

"Website Design & Implementation" Brief

■ Introduction to Web Design / ■ Assessments / ■ "Website Design & Imple...

Due 12pm on Monday, 10 June 2019 (Exam Week 1)

Undergraduates:

50% of Overall Grade

Postgraduates:

45% of Overall Grade

Overview

You'll be asked to design and implement a website in response to the provided project brief in a thoughtful and creative manner.

The project will comprise:

1. **Design Report** — describing the design and development decisions for the website as they relate to the brief. Design & development choices are to be justified with relevance to research, design principles and good practice web design.

2. Website Implementation — submission of HTML/CSS/JavaScript files that comprise a functioning website as described in the *Design Report*.

Rubric

(U) Website Design & Implementation Rubric.pdf 73.7KB

Don't Understand the Brief?

Ask us in your classes or on our course Piazza!

Piazza * Ask. Answer. Explore. Whenever.

Piazza is a free online gathering place where students can ask, answer, and explore 24/7, under the guidance of their instructors.



https://piazza.com/class/jr1r7oo91vc62x



Project Brief

You will design and implement an interactive website that combines non-fiction, educational content with the visuals & theme from a fiction text for a target audience.

Who's the Target Audience?

The broad target audience is people aged between 4 and 25 years old in these groups:

- For a young children and parents audience, it's been found that educational content themed with recognisable characters or stories (the intersection of non-fiction and fiction) can improve engagement in their learning experience. How can you contribute to this with your website?
- For older audiences, educational content is usually presented in a clean, yet uninspired (e.g. corporate) fashion. How can you introduce recognisable characters or stories to instil a sense of fun and imagination into the website?

Where Do I Start?

Remember, this is a creative thinking exercise that requires use of imagination to do well.

Step 1:

Choose the type of educational content (non-fiction) you'd like to communicate on your website. This doesn't have to be scholastic — you could teach people about anything you're interested in (instructional or historical).

This educational content can be derived from an online/physical resource of your choosing.

For example:

- How car engines work.
- The origins of dog breeds.
- How metro maps are designed.
- How GPS and satellites work.
- Etc.

Step 2:

Choose a story (fiction) to use as the visuals & theme for your website.

The story is of your choosing, however it must be from a printed book and not originate from a TV show or movie.

For example:

- Where's Spot?
 by Eric Hill
- <u>Charlie and the Chocolate Factory</u>
 by Roald Dahl
- Charlotte's Web by E. B. White
- Around the World in Eighty Days by Jules Verne.

Step 3:

Combine your choices from Steps 1 & 2. What interesting and unique concepts can you come up with? How can it be applied to a more specific target audience?

For example:

- Phileas Fogg and Passepartout from *Around the World in Eighty Days* teaches 16-21 year olds how GPS and satellites work as they travel the globe.
- Sally the dog from *Where's Spot* searches her home for Spot, but keeps finding different types of dog breed. 4-6 year olds will learn about the different dog breeds before eventually finding Spot in a basket.
- Willy Wonka from *Charlie and the Chocolate Factory* has branched into car manufacture. 9-13 year olds will receive a tour of his new wacky factory that explains each component of a car engine (e.g. the turbocharger room).

• Charlotte the spider from *Charlotte's Web* teaches 6-10 year old children how to design a metro map using spider webs.

Step 4:

What kind of interactivity lends itself to the ideas generated in Step 3?

Here's some basic examples:

- Willy Wonka from Charlie and the Chocolate Factory has branched into car manufacture. 9-13 year olds will receive a tour of his new wacky factory that explains each component of a car engine (e.g. the turbocharger room).
 - The user can enter their name, which is saved and incorporated throughout the website for personalisation.
 - An interactive slideshow introduces the learning experience.
 - The factory can be navigated via an "interactive map" (bird's-eye view).
 - Clicking/tapping on a "factory" icon returns the user to the "interactive map".
 - Hovering on engine components pops up more information about that component.
 - Clicking/tapping on the character of Willy Wonka shows a quote from the story.
 - Clicking/tapping on a button will make fuel enter the cylinders so the user can track how engine power is generated.
 - Step by step spoken audio prompts can be controlled by the user.
 - The user can set the font size for easier reading.
 - Etc.

How Might This Look/Function?

There are some pre-existing learning websites that use recognisable characters or stories to bolster the educational content. For example:

The Cat in the Hat Knows A Lot About That! | PBS

The Cat in the Hat helps parents get their kids excited about science with preschool science activities, tips, and learning resources.



http://www.pbs.org/parents/catinthehat/



The Magic School Bus | Books, Experiments, Printables,

Discover the new Magic School Bus and its books, try experiments, print out coloring pages, and play the apps at Scholastic Kids.



S https://www.scholastic.com/kids/books/the-magic-school-bus/



Meet the Thomas & Friends Engines | Thomas & Friends

Discover all the engines from Sodor! Thomas & Friends fans can learn about all their favorite characters from the Thomas & Friends



https://play.thomasandfriends.com/en-us/engines



Home | NASA Space Place - NASA Science for Kids

NASA's award-winning Space Place website engages upperelementary-aged children in space and Earth science through



💕 https://spaceplace.nasa.gov



Remember, you have creative freedom with how you present the content, so think beyond simple text and games. How could you present the content in an interesting, unique and engaging way?

What's Important to Consider in My Design?

Here's some important things to consider:

- How you could deliver the educational content in an interactive manner that is interesting, unique and engaging to your specific target audience.
- How the story (and genre of the story) being referenced could be used to provide the visual and narrative theme for your website.
 - Your chosen story should contain a good quantity and quality of images and text to draw from. You cannot use images from movies or TV shows. If there's not many images to draw from, consider creating your own supplementary imagery.
- The appropriateness of your proposed interactive elements for your specific target audience and the story. Your implementation should incorporate:
 - Navigation between multiple HTML pages.
 - Manipulation of document presentation/functionality in response to user input.
 - Any aesthetic choices required to support the website's look and feel.

Further Story Inspiration:

These are great stories for a younger audience as there's minimal text and lots of imagery available:

- The Very Hungry Caterpillar by Eric Carle.
- Yertle the Turtle and Other Stories by Dr. Seuss.
- Where's Spot? by Eric Hill.

These are great stories for older primary school children:

- The Deltora Quest series by Emila Rodda.
- Charlie and the Chocolate Factory by Roald Dahl.

These are great classic texts with a lot of established imagery:

- The Little Prince by Antoine de Saint-Exupéry.
- The Hobbit by J.R.R. Tolkien.
- Charlotte's Web by E. B. White.
- Around the World in Eighty Days by Jules Verne.

Can I Use a Comic Book/Graphic Novel?

Yes, you can use a comic book/graphic novel with some caveats:

- As you're using the fiction component for visuals & theme, ensure there is text also present in the work (to draw the theme, characters etc from).
- Your website should not just be a "comic book reader", instead using the visuals & theme to inform the aesthetic & narrative of the website.
- We would also suggest not to use pornographic material (e.g. some manga) to allow for a wider target audience and no submissions of such material to UQ servers!
- If you're unsure whether your choice is appropriate, contact your tutor for clarification.

1. Design Report

The design report will document the design and development decisions for your website. Throughout, you must provide justification for your design decisions (as it relates to research about other websites and design theory).

You must provide references to both the educational content and the story. Scans/photographs of the story will also be included as a PDF in your website files — you don't need to include it in the *Design Report*.

Structure & Template:

The template file attached below provides a structure for exactly what you should include in your design document.

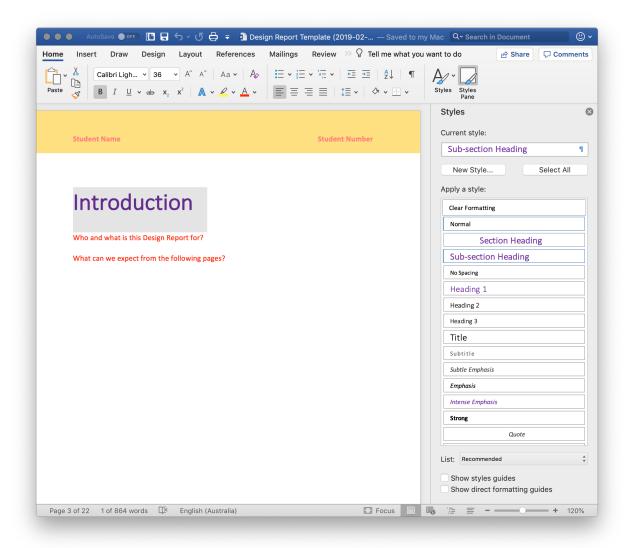
Design Report Template (2019-02-25).docx 2233.4KB

You may use this template as a basis for your own work. It should be heavily customised to your own style!

Feel free to remove or re-arrange the purple headings.

Areas highlighted in red must be changed or removed before submission. Ensure you also make those areas the default colour or black.

Use the Styles Pane in Word for Mac (similar for Windows) to easily apply pre-existing styles for a consistent look:



Requirements:

- The document must contain both text and images, and should be of a final delivery quality with a professionally designed header, footer and layout.
- The document must have a customised and unique look and feel, with your own typeface, colour scheme and other graphic elements used. It shouldn't just look like the provided template!
- You may include any work you produced for practicals/tutorials, however using another student's work in your *Design Report* will be considered plagiarism. You may reference the work of external authors as per academic standards.
- The document must be checked for spelling and grammar prior to submission.

- You must include in-text references (throughout the document) and a references list (at the end of the document).
 - You must use either <u>APA</u> or <u>IEEE</u> referencing styles. Refer to "<u>Referencing style</u> guides" for how to use referencing styles.
 - Ensure that all your work is your own, and that you have adequately referenced.
 Failure to declare the distinction between your work and the work of others will result in academic misconduct proceedings.

A Note About Plagiarism (If You Copy, We'll Know!):

- You must write all of the Design Report yourself.
- Don't buy your *Design Report* via a freelancer website or get your friend to write it. If you run out of time, it's better to receive some marks than none at all as a result of plagiarism (no academic merit).
- Any design work for the *Design Report* must be entirely your own. Don't use document templates other than supplied by the brief.
- All images and media obtained from the Internet/physical materials (apart from the source material, which for this brief we are considering as academic fair use) should be Creative Commons licensed or royalty-free. Don't use copyrighted material. This is in keeping with industry practice.
 - Why? As most websites see a public audience, the issue of copyright is a high priority for web design. In this brief, we are encouraging you to consider the source of your material as you would do outside of University.
- Check with your tutor if you need further clarification on any of the above. Remember, plagiarism is considered a serious offence at UQ.

How to Submit:

- Submit your final Design Report to the correct submission link under the <u>Website</u>
 <u>Design & Implementation assessment on Blackboard</u> by 12pm on Monday, 10 June
 2019 (Exam Week 1).
- To receive formative feedback on Part A of your *Design Report*, follow the instructions on the *Participation & Consultation* assessment brief:
 - "Participation & Consultation" Brief
- The file format must be PDF.

Ensure your file is optimised for file size (less than 50 MB ideally).

Criteria:

Website Design & Implementation Rubric.pdf 73.7KB

Your Design Report will be marked on:

- Audience, Education & Story:
 - As evidenced by the quality of your story and audience rationalisation, through an understanding of user-centred design and suitability of the story for an interactive educational website.
- Design Justification:
 - As evidenced by your ability to justify your design decisions using design terminology and principles.
- Design Research:
 - As evidenced by the quality of the results of your research and design activities (on other websites and design theory).
- Design Reflection:
 - As evidenced by the quality of your reflections on any changes to your website design (from feedback and critique) during your website's development.
- Report Design, Structure & Writing:
 - As evidenced by your ability to produce a professionally designed, clearly understood and logically structured report using images and text (without spelling and grammar errors). Includes all sections as specified in the provided template.

2. Website Implementation

Your Website Implementation must reflect the website proposed in the Design Report. It will consist of at least HTML, CSS, JavaScript and image files and must be entirely self-authored (i.e. all code within is your own).

Requirements:

- The website must contain entirely self-authored HTML5 markup and CSS styling.
- The website must be implemented using semantic HTML and should adhere to the good practice web design skills you've obtained throughout the semester.
- The website should have at least 5 unique interactions implemented with jQuery/JavaScript. Interactivity must support the educational content & story. Here's some examples of the types of interactions you could include:
 - Creation or manipulation of content in response to the user (or other events).
 - Manipulation of presentation in response to the user (or other events).
 - Dynamic navigation within a page or between pages in response to the user (or other events).
 - Stylistic integration of simple jQuery plugins such as slideshows and lightboxes.
- All self-authored jQuery/JavaScript code should be commented which explains concisely and clearly what the code does and how it relates to the HTML.
- Website content must be checked for spelling and grammar prior to submission.
- You must include a references list on a suitable page within the website (e.g. "About", "Acknowledgements" etc).
 - This should include references for any images or media used. You don't need to reference your chosen story as this is included in the design report.
 - If you use any jQuery/JavaScript plugins, make sure you reference those too.
 - You must use either <u>APA</u> or <u>IEEE</u> referencing styles. Refer to "<u>Referencing style</u> guides" for how to use referencing styles.
 - Ensure that all your work is your own, and that you have adequately referenced.
 Failure to declare the distinction between your work and the work of others will result in academic misconduct proceedings.

A Note About Plagiarism (If You Copy, We'll Know!):

 You must write all of the code for your website yourself using a code editor. No WYSIWYG (or "what you see is what you get") software is permitted in the production or delivery of your website.

- If you use any code snippets from tutorials, GitHub or any other source, ensure they are completely re-written in your own style. Certain jQuery/JavaScript plugins are okay.
- Any design work for the website must be entirely your own. Don't use templates/themes or CSS from any other source.
- All images and media obtained from the Internet/physical materials (apart from the source material, which for this brief we are considering as academic fair use) should be Creative Commons licensed or royalty-free. Don't use copyrighted material. This is in keeping with industry practice.
 - Why? As most websites see a public audience, the issue of copyright is a high priority for web design. In this brief, we are encouraging you to consider the source of your material as you would do outside of University.
- Check with your tutor if you need further clarification on any of the above. Remember, plagiarism is considered a serious offence at UQ.

How to Submit:

- Submit your final Website Implementation to the correct submission link under the <u>Website Design & Implementation assessment on Blackboard</u> by 12pm on Monday, 10 June 2019 (Exam Week 1).
- The file format must be **ZIP**.

- Your website files should follow the folder structure below:
 - index.html
 - Your home page file should always be named index.html.
 - Any other HTML files in your website.
 - CSS
 - All stylesheets should be contained in a css folder.
 - style.css
 - Your main CSS file should be named style.css.
 - images
 - All images should be contained in an **images** folder.
 - js
 - All JavaScript files should be contained in a **js** folder.
 - content.pdf
 - A PDF that includes:
 - Scanned or photographed images of all the story pages that you used.
 - Text-based references to the story and author.
 - Text-based references to the educational content.

Criteria:

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Your Website Implementation will be marked on:

- Website Completion:
 - As evidenced by your website's completeness to a professional standard, focusing on design, layout and content quality.
- Good Practice Web Design:
 - As evidenced by your ability to adhere to good practice web design by considering user-centred design, code quality and the separation of markup and style.

HTML Usage:

 As evidenced by the semantic and syntactic quality of HTML used in your website (use of appropriate & prerequisite elements, neatness of code etc).

CSS Usage:

• As evidenced by the semantic and syntactic quality of CSS used in your website (use of IDs, classes, advanced CSS features etc).

• jQuery/JavaScript Usage:

 As evidenced by the inclusion of at least 5 unique instances of interaction using jQuery/JavaScript and the syntactic quality of JavaScript used in your website (neatness & conciseness of code etc).

Previous Student Examples:

Refer to the Week 5 lecture for demonstrations of previous student examples with a focus on interactivity.

