result and gets the first question from the database. It then matches the details to result.

Here it is creating a new list called Answers. It then starts a loop. Inside that loop it goes and does the matching. Then it adds the answer.

Here is the getting and setting of the variables

Competition Entry Page

The next step was to create an index page for the competition. It had to contain four text fields, a question and three answers with radio buttons. To do this I had to create a new view. It is named Index inside a folder called ViewModel.

Index

Win a computer

1. School Name
2. Classroom
3. Email
4. School Telephone
5. School Address
6. QUESTION

The object of the game is to:

- ☐ Hit every number on the board including the bullseye
- ☐ Hit every number on the board excluding the bullseye
- ☐ Hit the bullseye

```

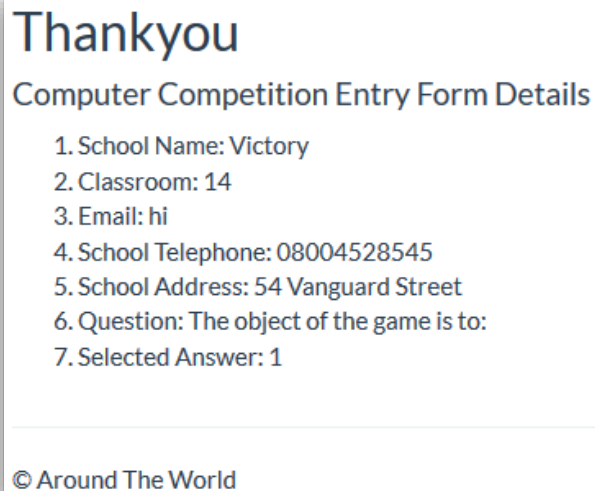
1  @{
2      Layout = "~/Views/Shared/_Layout.cshtml";
3  }
4
5  @{
6      ViewBag.Title = "Index";
7  }
8  @model MvcAroundTheWorld.Models.ViewModel
9
10 <h2>Index</h2>
11 <div>
12
13     @using (Html.BeginForm("SaveAction", "ViewModel"))
14     {
15         <div>
16             <h4>Win a computer</h4>
17             <fieldset>
18                 <ol>
19                     <li>
20                         <label for="CompetitionEntry_School_NAME"> School Name</label> @*Creates custom label for textbox*@
21                         @Html.TextBoxFor(m => m.CompetitionEntry.School.NAME) @*Creates a textbox*@
22                         <script src="/Scripts/schoolnamecompletion.js"></script>
23                         @Html.ValidationMessageFor(m => m.CompetitionEntry.School.NAME)
24                     </li>
25                     <li>
26                         <label for="CompetitionEntry_CLASSROOM">Classroom</label>
27                         @Html.TextBoxFor(m => m.CompetitionEntry.CLASSROOM)
28                         @Html.ValidationMessageFor(m => m.CompetitionEntry.CLASSROOM)
29                     </li>
30                     <li>
31                         @Html.LabelFor(m => m.CompetitionEntry.Email) @*Creates label for textbox from database*@
32                         @Html.TextBoxFor(m => m.CompetitionEntry.Email)
33                         @Html.ValidationMessageFor(m => m.CompetitionEntry.Email)
34                     </li>
35                     <li>
36                         <label for="CompetitionEntry_School_TELEPHONE"> School Telephone</label>
37                         @Html.TextBoxFor(m => m.CompetitionEntry.School.TELEPHONE)
38                         @Html.ValidationMessageFor(m => m.CompetitionEntry.School.TELEPHONE)
39                     </li>
40
41                     <li>
42                         <label for="CompetitionEntry_School_ADDRESS">School Address</label>
43                         @Html.TextBoxFor(m => m.CompetitionEntry.School.ADDRESS)
44                         @Html.ValidationMessageFor(m => m.CompetitionEntry.School.ADDRESS)
45                     </li>
46                     <li>
47                         @Html.LabelFor(m => m.CompetitionEntry.CompetitionQuestion.QUESTION) <br>
48                         @Html.DisplayFor(m => m.CompetitionQuestion.QUESTION) @*Displays Question from database*@
49                         <ul>
50                             @foreach (var item in Model.Answers)
51                                 //Selects the answers that match the question from the database
52                             {
53                                 <li>
54                                     @Html.DisplayFor(modelItem => item.Answer_Text) @*Displays tthe answer*@
55                                     @Html.RadioButtonFor(model => model.SelectedAnswer, item.ID, true) @*A radio button for the answer*@
56                                 </li>
57                             }
58                         </ul>
59                     </li>
60                 </ol>
61             </fieldset>
62             <input class="btn" type="submit" value="Send" />
63         </div>
64     }
65 </div>

```

The begin form is creating the form on the page. Each list item is a 'field' on the form.

Thank You Page

Next to be created was a thank you page. This page was required to display what was entered on the previous page.



```
1  @{
2      Layout = "~/Views/Shared/_Layout.cshtml";
3  }
4
5  @{
6      ViewBag.Title = "Thankyou";
7  }
8  @model MvcAroundTheWorld.Models.ViewModel
9
10 <h2>Thankyou</h2>
11
12 @using (Html.BeginForm("Index", "Home"))
13 {
14     <div>
15         <h4>Computer Competition Entry Form Details</h4>
16         <fieldset>
17             <ol>
18                 <li>
19                     School Name:
20                     @Html.DisplayFor(m => m.CompetitionEntry.School.NAME)
21                 </li>
22                 <li>
23                     Classroom:
24                     @Html.DisplayFor(m => m.CompetitionEntry.CLASSROOM)
25                 </li>
26                 <li>
27                     Email:
28                     @Html.DisplayFor(m => m.CompetitionEntry.Email)
29                 </li>
30                 <li>
31                     School Telephone:
32                     @Html.DisplayFor(m => m.CompetitionEntry.School.TELEPHONE)
33                 </li>
34                 <li>
35                     School Address:
36                     @Html.DisplayFor(m => m.CompetitionEntry.School.ADDRESS)
37                 </li>
38                 <li>
39                     Question:
40                     @Html.DisplayFor(m => m.CompetitionQuestion.QUESTION)
41                 </li>
42                 <li>
43                     Selected Answer:
44                     @Html.DisplayFor(model => model.SelectedAnswer)
45                 </li>
46             </ol>
47         </fieldset>
48     </div>
49 }
```

Each list item has text as a 'heading'. It is then displaying the details that were entered on the previous page by calling it from the database.

ViewModel Controller

A controller had to be created to handle the distribution of the Index view for the competition.

```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Web;
5 using System.Web.Mvc;
6 using MvcAroundTheWorld.Models;
7
8 namespace MvcAroundTheWorld.Controllers
9 {
10     public class ViewModelController : Controller
11     {
12         //
13         // GET: /ViewModel/
14         public ActionResult Index() // Competition Form
15         {
16             var model = new ViewModel();
17             return View(model);
18         }
19
20         //POST: /ViewModel/
21         [HttpPost]
22         public ActionResult SaveAction(ViewModel model) // Saves the Entry
23         {
24             model.SaveEntry();
25             return View("Thankyou", model);
26         }
27
28         public JsonResult AutocompleteSuggestions(string searchString)
29         {
30             var model = new ViewModel();
31             var suggestions = model.GetSuggestion(searchString);
32             return Json(suggestions, JsonRequestBehavior.AllowGet);
33         }
34     }
35 }
```

It also contains the SaveAction that returns the thank you view. Then there is the AutocompleteSuggestions that uses Json to return The GetSuggestion list that was created in ViewModel.

Contact

For the contact page I just added details for contacting the 'owner' of the website. There are three headings and three address tags that contain the appropriate details.

```

1  @{
2      Layout = "~/Views/Shared/_Layout.cshtml"
3  }
4
5  @{
6      ViewBag.Title = "Contact";
7  }
8
9  <h2>@ViewBag.Title.</h2> @*Page heading*@
10 <br />
11
12 <h4>Postal Address:</h4> @*heading*@
13 <address>
14     Private Bag 19<br />
15     Nelson, 7042<br />
16     New Zealand<br />
17 </address>
18
19 <h4>Phone Number:</h4> @*heading*@
20 <address>
21     <abbr title="Phone">P:</abbr>
22     0800 422 733
23 </address>
24
25 <h4>Email Address</h4> @*heading*@
26 <address>
27     <p>bubblegumbecky@hotmail.com</p>
28 </address>

```

Register and Login

I edited register and login so that they work again.



Content

At this point in time all of my content is completed. The only thing that currently needs adjusting is the scoreboard. If I have time I will try to make it interactive. My thoughts on doing that are by possibly adding click event listeners that will just draw a line on a number when it is clicked.

Conclusion

Due to being ill for most of this section I am very pleased with how much progress that I have made with my website.

Milestone Three

Introduction

Around the world is a darts game that is mainly used for practice and aiming purposes, but can be a fun game if played with another person. This is what my website is about. The purpose of this report is to show my understanding of the processes that I have undertaken in creating this website. As the project is indicative this is the third and final step of my work. This has been requested by Todd Cochrane and is due on Friday 21st November at 9am.

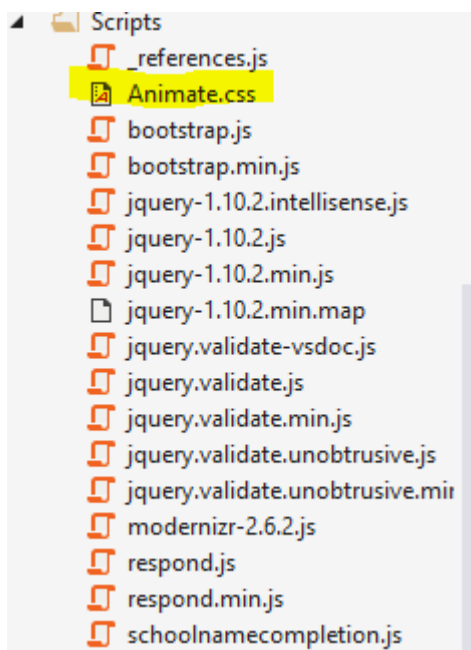
Findings

Part One

Part one of milestone three was to create an animation of some sort that moves from one side of the screen to the other. That animation is to hold the link to the competition form.

I decided that I would keep the same graphic that I currently had as the link for the form. I then decided that I would just animate that graphic across the page.

After a lot of attempts and research I found a file called Animate.css that will let me do some animation. I copied the file and added it under Scripts.



I then linked that script in my welcome page

```
@Scripts.Render("~/Scripts/Animate.css")
```

I then called one of the functions in that script in my image tag

```

<div id="complink" >
<a href="@Url.Action("Index", "ViewModel")">
    @*Sends the link to the competition page*@
     @*Image for link*@
</a>
</div>

```

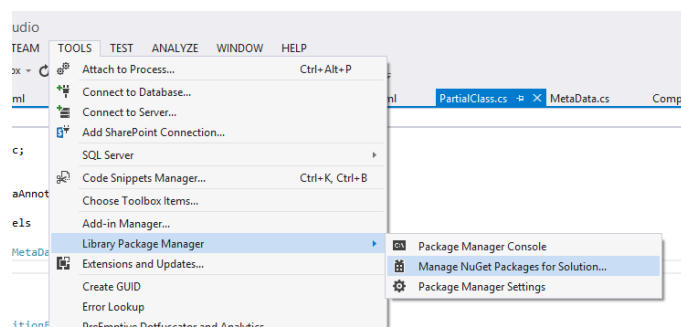
I called it so that when the image loaded it would bounce onto the page from the left hand side of the screen.

From all the research I did and the different attempts that I made, this should have worked. Though this was not the case. I have gotten to the point where my focus is needed elsewhere so I have left this in my code to prove that I have attempted it.

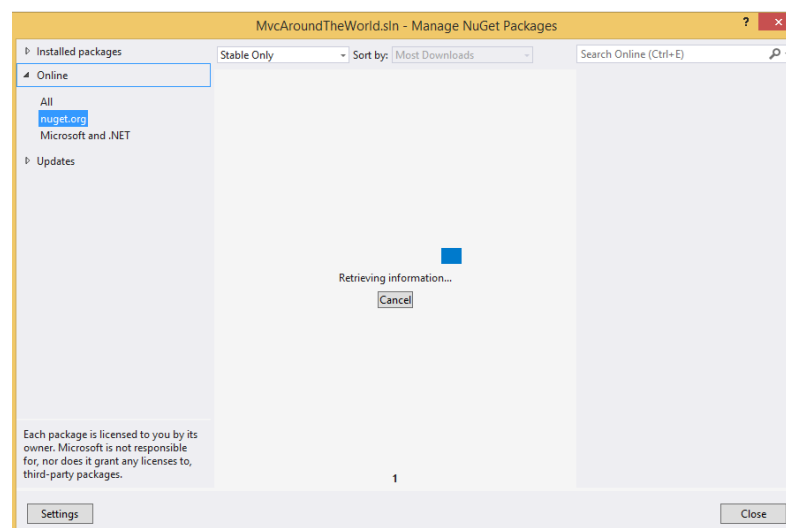
Completed Attempt

Originally I had been using a JQuery script but it didn't work. That was why I opted to using the Animate.css script. After having a chat with a classmate I realised why it didn't originally work. I had the wrong version of the file.

To update the script I went to Tools → Library Package Manager → Manage NuGet Packages for Solution...



From there I went to Online → nuget.org → Install



This updated my jQuery files.

Welcome.cshtml

The first thing I did was add a positioning style to my div that surrounds the image

```
<div id="complink" style="position:relative;" >
<a href="@Url.Action("Index", "ViewModel")">
    @*Sends the link to the competition page*@
     @*Image for link*@
</a>
```

Next I added the source of the script that will be used

```
<script src="/scripts/jquery-2.1.1.js" type="text/javascript"></script>
```

Then I added a script tag that contains what I want to happen

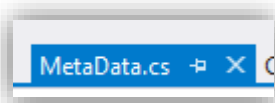
```
<script type="text/javascript">
    $(document).ready(function () {
        $("#complink").animate({left: '84%'}, {duration: (8000)});
    });
</script>
```

The type is stating that the script is JavaScript. Inside the tags it first states that the following function will happen when the document is loaded. The function states that it will animate the object with the id of complink. The animation states that it will go left with a duration of 8 seconds.

Part Two

Part two of milestone three was to implement client-side validation of the data that is collected from the competition form. The data needed to be validated before it was submitted to the server-side scripts. The fields that needed to be validated were classroom name, student email, school name and school telephone number. I also created a regular expression for school address.

The file that I created for this validation is a cs file called MetaData.cs



Classroom Name

The requirements for validation are as follows:

- Four letter text field
- Two capital letters followed by two digits
- Use regular expressions
- Provide examples

First I created a public class called CompetitionEntryMetaData

```
public class CompetitionEntryMetaData
```

Inside that class I created the regular expression

```
[Required(ErrorMessage = "Please enter a classroom")]
[RegularExpression("^[A-Z]{2}[0-9]{2}$", ErrorMessage = "Please enter two capital letters followed by two numbers, eg. KK12 or AB54")]
public string CLASSROOM;
```

The top line is stating that the field is required. It then throws an error message if the field is empty when the form is submitted. The second line is the regular expression. It then throws an error message if the field contains any invalid characters when the form is submitted. It also contains two examples of correct entries. The last line states that the field is a public string and gives it the name CLASSROOM.

Student Email

The requirements for validation are as follows:

- Text field
- Accepts an email address
- Use regular expressions
- Provide examples

I created the regular expression inside the class CompetitionEntryMetaData

```
[Required(ErrorMessage = "Please enter an email address")]
[EmailAddress(ErrorMessage = "Must contain @ and . eg. Hi@gmail.com or beka@hotmail.com")]
public string Email;
```

The top line is stating that the field is required. It then throws an error message if the field is empty when the form is submitted. The second line is the regular expression. It then throws an error message if the field contains any invalid characters when the form is submitted. It also contains two examples of correct entries. The last line states that the field is a public string and gives it the name Email.

School Name

The requirements for validation are as follows:

- Text field
- Use regular expressions
- Provide examples

First I created a public class called SchoolMetaData

```
public class SchoolMetaData
```

Inside that class I created the regular expression

```
[Required(ErrorMessage = "Please enter a school name")]
[RegularExpression("^[a-zA-Z_]*$", ErrorMessage = "School name can only contain letters, eg. Victory School or Nelson Intermediate")]
public string NAME;
```

The top line is stating that the field is required. It then throws an error message if the field is empty when the form is submitted. The second line is the regular expression. It then throws an error message if the field contains any invalid characters when the form is submitted. It also contains two examples of correct entries. The last line states that the field is a public string and gives it the name NAME.

School Telephone Number

The requirements for validation are as follows:

- Accepts international and national telephone numbers
- Use regular expressions
- Provide examples

I created the regular expression inside the class SchoolMetaData

```
[Required(ErrorMessage = "Please enter a telephone number")]
[RegularExpression("^[+0-9_]*$", ErrorMessage = "Please enter a correct phone number, eg. 03 593 0050 or +64 27 780 8328")]
public string TELEPHONE;
```

The top line is stating that the field is required. It then throws an error message if the field is empty when the form is submitted. The second line is the regular expression. It then throws an error message if the field contains any invalid characters when the form is submitted. It also contains two examples of correct entries. The last line states that the field is a public string and gives it the name TELEPHONE.

School Address

The requirements for validation that I decide on are as follows:

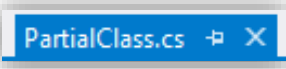
- Text Field
- Accepts only numbers and letters
- Use regular expressions
- Provide examples

I created the regular expression inside the class SchoolMetaData

```
[Required(ErrorMessage = "Please enter an address")]
[RegularExpression("[a-zA-Z0-9_]*$", ErrorMessage = "Please enter a valid address, eg. 42 Vanguard Street or 55 Toi Toi Street")]
public string ADDRESS;
```

The top line is stating that the field is required. It then throws an error message if the field is empty when the form is submitted. The second line is the regular expression. It then throws an error message if the field contains any invalid characters when the form is submitted. It also contains two examples of correct entries. The last line states that the field is a public string and gives it the name ADDRESS.

Next I created another cs file called PartialClass.cs.



```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Web;
5 using System.ComponentModel.DataAnnotations;
6
7 namespace MvcAroundTheWorld.Models
8 {
9     [MetadataType(typeof(SchoolMetaData))]
10    public partial class School
11    {
12    }
13
14    [MetadataType(typeof(CompetitionEntryMetaData))]
15    public partial class CompetitionEntry
16    {
17    }
18 }
```

Inside PartialClass.cs I created two public partial classes called School and CompetitionEntry. Above the name of each partial class is the definition of the MetadataType. This defines what metadata applies to the partial class.

A partial class has the same name as its class so that the metadata will apply to that class.

Competition Form

For the validation messages to appear for the required fields I had to go into Index.cshtml and add a few lines into the fieldset to implement them.

```
<label for="CompetitionEntry_School_NAME"> School Name</label> @*Creates custom label for textbox*@
@Html.TextBoxFor(m => m.CompetitionEntry.School.NAME) @*Creates a textbox*@
<script src="/Scripts/schoolnamecompletion.js"></script>
@Html.ValidationMessageFor(m => m.CompetitionEntry.School.NAME)
```

```

<label for="CompetitionEntry_CLASSROOM">Classroom</label>
@Html.TextBoxFor(m => m.CompetitionEntry.CLASSROOM)
@Html.ValidationMessageFor(m => m.CompetitionEntry.CLASSROOM)

@Html.LabelFor(m => m.CompetitionEntry.Email) @*Creates label for textbox from database*@
@Html.TextBoxFor(m => m.CompetitionEntry.Email)
@Html.ValidationMessageFor(m => m.CompetitionEntry.Email)

<label for="CompetitionEntry_School_TELEPHONE"> School Telephone</label>
@Html.TextBoxFor(m => m.CompetitionEntry.School.TELEPHONE)
@Html.ValidationMessageFor(m => m.CompetitionEntry.School.TELEPHONE)

<label for="CompetitionEntry_School_ADDRESS">School Address</label>
@Html.TextBoxFor(m => m.CompetitionEntry.School.ADDRESS)
@Html.ValidationMessageFor(m => m.CompetitionEntry.School.ADDRESS)

```

Conclusion

Due to being ill for a period of time I was unable to attend quite a few classes. Although that was the case I am happy with how much I still managed to get done.

Conclusion

Due to being ill quite a bit during this semester I didn't get to attend nowhere near as many classes and had wished to. Although that was the case I am still happy with how far I managed to progress through my project. There were quite a few ups and downs but I am happy with how it currently sits under the circumstances.