|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Assessment # and title | | | | C-WT-AT3-PROJ | | | | Web Technologies – Final Project | | | | | |
| **Lecturer name** | | | | *John Robertson* | | | | | | | | | |
| **Student name** | | | | *Alexander Glover* | | | | | | | | | |
| **Student ID number** | | | | *20085553* | | | | | | | | | |
| **Telephone contact number** | | | | *0438725598* | | | | | | | | | |
| **Email** | | | | *20085553@tafe.wa.edu.au* | | | | | | | | | |
| **By completing and submitting this signed form to my lecturer, I am stating that:**   1. The attached submission is completely my own work 2. I have correctly cited all sources of information used in this work (if required) 3. I have kept a copy of this assessment (where practicable) 4. I understand a copy of my assessment will be kept by the NMTAFE for their records 5. I understand my assessment may be selected for use in the NMTAFE’s validation and audit process to ensure student assessment meets requirements | | | | | | | | | | | | | |
| **Student Signature** | | *ALEXGLOVER* | | | | | | | **Date** | | *23/11/23* | | |
| Assessors please note: Where verbal clarification has been sought from a student to gather additional assessment evidence from an assessment item, question/s and response/s must be recorded, signed, and dated by the assessor, against the relevant assessment item/s. | | | | | | | | | | | | | |
| NB: Feedback will be given via Blackboard when possible. | | | | | | | | | | | | | |
| **Submission 1** | | Result | Satisfactory / Not Yet Satisfactory | | | | | | | Date | | |  |
| *To satisfy requirements for this assessment, you need to complete the following:* | | | Feedback to student… | | | | | | | | | | |
| **Submission 2** | | Result | Satisfactory / Not Yet Satisfactory | | | | | | | Date | | |  |
| *To satisfy requirements for this assessment, you need to complete the following:* | | | Feedback to student… | | | | | | | | | | |
| **Student Feedback** | | | Feedback from student… | | | | | | | | | | |
| Lecturer Signature | | |  | | | | Student Signature | | | | | |  |
| **Assessment type (þ):** | | | | | | | | | | | | | |
|  | Questioning (Oral/Written) | | | |  | 3rd Party Report | | | | | |  | Practical Demonstration |
|  | Other – Project/Portfolio (*please specify on the right):* | | | |  | | | | | | | | |

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|  |
| --- |
| Assessment Due Date |
| This assessment is split into components that have several due dates.  This component of the Portfolio of Work is due:   * Week 18 at 17:30 (5.30PM) on day of scheduled lecture   These are also shown in the Learning and Assessment Plan.  Also, refer to Blackboard for most accurate dates, which may alter due to unforeseen circumstances.  We also will endeavour to update these document(s) at the same time. |
| Required Resources |
| The base requirements this assessment task, are listed below. They are listed as common (for both PC and Mac), and for the individual operating systems.  We presume that all assessment work is completed on a **PC** with the software as specified. This is to reduce configuration issues affecting the successful completion of the assessment item.  Whilst other applications and operating systems may be used, we are unable to give extensive support to ensure your environment is working as expected. Common:  * Access to Office 365 & Microsoft Word * WebStorm, PhpStorm * Access to Figma.com for diagrams * Access to TAFE Web Site Hosting (located on dev.ScreenCraft.net.au) * WinSCP for deployment of site * Git for version control, GitHub account for  PC:  * Web Browsers (Must have **at least** TWO different rendering engines)   + Chromium based: Edge, Chrome,   + Firefox   + Opera  Mac:  * Web Browsers (Must have **at least** TWO different rendering engines)   + Chromium based: Edge, Chrome,   + Firefox   + Opera   + Safari   ***Use of some of these items may not be used in this part of the assessment task.*** |
| Optional Requirements |
| An application to provide web services such as web server, database and more.   |  |  | | --- | --- | | Windows | MacOS | | Laragon  AMPPS  XAMPP  Docker | MAMP  AMPPS  XAMPP  Docker |   The lecturers will not be familiar with all the options listed, and it will be up to the student to investigate how to set up and use any alternatives.  The use of alternative IDEs is allowed (such as VS Code), but not supported. |
| Instructions |
| Follow the steps listed in this assessment item.  Submission of the documentation, code, and associated items is at the end of each part of the portfolio.  Provide evidence in the form of scanned documentation, completed assessment documents, screenshots, screencasts and other formats as required in this assessment. |
| Project Specifications and Development Outline |
| The following are the specifications for the project you are undertaking as part of your final project. |
| Site Structure Requirements |
| All files must apply the naming conventions outlined in Appendix B: Naming Conventions.  Code must apply suitable code style as advised in Appendix A: Code Style Guidelines.  The project has a defined structure outlined in the Appendix C: Project Folder Structure. |
| General Instructions |
| Complete each step of the document in the order given.  All work must be completed at the CLI, except for starting the development environments.  When a step requires you to confer with the lecturer, ensure you do so, and make notes as required in spaces provided in this document.  Clarifying Requirements  If you require requirements to be clarified, please follow the instructions below:  Send an email using your TAFE email address to:  [f2f@screencraft.net.au](mailto:f2f@screencraft.net.au)  You MUST include the following subject:  C4 Prog: Web Tech Project  Online Students  Online Students must use the [online@screencraft.net.au](mailto:online@screencraft.net.au) email address for these forms of questions. |
| Answering Questions |
| When a step includes a question, you must attempt to answer it.  There is a minimum and maximum number of words to use for each answer.  Any step that requires answers to be provided will have a space in this document immediately after each step. The answer space will expand with the content you type or images you paste.  Resize images to fit the space provided, ensuring they are still legible.  Do not include a whole screenshot, just the required details.  If a step has more than one question, these maxima and minima are a total for all the questions in that specific step.  All answers must be in complete sentences unless indicated.  *If required, make sure to add any code you’ve written in a separate file to your submission.*  *DO NOT put long pieces of code (over 10 lines) in this document.* |
| Sources of Information |
| In industry, it is good practice to keep track of where information was obtained. This is especially true if it is a written document, or even code.  If you answer any questions using information from web sites, please include the site name and URL (Web site address) after the answer.  Likewise, include the title and author for books and magazine articles.  For example:   * RS Electronics Ltd:  <https://au.rs-online.com/> * Slack API Documentation, Users List Method:  <https://api.slack.com/methods/users.list> |
| Code Storage |
| We advise that you create a private GIT repository on GitHub and use this to store a copy of your work.  This assessment has instructions on setting up version control and a remote (private) repository. Do not initialise any version control until told to do so.  To ensure you have a recent copy of your code you **must** use **AT LEAST TWO** of the following methods, of which a version-controlled copy is REQUIRED:   * *Private Git repository,*   and one of:   * *Cloud Storage (OneDrive within your college Office365), and/or* * *Keep a copy on a USB thumb drive.*   Backing up to One Drive or to USB is best done by compressing the project folder up before copying to either OneDrive or USB. |
| Code Style |
| Please see **Appendix A: Code Style Guidelines** for details on the code style(s) to use for the assessment. |
| Professional Code and Documentation Requirements |
| This document contains appendices that cover the professional requirements when creating files, code, project structures and more.  These requirements must be adhered to.  You are only allowed to use Vanilla JavaScript, Tailwind CSS and Font Awesome Free. Configuration and other details are given in this assessment.  This means that you may not employ frameworks such as Bootstrap, jQuery, Vue, React et al in your work. |
| Assessment Structure |
| To complete this assessment, you will design and build a Portfolio site to display & showcase your current & future coding.  The site structure & project specifications are defined later in this document. |
| Assessment/Development Process |
| In the steps that are contained in this document, you will design several pages, and create the layout for the home page, with your code being version controlled as you progress.   1. *Initial project setup,* 2. *Version control,* 3. *Wireframe designs,* 4. *Use of imagery,* 5. *HTML, CSS & JavaScript* 6. *Use of Tailwind* 7. *Test HTML is displayed as expected using at least two different browsers with different web rendering engines.* 8. *Compress and submit your work.*   *Important:*   * *Your site should be fully responsive and have a “mobile first” CSS design.* * *In all cases Tailwind components must use semantic HTML elements so <div> elements must be updated.* |

# Assessment Steps

Complete the steps in the order given.

| **STEP** | **Task to perform** |
| --- | --- |
| 00 | Complete the Front Page Make sure you have filled out the front page of this document.  Familiarise yourself with the content and document your progress in this assessment. This means, **READ** the **WHOLE** assessment **AT LEAST ONCE** before starting any work.  Make notes on the requirements of this assessment, as details appear as you progress through and are not given in one location.  This is very similar to how details emerge during the continuous development interviews and meetings with a client.  At any stage during this assignment, you may consult the stakeholder(s) or their representative(s).  Max Sentences: N/A |
|  | Intentionally left blank. |
| 01 | Setting Up for the Final Project Open the new project in your web editor, be that WebStorm, VSCode or such.  We will need to use a terminal for this stage of our development process. For this, WebStorm has a built-in terminal, VS Code has a Terminal extension that may be installed, or you may use the Terminal from Laragon when on a PC.  We are presuming that you have stored your portfolio in the location c:\Users\USERNAME\Source\Repos\C4Prog-WT-PROJ\ on a Windows machine or in the /home/USERNAME on a Linux machine or /Users/USERNAME folder on a MacOS system.  You will need to modify some commands to suit if you have not placed the portfolio in the appropriately listed location.  We are also presuming the capital letters are as shown, so any differences will need to be made at the time of entering the commands for this step. WebStorm: Open the terminal tab by locating it at the bottom of the screen and clicking on the Terminal tab.  If you have a Windows machine it is advisable to open a new CMD prompt terminal rather than a PowerShell (PS) one. To do so use the V down arrow next to the + sign on the terminal area, and then select CMD.  If you have a newer version of WebStorm the terminal may not be present, so use the keyboard shortcut of: ALT+F12 / Option+F12. VSCode: Install the Terminal extension.  Open the terminal using… Getting into the Correct Folder As stated above, we presume that you have your project in the Source\Repos\C4Prog-WT-PROJ folder.  To get into the correct folder use:  Windows: cd %userprofile%\Source\Profile\C4Prog-WT-PROJ  MacOS/Linux: cd ~\Source\Repos\C4Prog-WT-PROJ |
| 01 | Setting up Version Control  * Create a new Project and initialise version control using GIT. * Create a file called: *Project-ReadMe.md* to explain what the project is about. * Create the project file & folder structure in ***Appendix C*** * Commit to version control, push to your git pages as needed. * Create a *.gitignore* that ignores the *node\_modules* and *.idea* folders (see instructions in appendix on how to do this in WebStorm)   You are now ready to continue with the portfolio.  Use a commit message based on the one below (note this is incomplete):   * “feat(project): Version Control setup”   Push the code to your private remote repository.  Max Words: N/A |
| A01 | Setting up Version ControlAdd screen shots of your Project-ReadMe & .gitignore files: |
| 02 | Initial Design Layout At this point you are required to sketch wireframes of each page of your final project **onto Paper**.  These sketches should outline all the major HTML sections for each of the 6 pages in the site structure.  For example, here are some sketched wireframes that have been created by lecturing staff for various purposes:   |  |  | | --- | --- | | Image | Image | | Image |     Page sections can be named, images, forms, buttons & other semantic HTML items must be indicated & be *hand drawn wireframes*.  *Important: these wireframes must be viewed, approved & signed off by your lecturer.*  Once completed add images of each wireframe drawings to this section of the assessment document & add them to your *evidence* folder. |
| A02 | Initial Design LayoutAdd images of the approved wireframes for each page: |
| 03 | Convert the Wireframes to Figma Use Figma to create a GREY BLOCK version of each if the approved pages.  Here is an example:  A screenshot of a computer  Description automatically generated  Export these pages as PNG and/or PDF and add these to your *evidence* folder.  *Important: these Figma images must be included in your blackboard submission.* |
| A03 | Convert the Wireframes to FigmaAdd images of the approved wireframes for each page |
| 04 | Determine your Site Colour Scheme You should determine up to FOUR colours besides Black and White for your site design.  The site <https://components.de.vscreencraft.net.au> has the TailwindCSS colours plus many more that have been created and added to the list by the lecturers.  If you have a colour that is not shown, and you would like it to be added to the list on the site, then please send a request using the details below:   |  |  |  | | --- | --- | --- | |  | **Face to Face** | **Online Students** | | **To:** | [f2f@screencraft.net.au](mailto:f2f@screencraft.net.au) | [online@screencraft.net.au](mailto:online@screencraft.net.au) | | **Subject:** | C4Prog Web Tech: Custom TailwindCSS Colours | | | **Message:** | Hi there John & Ady,  For the Project in C4 Programming Web Tech, could I kindly request the following base colours be added to those available at the components site. Thank you.  #rrggbb #rrggbb  #rrggbb #rrggbb | |   To obtain your base colours, you may use a web application such as the ones listed below to create tints and shades of the colours you have selected.  Colour, Tint & Shade Schemer Apps (all retrieved 28/8/23):   * <https://coolors.co/> * <https://uicolors.app/create> * <https://www.tailwindshades.com/> * <https://www.flatuicolorpicker.com/> * <https://colorswall.com/> * <https://www.colourlovers.com/>   Also see the following link for more choices:   * <https://www.diigo.com/user/ady_gould?query=colour+scheme>   Edit the Project-ReadMe.md file and add the BASE colour details to a new section:  Colour Scheme  Create a table in the Project-ReadMe.md using the following basic pattern (Copy this text into your Project-ReadMe.md for a head-start).  | Name | RGB | HEX |  |----------|----------------|----------|  | black | 0, 0, 0 | #000000 |  | white | 255, 255, 255 | #FFFFFF |  | name 1 | rrr, ggg, bbb | #RRGGBB |  | name 2 | rrr, ggg, bbb | #RRGGBB |  | name 3 | rrr, ggg, bbb | #RRGGBB |  | name 4 | rrr, ggg, bbb | #RRGGBB |  The section should have a table that shows the name (as you are giving it, the RGB value and the HEX value).  Edit the rrr, ggg, bbb to show the decimal values and RRGGBB to show the HEX values.  Add the changed/added files to version control.  Add the colours to the table on the next page.  Use a commit message based on the one below (note this is incomplete):   * “feat: add colour scheme for site”   Push the code to your private remote repository. |
| A04 | What are your selected colours? Provide the RGB and HEX versions of the colours.   |  |  |  |  | | --- | --- | --- | --- | | **Name for Colour** | **RGB  (rrr, ggg, bbb)** | **HEX (#rrggbb)** | **Sample** | | ***EXAMPLE COLOUR*** | ***107,6,102*** | ***#6B0666*** |  | | white | 255, 255, 255 | #ffffff |  | | black | 0, 0, 0 | #000000 |  | | BLUE GRAY | rgb(148, 163, 184) | #94A3B8 |  | | COOL GRAY | rgb(156, 163, 175) | #9CA3AF |  | | LIGHT BLUE | rgb(56, 189, 248) | #38BDF8 |  | |  |  |  |  |   Tab between cells, and tab on last cell to add new row. Use the fill tool to color final column. |
| 05 | Creating you Project Pages Create the HTML, CSS and any required JS for the pages.  Each page must be checked into version control during this process.  Push pages to GitHub as required.  Use the following (semantic) commit message format when creating the page.   * *“feat(page\_name): commit* *message”*   If fixing a bug later use   * *“fix(page\_name): name of bug being fixed*”   Pages will be created in the following order:   * 1. *Home page*   2. *Contact page*   3. *About page*   4. *Resumé page*   5. *Projects page*   6. *Sample project page(s)*   During this process you may use the <https://components.dev.screencraft.net.au> website to provide help when laying out some of the components of your page.  *Important: you must use the correct semantic structural elements when creating your pages.* |
| 06 | Displaying your Project on GitHub Pages The final stage is to publish your portfolio site on GitHub pages.  Use the resource below to update your GitHub repository settings.  <https://docs.github.com/en/pages/getting-started-with-github-pages/creating-a-github-pages-site>  Obtain the assessors feedback, update your work as required based on their feedback, ensuring all changes are notes as semantic commits using the *“fix:…”* tag at the start. |
| **A06** | Demonstrate to Assessor on GitHub PagesWhat is the URL of your projects GitHub repository: **What is the URL of your GitHub Pages site for the project:** |
| END | Submission of Portfolio Work To submit the portfolio, do the following:   * Save this document with your answers. * Copy of your code as a compressed file  (without the node\_modules folder). * The Project-ReadMe.md file from your project. * Link to your GitHub pages location. * Link to your GitHub repository for the site. * Scanned copies (PDF, PNG or JPG) of the initial sketches. * PNG or PDF copies of the grey box Figma drawings. * Upload the compressed site files. * Click submit.  All answer documents MUST be submitted in Microsoft Office 365’s Word format. It is important that the images, PDF and Word documents are separate from the portfolio compressed folder as this makes it much easier for assessment. |

# Appendix A: Code Style Guidelines

The following guidelines should be applied to your code as it is developed.

Many may be applied via the use of WebStorm, VS Code or similar plugins and code formatting.

### HTML Code

Please refer to the Google Style guide:

* <https://google.github.io/styleguide/htmlcssguide.html>

Note that PhpStorm and WebStorm will format code to their own standard, which is acceptable.

### JavaScript

Refer to the Google JS Style guide:

* <https://google.github.io/styleguide/jsguide.html>

Note that PhpStorm and WebStorm will format code to their own standard, which is acceptable.

### JSON Code

JSON should be formatted in an appropriate manner.

*Readability Counts   
- Zen of Python*

# Appendix B: Naming Conventions

## HTML, CSS and JS Files and folders

* No spaces.
* Alpha-numeric characters only except minus/hyphen (-) and full stop (.).
* All lowercase letters.
* Use hyphens (dash) between words.

## File extensions

The following file extensions must be used:

|  |  |
| --- | --- |
| HTML pages | .html |
| JS | .js |
| CSS | .css |
| PHP | .php |
| Node | .js |
| React | .jsx |
| Python | .py |
| JSON | .json |
| XML | .xml |

# Appendix C: PROJECT Folder Structure

The diagram below outlines a folder structure for the final project

# Appendix D: Useful Resources

The following links may be of use when developing this stage of the portfolio.

* <https://components.dev.screencraft.net.au>
* <https://tw-elements.com/>
* <https://www.hyperui.dev/>
* <https://merakiui.com/>
* <https://wickedblocks.dev/>

Also check <https://diigo.com/user/Ady_Gould> and search for TailwindCSS.

We STRONGLY recommend that you DO NOT mix and match component libraries.

We STRONGLY recommend that you DO list the resources used in the Copyright Page.

We STRONGLY recommend that you modify the source code provided by any resource to be semantically well structured. For example, replace a div that is being used for a navigation with the appropriate semantic element.

# Appendix E: SETTING UP TAILWIND

Once the terminal is open, and you are in the correct folder, verify that the following are available on your system by using the following commands:

NodeJS: node --version

NPM: npm --version

NPX: npx –version

Any version of NodeJS after 16 is suitable, and any version of NPM/NPX after 8 should also be suitable.

If an error occurs it means that Node and NPM are not installed. You will need to rectify this before continuing.

### Node is Ready…

Given that Node is available, and NPM/NPX are also working, we now start the TailwindCSS installation and “development” process.

Enter the following commands:

Install Tailwind: npm install -D tailwindcss

Initialise Tailwind: npx tailwindcss init

In your editor search for and edit the tailwind.config.js file which will be in the root of the project.

Make sure that the lines in this file now read:

*/\*\** ***@type*** *{import('tailwindcss').Config} \*/*module.***exports*** = {  
 content: [  
 './\*.html',  
 ],  
 theme: {  
 extend: {},  
 },  
 plugins: [],  
};

This configuration scans all .html files in the root of the project for any HTML files that contain any Tailwind Classes in the code.

### Create an Input CSS file

Next create a folder called src in the root by using the command:

mkdir src

Then, in your editor create a new CSS file in this src folder and call it “input.css”. Case will be important in following commands.

Now execute the following command (this is a SINGLE LINE):

npx tailwindcss   
-i ./src/input.css   
-o ./assets/css/site.css   
--watch

The command is on a single line, but to make it easier to read it is shown split over multiple lines.

**Choosing Tailwind Components**

Samples components are provided for you at the link below:

<https://components.dev.screencraft.net.au>

It is advised that you have a look at the page source code and the JS console to see how the page is structured and if errors occur in the provided content.

Pay attention to some of the methods used on the copyright page as this shows a header, footer, main area, and simple cards used for the references.

# Appendix F: using .gitignore files

You can find further information on how set up and use the *.gitignore* file for your operating system or IDE here:

* <https://docs.github.com/en/get-started/getting-started-with-git/ignoring-files>
* <https://github.com/github/gitignore>
* <https://www.toptal.com/developers/gitignore>