

## PROJECT CHARTER

|  |                   |                   |                  |  |
|--|-------------------|-------------------|------------------|--|
| <b>1. General Project Information</b>  |                   |                   |                  |  |
| <b>Project Name:</b>   | A weather website |                   |                  |  |
| <b>Executive Sponsors:</b>   | -                 |                   |                  |  |
| <b>Department Sponsor:</b>   | -                 |                   |                  |  |
| <b>Impact of project:</b>  | Learning outcomes |                   |                  |  |
| <b>2. Project Team</b>   |                   |                   |                  |  |
|  | <b>Name</b>       | <b>Department</b> | <b>Telephone</b> | <b>E-mail</b>  |
| <b>Project Manager:</b>  | Mike Navarro      |                   |                  | <a href="mailto:mike@assemblerschool.com">mike@assemblerschool.com</a> |
| <b>Team Members:</b>   | Prattya Datta     |                   |                  | <a href="mailto:prattyadatta@gmail.com">prattyadatta@gmail.com</a>     |
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|  |                   |                   |                  |  |
| <b>3. Stakeholders (e.g., those with a significant interest in or who will be significantly affected by this project)</b>  |                   |                   |                  |  |
| Cristian Fondevila   |                   |                   |                  |  |
|  |                   |                   |                  |  |
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| <b>4. Project Scope Statement</b>  |                   |                   |                  |  |
| <b>Project Purpose / Business Justification</b> <i>Describe the business need this project addresses</i>   |                   |                   |                  |  |
| The scope of the project is to develop understanding of making a complete static webpage using best HTML5 practices and learn how javascript is used in tandem to improve user experience. |                   |                   |                  |  |
| <b>Objectives (in business terms)</b> <i>Describe the measurable outcomes of the project, e.g., reduce cost by xxxx or increase quality to yyyy</i>  |                   |                   |                  |  |
| Develop a static web-page capable to be viewed and responsive enough on various internet browsers  |                   |                   |                  |  |

| 1. General Project Information  |                   |                           |           |  |
|---|-------------------|---------------------------|-----------|--|
| Project Name:   | A weather website |                           |           |  |
| Executive Sponsors:   | -                 |                           |           |  |
| Department Sponsor:   | -                 |                           |           |  |
| Impact of project:  | Learning outcomes |                           |           |  |
| 2. Project Team   |                   |                           |           |  |
|   | Name              | Department                | Telephone | E-mail   |
| Project Manager:  | Mike Navarro      |                           |           | <a href="mailto:mike@assemblerschool.com">mike@assemblerschool.com</a> |
| <b>Deliverables</b> List the high-level "products" to be created (e.g., improved xxxx process, employee manual on yyyy)   |                   |                           |           |  |
| A static website with the following 5 sections: <ul style="list-style-type: none"> <li>• A home page with menu and carousel</li> <li>• A services page</li> <li>• An about us page with videoplayback options</li> <li>• A gallery page with interactive images</li> <li>• A contact us page with form functionality</li> </ul> |                   |                           |           |  |
| <b>Scope</b> List what the project will and will not address (e.g., this project addresses units that report into the Office of Executive Vice President. Units that report into the Provosts Office are not included)  |                   |                           |           |  |
| The project will address the learning outcome of how to make a good static webpage which is responsive using HTML5, javascript and CSS. The page need not be dynamic  |                   |                           |           |  |
| <b>Project Milestones</b> Propose start and end dates for Project Phases (e.g., Inception, Planning, Construction, Delivery) and other major milestones   |                   |                           |           |  |
| <b>Proposed start date:</b> 29/10/2019<br><b>Planning date :</b> 29-30/10/2019<br><b>Building date:</b> 30-31-1/11/2019<br><b>Delivery date:</b> 03/11/2019   |                   |                           |           |  |
| <b>Major Known Risks (including significant Assumptions)</b> Identify obstacles that may cause the project to fail.   |                   |                           |           |  |
| Risk  |                   | Risk Rating (Hi, Med, Lo) |           |  |
| Non proficiency in Javascript   |                   | High-Level                |           |  |
| Bootstrap carousel  |                   | Medium-level              |           |  |
| Videoplayback and images in gallery   |                   | High-Level                |           |  |
| <b>Constraints</b> List any conditions that may limit the project team's options with respect to resources, personnel, or schedule (e.g., predetermined budget or project end date, limit on number of staff that may be assigned to the project).  |                   |                           |           |  |
| Lack of high proficiency in Javascript  |                   |                           |           |  |

|   |                   |                   |                          |  |
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| <b>Executive Sponsors:</b>  | -                 |                   |                          |  |
| <b>Department Sponsor:</b>  | -                 |                   |                          |  |
| <b>Impact of project:</b>   | Learning outcomes |                   |                          |  |
| <b>2. Project Team</b>  |                   |                   |                          |  |
|   | <b>Name</b>       | <b>Department</b> | <b>Telephone</b>         | <b>E-mail</b>  |
| <b>Project Manager:</b>   | Mike Navarro      |                   |                          | <a href="mailto:mike@assemblerschool.com">mike@assemblerschool.com</a> |
| <b>External Dependencies</b> Will project success depend on coordination of efforts between the project team and one or more other individuals or groups? Has everyone involved agreed to this interaction?                     |                   |                   |                          |  |
|   |                   |                   |                          |  |
| <b>5. Communication Strategy</b> (specify how the project manager will communicate to the Executive Sponsor, Project Team members and Stakeholders, e.g., frequency of status reports, frequency of Project Team meetings, etc. |                   |                   |                          |  |
|   |                   |                   |                          |  |
| <b>6. Sign-off</b>  |                   |                   |                          |  |
|   | <b>Name</b>       | <b>Signature</b>  | <b>Date (MM/DD/YYYY)</b> |  |
| <b>Executive Sponsor</b>  |                   |                   |                          |  |
| <b>Department Sponsor</b>   |                   |                   |                          |  |
| <b>Project Manager</b>  |                   |                   |                          |  |
| <b>7. Notes</b>   |                   |                   |                          |  |
| <p>The project was delivered by the delivery date but required minor revisions</p>  |                   |                   |                          |  |

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List of tasks to be performed:

1. Development of HTML5 and CSS of the complete website
2. Adequate JS scripts as a supplementary
3. Two versions of JS scripts are required, one with the third party libraries and one with pure Javascript
4. The website has to have different indicators for showing different information about weather information
5. Synchronize the work using GIT workflow
6. Testing and deployment of the complete site.

Details of the tasks to be performed including difficulty and priority level. Difficulty level is explained on a scale of 1 to 5 ( 5 being the most difficult ). Priority is explained on the level of 1 to 5 ( again 5 the highest parameter being the most prioritized work ). Details also include estimated time for each task.

| Task  | Priority | Difficulty | Estimated time(in hrs) |
|---|----------|------------|------------------------|
| Build the menu HTML5 and CSS                        | 4        | 2          | 2                      |
| Carousel  | 1        | 1          | 0.5                    |
| Ajax with JQuery scripting                          | 5        | 5          | 10                     |
| Pure javascript                                     | 4        | 3          | 6                      |
| Production version                                  | 4        | 5          | 3                      |
| GIT workflow  | 5        | 5          | 2                      |
| Setting up the local server for connecting with API | 5        | 4          | 3                      |

**Record of lessons learned:**

- API's: how they work and how to get them into the website
- JQuery and Ajax
- Javascript equivalent of jquery
- Gulp: Very powerful tool and used for not only hosting websites but also develop a production version of development code.
- More hands on training on GIT
- Develop project more on the scale of professional web developers
- More functionality in static websites
- More proficiency in Javascript

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### **Requirements for the project and the tools**

- Javascript
- HTML5
- Bootstrap
- JQuery
- Ajax
- The webpage should represent the current style of webpage on the markets. It has to be easy in use in for better client experience.

### **Quality control for the project**

- The quality control and testing is done by checking the HTML semantics on w3 schools
- At every level quality control is also done by checking the parameters of responsiveness etc. on different browsers
- GIT is used extensively during the projects to keep track of changes and easy project management
- Audit of the website is done on the google audits

### **Chronogram**

Chronogram of the project:

06/11/2019 10:15 am :- Project assignment

06/11/2019 10:20 am :- Read through the requirements for the project using tools, APIs required, and definitions of the new terminologies needed for the project

06/11/2019 10:35 am :- Installation of jquery, yarn and setting up of the project

06/11/2019 10:45 am :- Read again through the requirements and initialize GIT.  
Download required libraries

06/11/2019 12:00 pm :- Made an API account, have the rudimentary design of the website planned. Details of requirements for the project has been completely analyzed. Project planner is designed for the major steps

06/11/2019 3:00 pm :- Starting to put the div element on top of main page which will be used as a city search for weather API

07/11/2019 10:30 am :- Get the API call and use it change element inside the html page.

07/11/2019 12:00 pm:- fetch temperature and other details

07/11/2019 3:00 pm :- Working on the same part

07/11/2019 5:00pm :- installation of gulp and understanding its use

08/11/2019 10:30 am: Trying to use the map API and various locations at one latitude and longitude but unsuccessful

08/11/2019 12:30 pm:- Starting of the consolidation of the JQuery code and make it clean.

# Website Quality Assurance Checklist

The purpose of this checklist is to provide a method of validation for web developers at ECU to assist with meeting the minimum requirements set out in the Web Content Management policy (ref) and the Corporate Web Style guidelines (ref). You should aim to 'Pass' all three parts of the checklist.

## PART A: WEB-BASED PUBLICATION STANDARDS AND USABILITY

If the website is managed through the WebCMS, most of the following are automatically managed, however you should review items A3, A5 and A8 before skipping to Part B. Otherwise web developers will need to verify all the elements identified in this part.

| Item | Issues<br><i>Description / Test to be applied</i>  | Met criteria<br>Pass / Fail |
|------|--|-----------------------------|
| A1   | <b>Document Type Declaration (DTD)</b><br>The web-based content has the correct DTD code at the top of each document.  | unknown                     |
| A2   | <b>Markup (XHTML)</b><br>Each webpage should contain valid XHTML markup, validated within the WebCMS using the HTMLTidy and Accessibility validation tools, or using the W3C Markup Validation Service ( <a href="http://validator.w3.org">http://validator.w3.org</a> )   | pass                        |
| A3   | <b>Metadata</b><br>Each webpage should contain appropriate metadata in accordance with ECU Metadata Standards.<br>( <a href="http://intranet.ecu.edu.au/staff/centres/marketing-and-communications-services/our-services/managing-web-content/how-to-guides-and-other-resources/making-content-searchable">http://intranet.ecu.edu.au/staff/centres/marketing-and-communications-services/our-services/managing-web-content/how-to-guides-and-other-resources/making-content-searchable</a> )  | unknown                     |
| A4   | <b>Styles, graphics, and layout</b><br>Design of websites/webpages conforms to the current corporate web style (ref). This includes; <ul style="list-style-type: none"><li>• All style and formatting is done through the use of Cascading Style Sheets.</li><li>• All pages comply with the Corporate Web Style guidelines.</li><li>• In the case of 'Web Applications' appropriate 'grading' has been applied.</li></ul> ( <a href="http://intranet.ecu.edu.au/staff/centres/marketing-and-communications-services/our-services/managing-web-content/our-styles-and-templates">http://intranet.ecu.edu.au/staff/centres/marketing-and-communications-services/our-services/managing-web-content/our-styles-and-templates</a> ) | pass                        |
| A5   | <b>Hyperlinks</b> <ul style="list-style-type: none"><li>• All hyperlinks internal to the website are relative, not absolute.</li><li>• All hyperlinks are tested for broken links.</li></ul>   | pass                        |

|           |   |                    |
|-----------|---|--------------------|
| <b>A6</b> | <b>Browser compatibility</b><br>The website is compatible with the following base set of browsers: <ul style="list-style-type: none"> <li>• Microsoft Internet Explorer 8+</li> <li>• Mozilla Firefox 3.6.8+</li> <li>• Apple Safari 5+</li> <li>• internet explorer</li> </ul> | Pass except safari |
| <b>A7</b> | <b>Navigation aids</b><br>The website/webpage should provide alternative navigation aids such as;<br>(breadcrumbs, navigation footers, skip to the content, back to top)  | pass               |
| <b>A8</b> | <b>Media independence</b><br>Are all hyperlinks worded in a media independent way and include appropriate "title"?<br>(text descriptive and embedded, rather than the typical "click here")   | pass               |
| <b>A9</b> | <b>Client side scripting</b><br>No essential information of the website/webpage requires client side scripting.   | pass               |

## PART B: WEB-BASED CONTENT

All web developers will need to verify all the elements identified in this part regardless of whether the web content is implemented in the WebCMS or not.

| <b>Item</b> | <b>Issues</b><br><i>Description / Test to be applied</i>   | <b>Met criteria</b><br><b>Pass / Fail</b> |
|-------------|--|---|
| <b>B1</b>   | <b>Spelling, Grammar, Punctuation</b><br>All content, including any titles, headers, menus, links, has been checked for spelling, grammar and punctuation. <i>(It is preferable for this to be done by someone other than the webpage creator.)</i>  | pass                                      |
| <b>B2</b>   | <b>Rich Media</b><br>If the web site contains any elements, such as Flash, Video, Audio, and DHTML: <ul style="list-style-type: none"> <li>• Alternative media types been supplied for those without correct plug-ins? (Such as plain-text alternatives, transcripts of spoken word).</li> <li>• Links are provided for downloading the correct plug-in.</li> </ul>  | pass                                      |
| <b>B3</b>   | <b>Dynamic Content</b><br>If the website derives any of its content from a dynamic source outside of ECU, such as a database: <ul style="list-style-type: none"> <li>• The dynamic source been tested thoroughly to ensure it functions correctly.</li> <li>• The security of the database, and its hosting been approved by ITSC.</li> <li>• If the dynamic source contains sensitive data it should be encrypted.</li> <li>• The website/webpage "fails gracefully" when the source is unavailable (standard system error messages are not acceptable).</li> </ul> | unknown                                   |

|           |  |         |
|-----------|--|---------|
| <b>B4</b> | <b>Dynamic Applications</b><br>If the website uses any Web 2.0 dynamic elements: <ul style="list-style-type: none"><li>• The dynamic application been developed using progressive enhancement.</li><li>• The website operates without the enabling technology.</li><li>• The visitor is able to select whether or not to use the enhanced functionality.</li></ul> | unknown |
|-----------|--|---------|



|           |  |         |
|-----------|--|---------|
| <b>B5</b> | <b>Viruses</b><br>All files, including Microsoft Word, and PDF documents have been scanned for viruses prior to being placed on the web. | unknown |
|-----------|--|---------|

**PART C – ACCESSIBILITY** (All ECU websites/webpages are expected to obtain a minimum W3C Web Content Accessibility Guidelines 2.0 Level AA conformance).

If the website is managed through the WebCMS, most of the requirements are automatically managed, with only a subset of critical guidelines shown below. Otherwise web developers will need to verify all the required elements that form the WCAG 2.0 Level AA conformance. Guidelines available online at <http://www.w3.org/TR/WCAG20/>

| Item      | <b>Issues</b><br><i>Description / Test to be applied</i>  | <b>Met criteria</b><br><b>Pass / Fail</b> |
|-----------|---|---|
| <b>C1</b> | Guideline: 1<br><b>Equivalent alternatives to auditory and visual content are provided.</b> <ul style="list-style-type: none"> <li>All non-text elements, such as images (including buttons, spacers) have meaningful alternative “alt”, or long description (longdesc) text.</li> <li>Rich media elements have meaningful alternatives presented.</li> </ul>   | pass                                      |
| <b>C2</b> | Guideline: 2<br><b>Don't rely on colour alone.</b> <ul style="list-style-type: none"> <li>Where information is conveyed with colour, it is also provided without colour.</li> <li>Foreground and background colour combination provides sufficient contrast for both images and text.</li> </ul>  | pass                                      |
| <b>C3</b> | Guideline: 3<br><b>Use markup and style sheets and do so properly.</b> <ul style="list-style-type: none"> <li>Use markup rather than images to convey information.</li> <li>Relative, rather than absolute, measurements for property values are used, such as DIVS, FONTS, PADDING, MARGINS.</li> <li>Header elements are used to convey document structure, such as H1, H2</li> <li>Correctly markup quotations.</li> <li>List elements are used for generating lists, such as UL, OL, LI.</li> </ul> | pass                                      |
| <b>C4</b> | Guideline: 4<br><b>Clarify natural language usage.</b> <ul style="list-style-type: none"> <li>Abbreviations and/or acronyms are expanded.</li> </ul>  | pass                                      |
| <b>C5</b> | Guideline: 5<br><b>Tables that transform gracefully.</b> <ul style="list-style-type: none"> <li>CSS positioning rather than tables are used for layout.</li> <li>Table elements are used describe table structure, such as TH, CAPTION, SUMMARY.</li> </ul>   | pass                                      |
| <b>C6</b> | Guideline: 6<br><b>Pages featuring new technologies transform gracefully.</b> <ul style="list-style-type: none"> <li>Page content is ordered and structured in a way that it can be ready with any</li> </ul>   | pass                                      |

associated style sheets turned off, or not supported by the browser, such as Lynx.

- Equivalents for dynamic elements are available and updated concurrently.
- Page content is usable when scripting and dynamic applications are turned off, or not supported by the browser.
- For dynamic elements, event handlers are input-device independent, not to include handles such as MOUSE-UP, MOUSE-DOWN, MOUSE-OVER

### **GIT workflow**

For the git workflow we use the idea easily explained in the following documentation:

<https://rogerdudler.github.io/git-guide/>

In the present work since there is only one contributor, only a master branch was used. No other branches were created as the edition was done directly in the visual editor.

### **Tools documentation**

HTML5:

<https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/HTML5>

CSS:

<https://developer.mozilla.org/en-US/docs/Web/CSS/Reference>

Bootstrap4:

<https://getbootstrap.com/docs/4.0/getting-started/introduction/>

Javascript:

<https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference>

JQuery:

<https://jquery.com/>

Ajax:

<https://api.jquery.com/jquery.ajax/>

### **Tests**

The website works smoothly on all the browsers

### **SEO audits**

On each html page audits were done to check SEO optimization and following are the results:



Performance



Best  
Practices



SEO