# STREAM 2 PROJECT

This doc is to show the thought that has gone into the site design and the structured way in which the design/experience and manual testing has been approached. This may seem overkill for such a small site, but it serves as an illustration of awareness that a structured approach needs to be taken with Web Development projects, and demonstrate my ability to step through one of those approaches and apply it to a real life example.

## Site:
The idea behind this site was for it to be an interesting site for fellow football fans through which I could demonstrate competency in Web Development skills to a future employers. I would show I could incorporate database functionality and produce a useful and highly responsive data driven front Web Site. The website the additional purpose of being a piece of graded project work and as such I had to be aware that this was another audience it was addressing.

## Users

### ACTOR & GOAL
- **Football Fan**: Browses website looking to drill down into football transfer data.

### USER ROLE
- **Potential Client:** Looks at site for clear information and different ways of splitting to data to produce insight into it.
- **Exam Assessor:** Assesses site against course grading criteria.

### USER PROFILE
- **Users:** 5-10 fans/assessors visit this website monthly
- **Activities:** Browsing
- **Computer Skills:** Basic to expert
- **Domain expertise:** Typical users (clients/assessors) will have used websites before although perhaps football fans may not have used DC.js graphs before.

### PERSONA
Due to the limited scope of this site, specific personas have not been developed but this has been kept in to acknowledge that it is a part of the development process that should be considered.

## User Experience

**Strategy:**
*Business/Website goals drive who is going to use it and where it is going to be used, it is this that develops strategy.*

### Website Goals:
To show my competency in developing a basis websites to future employers.

To show my competency to the examination board (via their marking criteria).

To showcase my interests football, especially my amazement at how much money is involved.

To show/explain good practice has been followed, such as:
- **Design**
  - Garrets Elements of UX Stack
  - Usability Heuristics (where applicable)

- **Coding:**
  - W3C HTML/CSS compliant
  - Cross browser compatibility (HTML/CSS/JS)
  - Semantic MarkUp
  - Modular Coding
  - Scripts at bottom of body
  - External CSS/JS and JS in scripts folder

### Who is going to be using it?
Exam board (for Certificate)
Prospective/Future Employers
Football fans

### Where will it be used?
- **Mobile phone** – *Friends/Family and football fans, viewing in social context with them, exam board for assessment purposes (i.e mobile friendly design).*
- **Tablet** – *Friends/Family and football fans viewing in home context, some employers might use tablets for profile/portfolio browsing, exam board for assessment purposes (i.e tablet friendly design) and potentially charities for portfolio review.*
- **Laptop/Desktop** – *Employers for profile/portfolio browsing, exam board for assessment purposes, possibly friends/family and football fans for home viewing.*

## User task-centric Scope:
What tasks will the users want to be able to do?
- They will want to understand what the data is showing
- They will want to see information clearly laid out in a logical manner
- They will want to be able to interact with the data and see the impact of applying the different filters.
- Navigate Site, only a menu is OK the site is  too small for breadcrumb or site map.

**Structure:**
The structure of the site was clear as it is of such small size.

**Skeleton:**
The page skeletons were wire-framed in LibreOffice Impress and are in the accompanying documentation.

**Surface:**
This can be seen as you browse the site

## Manual Testing

**Functionality Testing:**
- **Test all internal links.**
  - Home, Data and About
- **Test all external links** (About page)**.**
  - D3js.org, crossfilter, flask, transfer league, dc.js
- **Data Page**
  - Check data is fed into all charts
  - Check filter on one chart results in correct change in others
  - Check individual chart resets work for individual chart, plus all other charts
  - Check main filter button resets all charts
  - Check that Most expensive transfers table is ordered by fee
  - Check total transfer spend is in correct units (and correct value)

- **Validating your HTML: https://validator.w3.org/**
  All site pages have been successfully run through validation

**Compatibility Testing:**
Browser compatibility
- Firefox
- Chrome
- IE
- Safari

Operating system compatibility
- Win10
- macOS

**Responsiveness**
Physical Devices:
- Tablet (iPad and Android)
- Laptop (Windows)
- Desktop (macOS)

Software Simulations (simulating an array of different device types/sizes):
- Device Toolbar (Within Google Chrome's web developer tools).
- Responsive Design Mode (Within FireFox web developer tools)
  ***Please note:*** *When testing via these software simulators the tester is required to reload the page after a dimension change to invoke the JavaScript to refresh the layout.*