PROJECT MANAGEMENT PLAN
ITC601

Henry Sly, Jayekib Den-Dulk, Holly Johnston, Ben King

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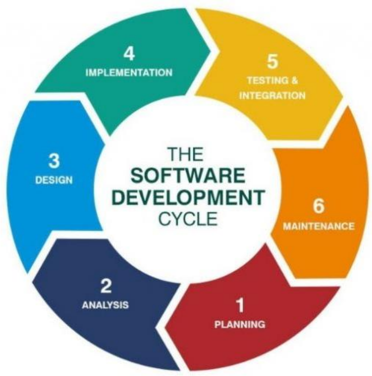
Introduction

For this project, we have been approached by Lynette Jack, a local business operator who operates personalised guided tours of Invercargill and the Southland Region. She has been running her business for 26 years and throughout those years has not had much of an online presence (only being mentioned on third-party websites). For this project, Lynette has approached WebTech to create a business website which promotes and provides details of her tours, as well as to create a business Instagram and Facebook Account allowing her to promote her business on Social Media, as well as a Trip Advisor allowing guests to leave reviews. Throughout this project we have used an Agile Project Management Approach, using an online board (Trello) to assign tasks and communicate to each member of the team, as well as to monitor progress.

Project Management Approach

Project Methodology

For this project, WebTech will be taking an overall Agile approach to work production. We have chosen to use an Agile approach with how it allows us to follow a clear and specific path, as shown in the flowchart to the right. It allows us to adapt to any incoming project changes and maintain a steady workflow throughout the project. This will be delaminated by the completed works produced by the group, wherein we will alter their immediate tasks/roles and continue working to maintain a strong work output.



Roles and Tasks will be assigned based on the speciality/skillset of each team member. For instance, one team member could primarily handle management, communication, and documentation, while another team member will focus primarily on the website's design and production. This will enable the team to play to their strengths and increase overall quality and productivity.

Trello

To ensure that we follow an Agile approach we will be using Trello, a Kanban-style board to assign tasks to each team member. By using Agile we can setup Roles for each task – assigning these to everyone in WebTech. Trello allows us to split these tasks into cards, which can then be put into different lists in the Board (We have used Other, Things to Do, Doing & Done lists) easily allowing us to see what hasn't been started, is being worked on currently, and has been done. The other list will be used to allow us to add additional information, such as our project plan-of-attack which doesn't fit under the other lists.

Using Trello this allows each member of the team to easily see their assigned tasks, as well as what other team members are working on (and have been completed), keeping everyone in the loop. Trello has Desktop (Windows 10/macOS) applications, as well as mobile device apps (Android/IOS), and a web app (can be viewed in any HTML5 Web Browser) which means that it is easily accessible to all team members on WebTech, whether is by accessing it on their phone or computer (or SIT Surface).

Trello also allows us to include Powerups, which we will incorporate into our Project Management of the Project. One of the Trello Powerups we have used is the Team Gantt Plugin which allows a Gantt Chart to be automatically created from our Trello Cards, easily allowing us to see our progress through its bars. Our Gantt Chart is included in Appendix 1.

Another Trello Powerup we have used is the Google Drive Plugin, allowing us to easily link files from our shared Google Drive Folders to Tasks – allowing us to easily access them by clicking on the files and see how the team members are going with their assigned tasks. We have split up and set deadlines for each area of the Software Development Life Cycle as seen in the next section.

Software Development Lifecycle Breakdown

Process	Dates	Work Done
Planning	9th - 15th July	Meet with Lynette to discuss needs and Scope Areas of the project assigned to each Team Member
Analysis	15th - 29th July	Needs & Business Analysis Document Created Project & Feasibility & Needs Priority Report Created Project Scope Document Created
Design	30th July - 19th August	Decide on a Colour Palette Website Site Map Created Draft & Final Wireframes Photos and Posts planned for Facebook & Instagram Obtain the sources for Lynette's Photos she provided
Implementation	1st August – 4 October	Research and Decide on Webhost and Domain Controller Creation of Website Creation of Facebook Account Creation of Instagram Account Creation of TripAdvisor Account
Testing & Integration	4th – 14th October	Testing of Website to ensure no Dead Links Embedding Facebook/Instagram/TripAdvisor Plugins onto the Website Ensuring that the Website URL is on the Facebook/Instagram/TripAdvisor
Maintenance	14th October – 25th October	Creation of Facebook Instruction Booklet for Lynette Creation of Instagram Instruction Booklet for Lynette Creation of Website Instruction Booklet for Lynette Creation of TripAdvisor Instruction Booklet for Lynette *Instruction Booklets will be created alongside the Website/Facebook/Website/TripAdvisor creation* *Transfer of Website/Facebook/Instagram/TripAdvisor*

By splitting up this project into the above processes within the SDLC, as well as setting clear milestones this will allow us to keep track of our progress, as well as to communicate throughout the project to each other how well we are performing.

Roles and Responsibilities

Each person has been assigned tasks throughout the project which suit their strengths, increasing overall quality and productivity as seen in the table on the next page.

<table>
<tr><th>Team Member</th><th>Responsibilities</th></tr>
<tr><td>Ben King</td><td>Creation of Facebook & Instagram Pages and helping with the Documentation.
Helping with the implementation of a Kanban Board & using a Gantt Chart (due to previous experience)
Creation of Documentation alongside Henry
Creation of Facebook/Instagram Instruction Manual</td></tr>
<tr><td>Jayekib Den-Dulk</td><td>Creation and Development of Website Wireframes
Coding of Website.
Creation of Trip Advisor Account</td></tr>
<tr><td>Henry Sly</td><td>Project Manager – Help Organise Team Members.
Check in with Team Members.
Keep in Contact with Lynette (client).
Creation of the Documentation alongside Ben.
Help all round in General</td></tr>
<tr><td>Holly Johnston</td><td>Creation and Development of the Website Colour Palette.
Research of Website Hosting and Domain Controller
Coding of Website
Testing of Website
Creation of Website Instruction Manual</td></tr>
<tr><td colspan="2" align="center">All Members help to contribute with the Documentation when required.

Henry will manage Contact and Communication with Lynette to prevent miss-communication

Each Member will create the instruction manual for their assigned piece (as shown above)</td></tr>
</table>

Identified Project Barriers

Workload Management

One of the main barriers when working on this project will be the external workload that the team will have to complete outside of the project. As full-time students with employment, there will be a heavy conflict of interest in choosing work to be completed on the project, or with other subjects.

Time/Work Management

There will be a finite amount of time to work on the project. This will compound the issues faced by the team considering their external commitments, as these too are time-sensitive. This means the team will have to juggle their commitments to the project with the finite amount of time they have, increasing the difficulty of the project.

Expendable Income

As fulltime students, the team is unlikely to have the spare resources required to pay for additional project resources out of pocket. Furthermore, some team members may need to prioritize their external work commitments over project work in order to support themselves.

Project Work Experience

While the team has coordinated with one another on team projects and assignments in the past, some team members may not have had experience in working on a formal project of this scope. This will make working on the project more difficult and will lengthen the amount of time for the team to adjust to the full weight of the project.

Team Wellbeing

An extended workload, alongside the project barriers stated above, will increase the amount of pressure that each team member is placed under. As the team is comprised of individuals who adjust to stress in a variety of different ways, there will be a hard-line limit to the amount of work that each team member will be able to take on.

Limitations and Constraints

Deadlines and Time Constraints

At our first meeting with Lynette, she informed WebTech that there were no deadlines or Time Constraints imposed from her, however, she did acknowledge that because WebTech was consisted and made up of SIT Students, we would have deadlines and time constraints opposed upon us from the Southern Institute of Technology (SIT).

One of the Time Constraints that we encountered was that the entire project needed to be completed within Semester 2 of the SIT Academic Year of 2019. This meant that we needed to have started and completed the Project within 8th July 2019 – 8th November however due to the time constraints of ITC601 we needed to try to have as most of the project done by the 31st October 2019 due to how this is the scheduled date of our group presentation.

Another time constraint is that OpenHost, our chosen hosting provider only provides a trial period for 14 days, which would be imposed on us and affect us with how we needed to ensure that our creation of Lynette's website was performed within this trial period so she knew what she would be getting before entering her payment details in.

Team Skillsets

The WebTech team is composed of second-year tertiary students studying towards a New Zealand Bachelor's degree in Information Technology. Despite all of us having studied basic web design in their first year, we have yet to cover any advanced use of PHP and back-end programming for the web.

The website will, therefore, be confined to the use of Bootstrap and JavaScript, remaining a static website as this is more applicable to the team's overall knowledge-base and Lynette's needs. While Lynette herself only wants a simple website design, this will prove to be an additional limitation that will confine the team to the simple features required for the project.

Client Skillsets

Lynette has identified that she is not as adept with technological subjects as our team currently is. This means that her technological skillset must be taken into consideration when producing the website and means that the scope of the overall site is limited as we will need to ensure that Lynette is comfortable with managing and utilising the website after the project's completion.

Financial Availability

The Southern Institute of Technology (SIT) who are currently preceding over WebTech's development project for Lynette has laid out some guidelines for the team to follow with regards to the involvement of finances in our project. When dealing with monetary costs, money is not allowed to transfer hands between the team and the client.

This procedural constraint means that the acquisition of project resources such as domains and hosting schemes has been delayed and introduces another step into the process. We will need to consider being present to walk Lynette through the acquisition process to ensure that she is comfortable with the decisions being made and to ensure that the process is transparent while meeting SIT's procedural guidelines.

Team and Client Availability

Team and client availability are other important factors to consider. Most of the team members work 20 hours and upwards per week on top of their full-time studies. Lynette is also currently engaged with full-time employment and this may constrain the times that team members and the client are available to meet up together at any given time. There is also a risk that one or more team members end up sick which will decrease this availability further (as discussed in the Risk Analysis section further in this document).

Physical Hosting Platforms

The financial and labour cost of hosting the website on a physical computer/server under Lynette's ownership may render this option infeasible for both the team and Lynette. Because of the financial cost associated with procurement, installation, and ongoing maintenance of a web server, in addition to the necessitation of the strong internet speeds required to handle web traffic, the capacity for our team to establish a physical hosting solution for Lynette is off the table. We are therefore limited to the use of an established Internet Hosting Service to host Lynette's website.

Hosting Services

Some hosting constraints that we had were that with WordPress as our original site hosting service we couldn't create the type of site we envisioned without costing our client extra for a yearly service. To get around this we looked around at other sites that could be used for web hosting before we chose OpenHost. As OpenHost is a New Zealand site with many reputable clients using their web hosting services we felt that they were a good fit for our client as we could create the site in the way that we felt would be best for the client for it to be easy for her to use and we were able to design the site to fit in with her branding in the best way.

Domain Availability

The number of available domains for purchase may impose a resource constraint on the project. Their unique nature (i.e. there can only be one of that domain name for sale/use) may mean many relevant domain names that would have otherwise been the first choice could be taken.

Scope Constraints

The team will not be creating work outside of the scope that is defined in the Project Scope. Because Lynette has yet to nail down a specific vision of what she wants her website to be like this is a self-imposed limitation intended to reduce the amount of scope-creep faced over the course of the project. Project resources used outside of the project's scope will need to be brought back in line with the scope or dropped to ensure that resources are being used to complete relevant and vital work.

Project Scope

Our team has been tasked with creating a website for Lynette Jack, manager of the company Scenic sights. The website will be limited to a static website for general use and will not include many advanced back-end features to keep the website simple for Lynette. There will be no management or handling of data and information other than potentially sending client emails from the website to Lynette directly.

The scope of the project also includes the tangential creation and management of Lynette's social media presence. This includes the establishment and tidying of her Facebook, TripAdvisor, and Instagram accounts. The scope of this management is currently open ended; however, this will be kept to these accounts.

Management of Lynette's social media and support of the website after the assessment deadline will not be included in the scope of the project. Any voluntary assistance for Lynette after the assessment deadline will not be a part of the marked criteria for the project and is not going to be considered as part of the project scope.

The creation of manuals and walkthroughs for Lynette within the timeframe of the project will be included in the scope, however, as this will enable Lynette to make the most of the product she has been presented with at the end of the project's completion. These instructions will be purely focussed on the final products themselves, such as showing Lynette how to best manage her social media accounts herself and to edit and maintain her website. Instructions on aspects tangential to the project, such as tutorials on marketing through social media and HTML coding will fall out of scope to this project as this will soak up time and divert resources from the website and social media production which is this project's focus.

Business and Needs Analysis

Existing Online Presence and Practices

Scenic Sights is a small, independent tourism company, owned and managed by Lynette Jack. Lynette started the company in 1993, and she is now looking to expand her online presence to improve her social exposure. Lynette currently has a personal Facebook account, which she uses currently to advertise and share her business with people, however, this is limited with how only her Friends (or Friends of Friends) can view it, not allowing potential customers of her business to see it.

She also has information about her business spread across several third-party tourism websites, which results in her not currently having a consolidated place for information, and she would like a website that can be easily found and navigated by users, and that can entice users to use her service.

Lynette currently accepts contracts through direct correspondents and does not feel she has the customer-base to warrant the employment of a fully dedicated data structure. She notes that she currently has around one tour per week on average (in the summer). However, this does change depending on the current season, with periods during the Winter where she might not have any tours commencing due to the reduced tourist numbers in Invercargill.

Needs and Wants Expressed during the Interview

During the interview with Lynette on the 23rd of July 2019 at 10:00 am, Lynette produced several resources, including image assets and brochures that she would like emulated and integrated with the website design, that she has used for several years while the business has been running.

She has set up a Gmail account for personal use and has expressed that she would like her Business Facebook account separated between her personal Facebook account where possible (using her Gmail account) and private (using her scenic.sights@xtra.co.nz account).

Lynette has also expressed her desire to expand her social media presence, by incorporating a Facebook Page which links to an Instagram account (Images provided) as well as a TripAdvisor account (testimonials provided), like how other companies are utilising technology and the internet in the present day. She would like clear and accessible links to these sites within her website.

Due to the way she accepts clients, Lynette feels that clear and accessible contact information is non-negotiable and that she would benefit highly from the use of an online email form for customers to make quick and easy bookings. This would allow her to get booking emails and responses that better enable her to create their booking (including information such as the client details, booking date/time, number of people in the group, etc.), and reduce the risk of miscommunication.

The way Lynette advertises her company is very personality-driven and is often tailored to the needs of the individual customer. She would like her website to reflect this "friendly, personally-oriented" business approach in her website's design.

Being her own employer, Lynette often hires out certain vehicles to match the numbers and needs of the customer on each tour. Her business information reflects that tourists in the southland region find it more enjoyable to have a tour guide to manage the trip for them as opposed to self-managing their trip, which involves navigation, driving, resource management, etc. She would like this to be a to be conveyed the message and advertising component for the website, with the main message of how convenient and relaxing her guided tours are being prominent and visible.

Primary Requirements and Features

Aesthetic must conform to current branding and company designs, as well as being accessible to all users.

Lynette has notified us that the image assets she has provided us also contain some images that were obtained from Google-Images. This means that the legal usage of the assets provided may need to be explored before implementation.

Social media and TripAdvisor links must be included, and if possible, linking them so the user can easily Like, Follow or Rate on TripAdvisor from her website and other social media pages.

This feature will be relatively easy to implement and can be done so without monetary cost. Although Lynette has requested this as a primary requirement, the implementation of this feature is dependent on the established social media accounts and a functioning website prototype. This means that while it is more than feasible to do so, we will need to integrate social media interaction later during development once a web-prototype and accounts are created.

The ability to maintain it easily once WebTech has set it up for her. This can be done by providing clear and coherent documentation, with step-to-step guides and one-on-one training for Lynette once the website is up and running.

This requirement is heavily emphasised as a project requirement. Although it will extend the time-cost of our development, the use of clear and concise website documentation and accessible, easy-to-use maintenance methods is a necessity to the longevity of the project.

The creation of tutorials and training for Lynette may fall a little out of scope for the project as it is however and will need to take a back-seat to the formal development of the website for some time. This may be reconsidered further into development as more time and resources are freed up for use, however, the last half of this requirement is at this time infeasible.

Attractions Page(s) with full cost and tour information with the possibility of each tour having its own Tour Page clearly showing the routes, pricing images etc.

The ability to condense the tour information Lynette has provided us on a single page is more than viable and can be easily done during the development of the website. Creating individual pages for the tours with additional/tailored information can also be done, however, it requires an additional amount of time. Despite how easy these pages will be to develop; these may be the last pages we develop as we dedicate our initial development to the rest of the website structure.

Cheap/Free hosting

This requirement should be relatively feasible due to the number of options that are open to us, such as the use of online resources like Weebly and WordPress. Lynette has however identified that she would like her own domain for the website and may make this requirement more difficult by attaching a monetary aspect that was not previously there. More discussion with Lynette will be required.

Accessibility from basic web searches with appropriate meta-data

Due to the online search popularity, Lynette has accumulated through third party websites, the use of appropriate meta-data and web documentation should make this requirement relatively viable. However, testing time and a viable hosting method will be required before the effectiveness of this can be determined.

Reliable and stable with little to no down time

This requirement will be tied in closely with the Cheap/Free Hosting requirement. By limiting the cost of hosting we, unfortunately, limit the hosting performance and reliability. We will need to explore further options to maximise hosting stability with the limited resources that are available to us at this current time.

Optional Requirements and Identified Improvement Features

Attractions page can utilize a scrolling design with anchored links to maximise space with provided assets and information

This can be done fluidly throughout development with very little time/labour cost, however, implementation of this will be determined by the ultimate design direction of the website.

Social media can be interlinked to auto-post (I.e. take full advantage of Facebook's and Instagram's features)

This may take some finesse to set up properly, requiring some amount of labour however, it will ultimately make Lynette's use of social media platforms more fluid and more convenient. The deciding factor for feasibility and implementation, however, will be the amount of left-over time available to us after the initial set up of Lynette's social media vs the perceived time taken to set this up. The functionality of the Social Media Websites will also play a factor within this requirement, as it will only be possible to achieve this specification if social media platforms support this feature.

Image assets can be consolidated in a Gallery page for easy access

As mentioned before, the image assets Lynette provided us contain some images that were obtained from Google-Images, and the legal usage of the assets provided may need to be explored before implementation.

A specific webpage with all the pricing on a single page for comparing tours side by side.

Our team can implement this easily using tables that consume little skill/labour resources despite their "grindy" time-consumption. This is very feasible with little cost.

Take full utilisation of google-map features for conveying user friendly information, such as custom maps with the routes of her guided tours

Google Maps APIs take some skills to implement effectively, however, these maps do not take much time to set up and will provide useful information to the users of the website. This makes this requirement not only somewhat more viable but also more useful.

Milestone List

Below is a list of the main milestones and deliverables for the project. This will act as a step-by-step list of the work that needs to be achieved to create a final product that Lynette will be happy with. The information provided highlights some deliverable milestones that will involve work that can be physically shown to Lynette, to ensuring the project's transparency and providing her with a clear sense of practical progression.

The table below also indicates which milestones have a more negotiable and fluid deadline. These milestones can be delayed as needed to ensure completion in conjunction with any work needed to achieve the next milestone. This way the milestone can be completed at a more casual rate, while still making clear steps towards the final product.

Milestone	Is Deliverable	Description	Date	Negotiable Deadline
Complete Requirements Gathering		All requirements for Lynette's website and social media requirements must be determined to base design upon and inform future decision making.	23/7/19	
Workload Delegation		Work has been divided among team members based on skillset. (I.E: One member to focus on social media, one member to focus on design, one member to focus on development etc.)	30/7/19	
Website Mapping and Content Planning	✓	A site map has been generated and content for each web page has been decided on. *(See Appendix 2)*	7/8/19	
Web Platform Research and Designation		A suitable platform for website design and hosting has been researched decided on. Domain and hosting costs have also been considered.	13/8/19	
Draft Designing and Wireframe Completion	✓	Using the requirements laid out by Lynette, draft designs have been created for her website and are ready for finalisation.	27/8/19	✓
Final Wireframe and Formal Draft Completion	✓	Using the drafted designs and Lynette's feedback and approval, final website designs have been completed. This will both support and delimit the beginning of the development process.	10/9/19	
Social Media Optimization and Organisation Completion	✓	Social media has been optimized and set per Lynette's requirements.	17/9/19	
Additional Account Creation	✓	Additional online/social media accounts specified by Lynette have been created.	24/9/19	✓
Functional Prototype Website Completion	✓	A prototype website has been completed with functioning features in place.	4/10/19	

Functional Website Completion	✓	Using the functional prototype, aesthetic design elements have been fully incorporated into the website.	11/10/19	
Website Testing Completion and Bug Removal	✓	The website has been adequately tested to remove as many errors and bugs as functionally possible.	18/10/19	✓
Hosting and Domain Procurement		Domain and hosting platform have been procured with Lynette. This will delimit the final development stage and final hosting and maintenance phase for the project.	20/10/19	
Hosting and Final Testing Completion	✓	The website is hosted and online and has been tested to ensure functionality and reliability.	24/10/19	
Management Documentation and Maintenance Manuals	✓	Management and maintenance manuals have been produced for Lynette to enable her to manage and upkeep the website after the project's completion.	29/10/19	✓

Highlighted above are some of the major milestones and deliverables for the project, marking key turning points in the project's lifespan. The first requirements milestone is the foremost essential milestone for the project, as this will provide the basis for the team's design decisions throughout the project. The team will need a clear-cut set of requirements and objectives to move towards to ensure that the work produced by the team is relevant and within scope.

Website drafting and social media organisations are intended to be worked on simultaneously throughout the project, with the primary objective being the creation of the website wireframe and design templates. This is because these designs will act as a foundation for the websites overall functional and aesthetic, and why this milestone is due slightly earlier than the fully deliverable social media work. Because of the importance of the social media work to Lynette however, completion of work relevant to this is of vital importance, marking it as a vital milestone alongside the drafts for the website. The simultaneous nature of these two milestones also means that their deadlines are slightly less rigid, as it may become necessary for the progression of the project to dedicate more time and resources to one or the other.

Staff Management Plan

Assigned Roles and Requirements Outline

Below is a report on the roles that will be assigned to each team member, the work that is expected from each role, and the requirements/expectations that team members will be held to while under that role. This will also include a projected outline of the start time and duration of the role assigned to each team member.

Role	Activity	Project Responsibility	Skill Requirements	Team Member	Start Date	End Date
Project Manager	To coordinate and organize the team and coordinate with the client	Team Organization Task and Role Assignment Client and Team Communications Management Project Weekly Updates and Status Reports	Good Communication skills Good Organisation skills	Henry Sly	9th July	30th October
Social Media Manager	Establish and maintain the client's social media accounts	Create Social Media Accounts Optimize Social Media Accounts Maintain Social Media Accounts	Knowledge of Current Social Media Practices Understanding of Social Media Management Features	Ben King	9th July	30th October
Website Designer	Generate wireframes and draft designs for the website	Create Wireframe Drafts for the Website Create Template Prototype Designs Website Asset Selection	Knowledge and Familiarity of Website Design Techniques Knowledge and Familiarity of User Driven Interface Design Practices	Jayekib Den-Dulk	9th July	30th October
Website Researcher/ Developer	Develop and maintain the website and	Create Functional	Familiarity with Web Programming	Holly Johnston	9th July	30th October

	it's hosting methods	Website Prototype Create Functioning Website Research and Establish Hosting Scheme Website Hosting Implementation	Languages (HTML, CSS, JavaScript etc.) Knowledge and Familiarity of Website Design Techniques			
Documentation/ Admin	Manage documentation and administrative tasks	Project Management Plan Formal Documentation (Requirements Analysis, Risk Assessment etc.)	Good Writing and Linguistic Skills Familiarity and Knowledge of Text Editing Software	Henry Sly	9th July	30th October
				Ben King	4th October	30th October

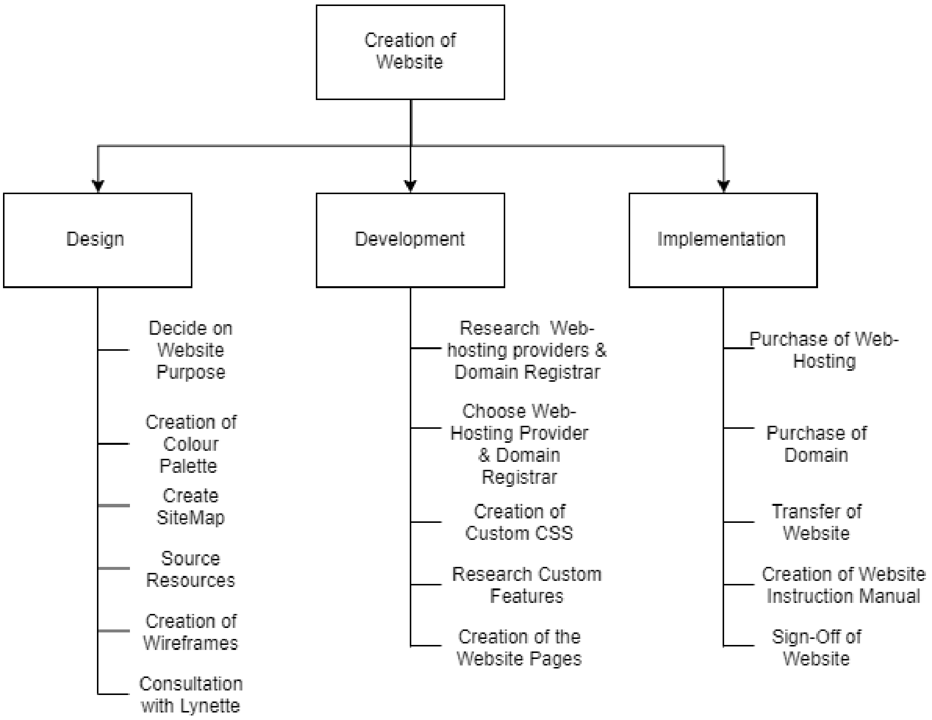
Agile Role Assignment

Roles will be subject to change and adaptation throughout the project as a result of the Agile methodology used to manage the project. The nature of our agile development approach means that staff management will be less rigid, meaning that role confinement will not be a major factor in managing staff throughout the project's lifespan, and staff will mainly be managed as needed, based on the tasks at any given stage in the project.

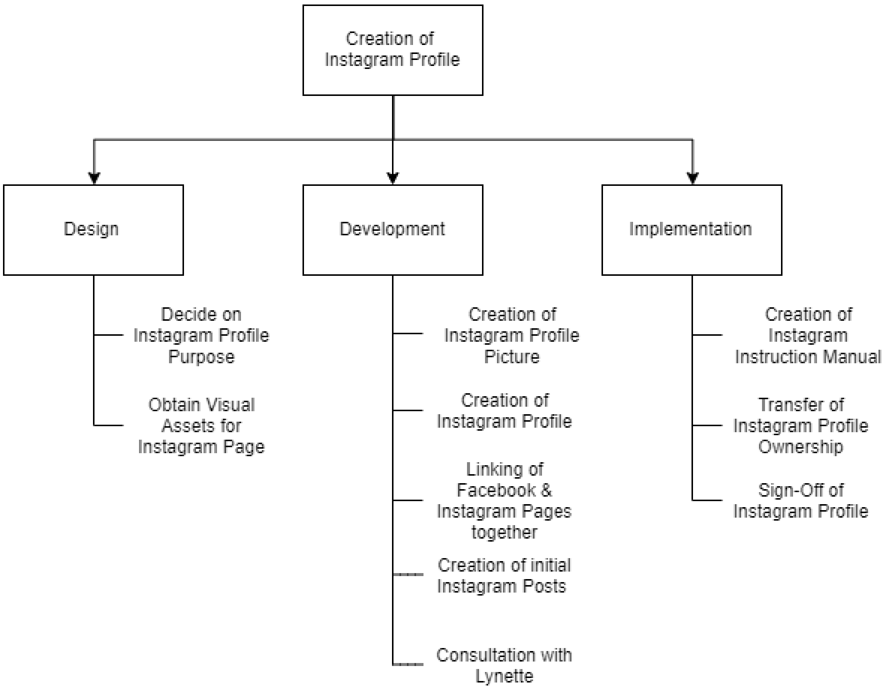
Schedule Baseline and Work Breakdown structure

Work Breakdown Structure

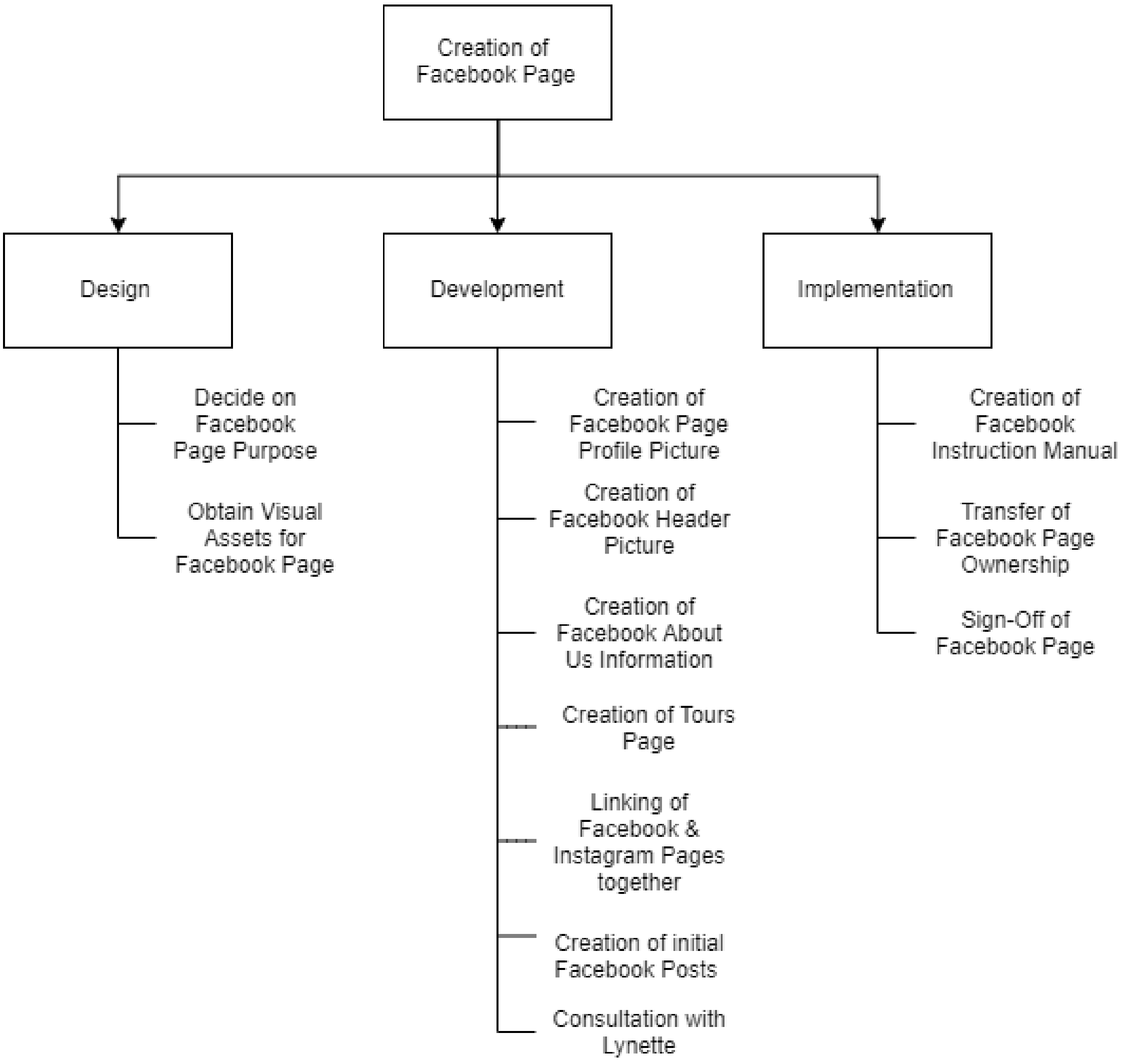
Website



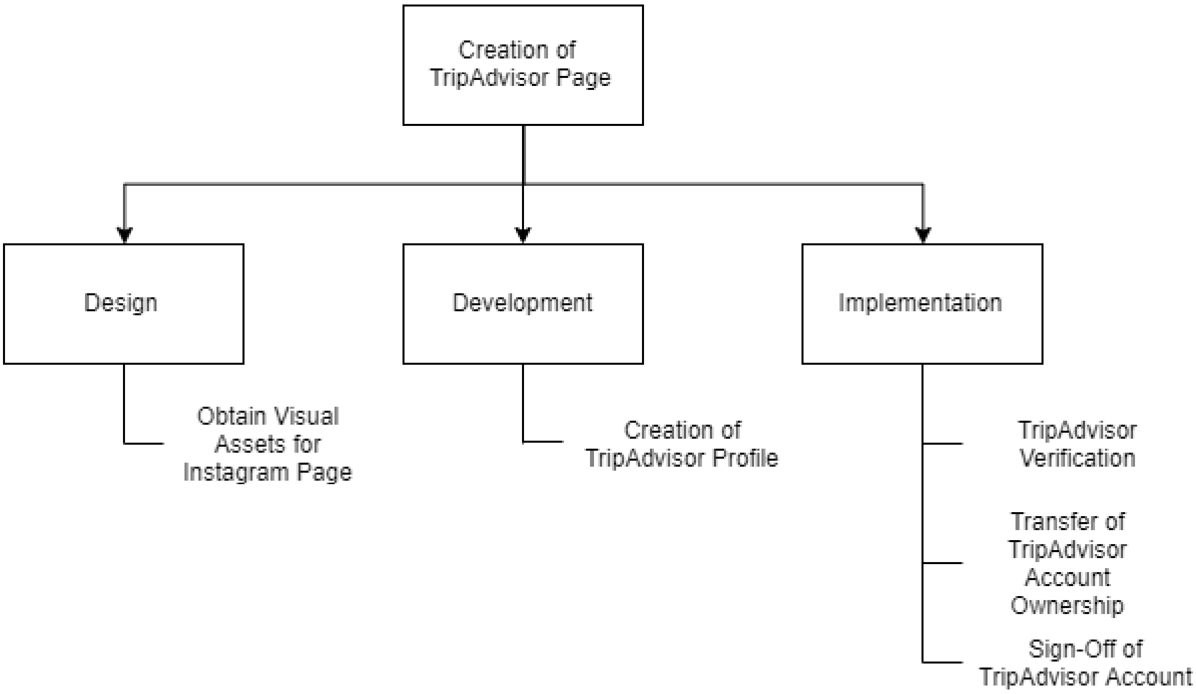
Instagram



Facebook



TripAdvisor



Major Work Packages

As outlined in the WBS, there are several work packages that will be worked on by the team throughout the project. Below are some of the more vital work packages involved in the project, and a brief outline of the package and its importance.

Creation of the Wireframes

The creation of the website is the foremost focus of the project. Therefore, the production and completion of a functioning website is of vital importance to the project. In order to complete this acceptance criteria, the design and template for the website must be completed.

Creation of Social Media Accounts

The creation and management of Lynette's social media accounts have also been detailed as a vital acceptance criterion for the project. This will involve the creation of and Instagram account for Lynette, and the splitting of her current Facebook account between her personal and professional account.

Creation of the Website

Being the focus for the project and the main acceptance criteria, the final creation of the website is the goal of the project. This work package includes the development and finalization of the website throughout all its stages, from its initial structuring to its final bug testing and design completion.

Transfer of the Website

This work package involves transferring the completed website to the selected hosting platform and linking that website to the domain that Lynette has selected. This is one of the final work packages that will occur on the project in conjunction with the account transfers discussed below, and will involve procurement off hosting and domain services, transfer of the website and its assets, pairing the domain's DNS information with the hosting platform, and getting the website online and operational.

Transfer of Accounts

Alongside the transfer of the website, the team will transfer the social media, hosting, and domain accounts to Lynette. She will be given personal access to the account's and the passwords to those accounts will be changed to one of her choosing. Once these accounts have been handed over, this will be taken as an indication that the team no longer requires access to them for completion of the website.

Creation of Instruction Manuals

The final work package will include the creation and handing over of user manuals for Lynette. These manuals will include instructions on how to update and maintain her social media and website and will go into depth with assisting her understanding user settings and maintenance practices. This will ensure that Lynette is fully equipped to make full use of her website and social media after the completion of the project, after which time the team will no longer be formally required to provide support for the content produced.

Change Management Plan

Due to the Agile nature of the project, changes to the project and its requirements are to be expected. The process involved in adopting or refusing these changes will determine how the project will mutate throughout its lifespan.

Determine Type of Change

The first step in this procedure is to determine the type of change that will occur to the project. This will help to inform how best to proceed with undergoing the project change and assist in streamlining the change's implementation while limiting disruption to the project. Below are some expected changes and how best to proceed.

For Requirement Changes

As stated above, changes to the requirements and specifications of the project are to be expected. These will come as the project progresses, with requirements being changed, elaborated on, and rescinded. This can be both at the discretion of the client as they flesh out what they want to get from the project, or through deliberation with the team as requirement and specification viability becomes more apparent.

Proposal and Change Introduction

The first step in the process is to look at the change that is being proposed, either by the client or the team as this will inform our decision making throughout the remainder of the process. This means taking a clear look at the change proposed, preferably through direct communication to ensure that there is no miscommunication as to the change that is to be made.

This includes taking an in-depth look as to why the change is being proposed. If the client is asking for the change, the team must understand what is driving their decision making as this can be used to ensure that any changes implemented will be concisely tied to what the client wants from the project. If the team requests a change to the specifications, however, the focus will be more centred on why the team feels that they cannot meet the specification, and determining what barriers are leading to this change request.

Impact Analysis

Once there is enough understanding of the change request and the motivation behind the request, the impact that this change will have on the project will need to be considered. The first component to consider is how the existing project will be impacted by the change. I.e. How the requested change will impact the existing procedures and completed work of the project and looking at whether the change will cause significant harm to the existing project infrastructure or force an overwhelming amount of existing work to be reworked.

The first thing that will be considered is the impact on the project's scope overall. If the change request pushes the scope too far out of the bounds set by the initial project for instance, then it may be worth reconsidering its implementation. E.g.: Setting up a wired network for Lynette in her office is incredibly out of scope and would not be accepted for implemented in the project.

The impact of the proposed change on longevity will also be assessed, and the potential long-term effects of implementing the change will be considered to determine how best to proceed with implementation. This will also assist in the mitigation of potential issues caused by implementing the change later into the project's lifespan.

Finally, we will look at the potential impact on the project's established roles and infrastructure. We will determine if there will any resistance to the implementation of any changes from the team, client, or infrastructure, all of which will determine how best to proceed. It is also in the team's best interest to look at how the change may interact with established roles, assessing if they will change or mutate as a result.

Implementation

If it has been determined by the team and the client that implementation of the project change is feasible, then the team will proceed with implementing the change. To do so, however, we will need to assess how the change will be functionally introduced into the project. We will do this by looking at when the change will need to be implemented by and weighing it against the resources that need to be delegated to its implementation. Once this has been considered, the proposed change will be fully introduced into the project requirements to be worked and completed.

Communications Management Plan

The team will be communicating with each other continuously using the instant messaging platform offered with the application Discord as needed. This may include any questions, general correspondence, work overview and proofreading, task assignment, planning, and coordination, etc. This will allow the team to coordinate quickly and easily at any available time without the need for each other being physically present.

The application also allows the use of pinned items and addressing specific team members, as well as the ability to assign roles and privileges within the app allowing for more concise and direct communication amongst the team. For instance, the project manager has administrative rights over the Discord server and can communicate with everyone in Role "X" to see their progress and help coordinate their work effort. The ability to share files and links over Discord also means that work and research can be shared directly. This facilitates peer-review using the app and enables faster and more efficient work submission.

The team will also meet in person at least once a week to discuss the project and its progression. This is an opportunity for the team to communicate with one another about assigned tasks, work completion, coordination and planning, next steps, etc.

Communication between the team and Lynette will be carried out primarily through Henry, the project manager to ensure consistent information management. This will also ensure that Lynette is provided information from the team member with the most oversight and general knowledge of the team's total progress, improving the general accuracy of the information that Lynette receives. This messaging will be done via a mixture of email and phone correspondence. Email correspondence will be favoured however, as this will ensure that a greater volume of information communicated will be accurately transcribed and keep a detailed record of correspondence.

The information Lynette receives will consist of project and status updates, as well as any potential feedback or queries that either Lynette or the team has with regards to the project. This is also how Lynette will be contacted to arrange face-to-face communication with her. Lynette and the team will meet up in person to showcase completed work and ask more specific questions about how she feels about the project's progression and overall direction. This will occur at least once every 3-4 weeks at a regular time to ensure that Lynette is receiving full and transparent updates at regular intervals.

Sensitive information handling

Throughout the project, the team will be dealing with a large amount of Lynette's personal information. This includes contact details, account usernames, and passwords. Therefore, it is essential that we follow the rules and procedures listed below to minimize the risk of this information being harmed or compromised:

- Communication with Lynette is limited to communications with the Project Manager and monthly team meet-ups. This is to ensure the limited dispersal of personal information, reducing the potential number of information leaks and reducing the amount of comprisable communication sources.

- None of Lynette's personal information must be disclosed, both externally and internally with other team members, unless it is both vital to the project's progression, and with Lynette's express permission. This is again to reduce the likely number of security risks involved with personal information handling, and to ensure the team follows the NZ Privacy Act (1993)

- All relevant information must be handed back over to Lynette and safely deleted after the completion of the project. This is to ensure that vital information cannot be compromised after the project has been completed.

Changes in Communication

As the project progresses there may be changes in the way the team and client communicate with one another, such as changes in the project's main communication channels and changes to the main communication procedures.

Negative Communication Changes may occur throughout the project and is a risk that can have severe negative impact on the team's performance. There are risks that can induce these changes within the project, including the downtime of the team's major communication channels. The team primarily relies on the instant messaging platform offered by Discord for communication, and losing this platform, even temporarily can cause severe issues for the team. To mitigate this risk, the team also has the capacity to communicate via email. This may be a slower option when compared to Discord, however, this would allow the team to coordinate should communication failure occur.

Team availability will also be an important factor to consider as the project progresses. Despite the availability of long-distance messaging utilized by the team, the team will still need to meet regularly to ensure team coordination and asset sharing. This means that the risk of absence may cause a slowdown in the teams work output and temporarily hinder the team's overall effectiveness.

The team's overall synergy and personal relations to one another may also be a strong factor to consider. The project manager will need to take steps to ensure that the team members are working comfortably together, as a breakdown in team cohesiveness would likely cause major delays in productivity, and an overall collapse in the team's capacity for communication.

Positive changes in our team communication is also a distinct plausibility for the team. As the team continues to work on the project for instance, it is expected that the general communication procedures within the team and with the client are expected to become more efficient due to increased familiarity and team synergy. The timespan of the project will also provide additional time to root out communication deficiencies and allow the team room to adjust and refine the way we communicate.

Communication Requirements

Lynette has provided the Project Manager with contact details for her phone and email address. She has also expressed that she has a flexible timetable and can make time to arrange face to face communication as needed. Lynette has not provided specific communications specifications and procedures that she requires for successful communication other than that she prefers the use of email, phone calls, and face-to-face communication as a means of communicating.

Cost Management Plan

Lynette has communicated to us that despite there being a likely monetary cost for the hosting and domain services for her website, there will be no set budget for the project. Instead, she has requested that we try to find medium-low cost solutions for her and defer to her for the final say on any expenses. From there she will either say yes or no to the expense at her discretion.

This means that any available finances must come directly from Lynette through communication between the team and Project Manager. This also means that the team's only concern with regards to budget is ensuring that all expenses are thoroughly Min-Maxed and optimised to make the most of any medium-low cost solutions available.

How Cost is Broken Down and Presented:

To break down any monetary cost for Lynette, the team will present her with several source options offering the resource that needs to be procured. This will provide Lynette with a better understanding of the pricing involved, and what will be acquired as a result of the expense. Lynette will also be walked through the transaction process for all expenses involved with the project to ensure that she has full understanding of the transaction being made.

Resource Procurement Management

At our first Group Meeting Lynette provided us with several visual assets (.jpg) as well as text assets (.doc files) from her business files. Because she has used these visual and text assets previously in her marketing and business documents, we have informed her that we will try and incorporate these onto the website, Facebook, Instagram and TripAdvisor Accounts that we will be creating for her.

With how Lynette has provided these digital assets to WebTech in a Digital Form, to allow each member to access and use these files we have created a Google Drive Shared Folder containing these assets. Other resources will be procured and recorded when the need and relevance to the project arises. For example, a team member may be tasked with creating additional assets for the website such as header images or tables containing information.

All Image Assets will be sourced and referenced on the website if obtained by third-party websites. Lynette has informed us at the first meeting that most of her images that she has used on her existing marketing have been sourced as such, so to abide by Copyright Laws we will obtain sources for these images and reference them where possible.

Money Handling and Resource Acquisition Procedure:

The Southern Institute of Technology is currently overseeing the project for assessment purposes. While the project is still largely independent, SIT has laid out some regulations for general money handling and transactions on the project. This is to ensure that SIT and their students (including the project team) are not put in ethical or legal risk. As a result, we are not allowed to handle any of the client's finances directly.

To acquire resources that require Lynette's financial support, there will be a set procedure in place to ensure the process is transparent and with reduced risk. An open discussion will first be held with Lynette to provide her with as much information about the transaction as possible, allowing her to ask questions and gather knowledge from us at her discretion.

If Lynette is comfortable with the transaction proposed, the team will walk her through the transaction and the process required for the resources acquisition. We will discuss the reason behind each step of the process with Lynette throughout this stage, allowing her to ask any questions for the sake of clarity.

After the transaction process has been completed, the team will then provide Lynette with all available confirmations that the payment has been processed, and the resources have been acquired (E.g. showing Lynette evidence, such as screenshots, of the resource once the team has gained access to it.)

Project Quality Management

The quality of our finished product will be a complete finished website with social media with all the mandatory requirements as specified in our Business and Needs Analysis.

Below are some specific requirements that we must accomplish to have a finished product which the client will be happy with:

Website

The website is fully functional with information about Lynette Jack Scenic Services running on a reliable Webhost with the relevant domain of ljscenicsights.co.nz as chosen by Lynette.

- A Home Screen which greets the user to her Website
- A Tour Page which displays the tours she provides with a brief description and price
- A Gallery Page which displays images from Lynette's Tours
- A Booking Page which contains a Web Form that allows people to easily book tours (which will send an email with their booking request via an email)
- A Contact Page which contains a Web Form that allows people to contact Lynette through her website (but without her contact details to prevent bot-hunting).
- Website Links to the Instagram, Facebook and Trip Advisor Pages that we have created for Lynette
- A Theme of Red with her logo in the heading which utilises the theme of her current business branding

Facebook

- A Fully Functional Facebook Page which features her Logo and information about her business.
- A detailed and easy to follow Instruction Manual of how to use Facebook (for Pages) as well as showing how to update prices and post new posts.

Instagram

- A Fully Functional Instagram Profile which allows customers to look at information about her business and see photos about her business.
- A detailed and easy to follow Instruction Manual of how to use Instagram as well as showing how to update her profile and upload new photos.

Throughout the project, we will be in regular contact with Lynette by email (with Henry as the Project Manager handling all communication) keeping her informed about our progress and arranging regular meetings with her to show off completed progress.

We will also be referring to our Project Requirements as outlined earlier in the Project Management Plan to ensure that we are accomplishing and completing them.

Risk Management Plan

Throughout our project we have identified several risks that are associated with it. These include:

Risks	Risk Owner	Responsibilities
Team Serious Health Issues	All Team Members	- Ensure all work is backed up online so each Team Member can access it.
Client Serious Health Issues	Client & Team Members	- Ensure Regular Communication with the client so if client unavailable we can work around it
Team Member Sickness/Ill	All Team Members	- Ensure Team Member informs other Team Members including Project Manager - Ensure that a Plan is created to catch up on Work Missed
Earthquake	N/A	- Backup Files securely online outside of Invercargill/Southland/New Zealand
Loss of Files	Project Manager	- Implement Backup Procedures - Ensure Team Members are following Backup Procedures
Website goes offline	Team Member in Charge of Development & Project Manager	- Implement Backup Procedures for Website (& Code) - Ensure other website hosting providers have been researched if they need to be used
Content gets uploaded by third parties	Team Member in Charge of Development & Project Manager	- Implement a Secure Password (Mixture of Uppercase & lowercase letters, Special Characters & Numbers) - Store Logon Credentials are stored Securely
Domain Provider goes offline	Team Member in Charge of Development & Project Manager	- Keep Domain Certification Files to proof Ownership of Domain. - Ensure other Domain Providers have been researched if they need to be used

Inability to pay for Hosting/Domain	Project Manager & Client	- Ensure Client is aware of Potential Costs associated with the Project - Investigate Cheaper/Free Hosting/Domain Providers
Behind in Work	All Team Members & Project Manager	- Ensure everyone keeps UpToDate with their work - Implement a Catchup Plan for any missed work - Ensure the Project Manager (Henry) is ensuring team members work on their assigned pieces

Please see Appendix Two for our Risk Identification Matrix and Appendix Three for our Risk Treatment Table.

Overall, we have several risks associated with our Project that could impact on our final finished product. To prevent the probability of these risks from occurring and affecting our project where possible, we have identified them and come up with Risk Mitigations and other approaches to manage them.

Resource Calendar

Below is our Resource Calendar for this Project

Purpose of Resource	Resource	Date Resourced By	Length Required
Website/Social Media	Logo Photos Tours and About Information Contact Details	Meeting with Lynette on 23rd July 2019	Full Project Length (for completion of Project)
Website Setup	Domain Registration (lgscenicsights.co.nz) **– *Requires Client Payment***	20th October 2019	End of Project (for completion of Project)
	Website Hosting with OpenHost **– *Requires Client Payment***	20th October 2019	End of Project (for completion of Project)
Instruction Manuals	Images (Screenshots) Information	17th October 2019	End of Project (for completion of Project)
	Printed Instruction Manuals (through the SIT Printer)	21st October 2019	End of Project (for completion of Project)

Quality Baseline

As a part of the quality management process, the final product must contain a set of specific deliverable requirements that Lynette requires for sign-off and acceptance. By ensuring that our work is completed to these specifications, we will ensure that the work produced contains all the necessary features that are within scope, and Lynette will be happy with it.

Quality Assurance and Regulation

To further ensure that the work produced by our team is well received, there will be a set of additional procedures in place to keep our work to a high standard of quality.

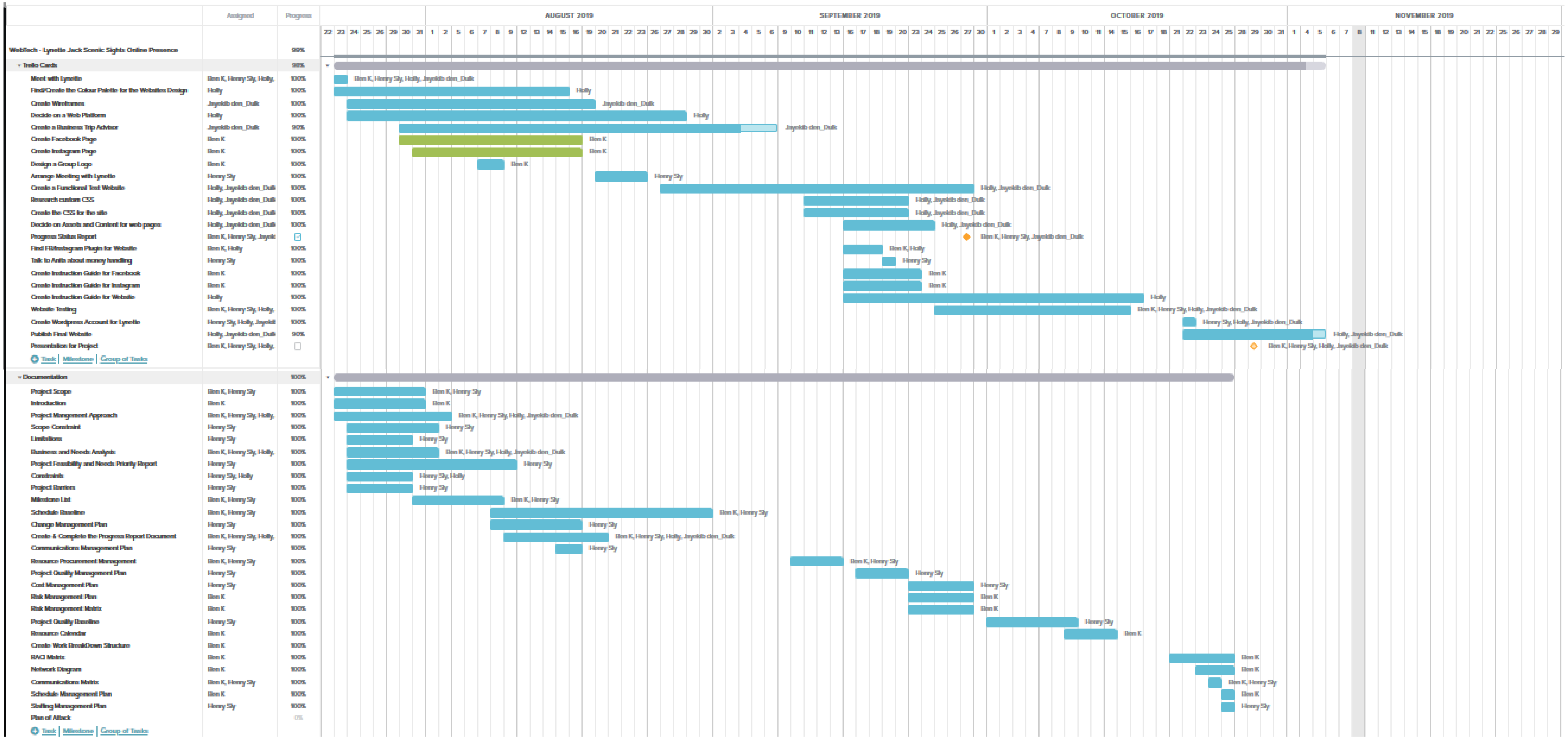
- Regular bug testing and removal must be carried out throughout the development process. Any features that are added or edited must be tested to ensure that the changes made are safe and with minimal faults.
- Any features that are removed must be tested to ensure that this removal will not affect adjacent processes.
- Hosting and domain services need to be thoroughly researched to ensure their trustworthiness and reliability as a hosting platform.
- Documentation and text assets need to be thoroughly checked for spelling and grammatical errors to reduce miscommunication and increase legibility.
- Completed tasks will require the project manager's sign-off
- The final product will require Lynette's sign-off to be considered "complete".

Schedule Management Plan (GANTT CHART)

Throughout the Project we have been using 2 Online Software Packages to schedule and manage the project.

One of these is Trello, which as previously discussed is a Kanban-style board where we assign tasks to each team member, easily allowing each team member to see what has been assigned to them.

We have also used Team Gantt, using the TeamGantt plugin which allows us to create a Gantt Chart, as shown in Appendix Three. This features our tasks from Trello easily sorted in a chronological order. Due to how TeamGantt only supports allowing 3 people using it in a Team in the Free version Holly is unable to see the Gantt Chart, so she has been sent updates of the Gantt Chart regularly. However, we have set up Holly as a Resource on the Gantt Chart so that she can still be assigned tasks on it.



AUGUST 2019
SEPTEMBER 2019
OCTOBER 2019
NOVEMBER 2019
Assigned
Progress
WebTech - Lynette Jack Scenic Sights Online Presence
Trello Cards
Meet with Lynette
Find/Create the Colour Palette for the Websites Design
Create Wireframes
Decide on a Web Platform
Create a Business Trip Advisor
Create Facebook Page
Create Instagram Page
Design a Group Logo
Arrange Meeting with Lynette
Create a Functional Test Website
Research custom CSS
Create the CSS for the site
Decide on Assets and Content for web pages
Progress Status Report
Find FB/Instagram Plugin for Website
Talk to Anita about money handling
Create Instruction Guide for Facebook
Create Instruction Guide for Instagram
Create Instruction Guide for Website
Website Testing
Create Wordpress Account for Lynette
Publish Final Website
Presentation for Project
Task | Milestone | Group of Tasks
Documentation
Project Scope
Introduction
Project Mangement Approach
Scope Constraint
Limitations
Business and Needs Analysis
Project Feasibility and Needs Priority Report
Constraints
Project Barriers
Milestone List
Schedule Baseline
Change Management Plan
Create & Complete the Progress Report Document
Communications Management Plan
Resource Procurement Management
Project Quality Management Plan
Cost Management Plan
Risk Management Plan
Risk Management Matrix
Project Quality Baseline
Resource Calendar
Create Work BreakDown Structure
RACI Matrix
Network Diagram
Communications Matrix
Schedule Management Plan
Staffing Management Plan
Plan of Attack
Task | Milestone | Group of Tasks

Appendixes

Appendix One: Project Feasibility and Needs Priority Report

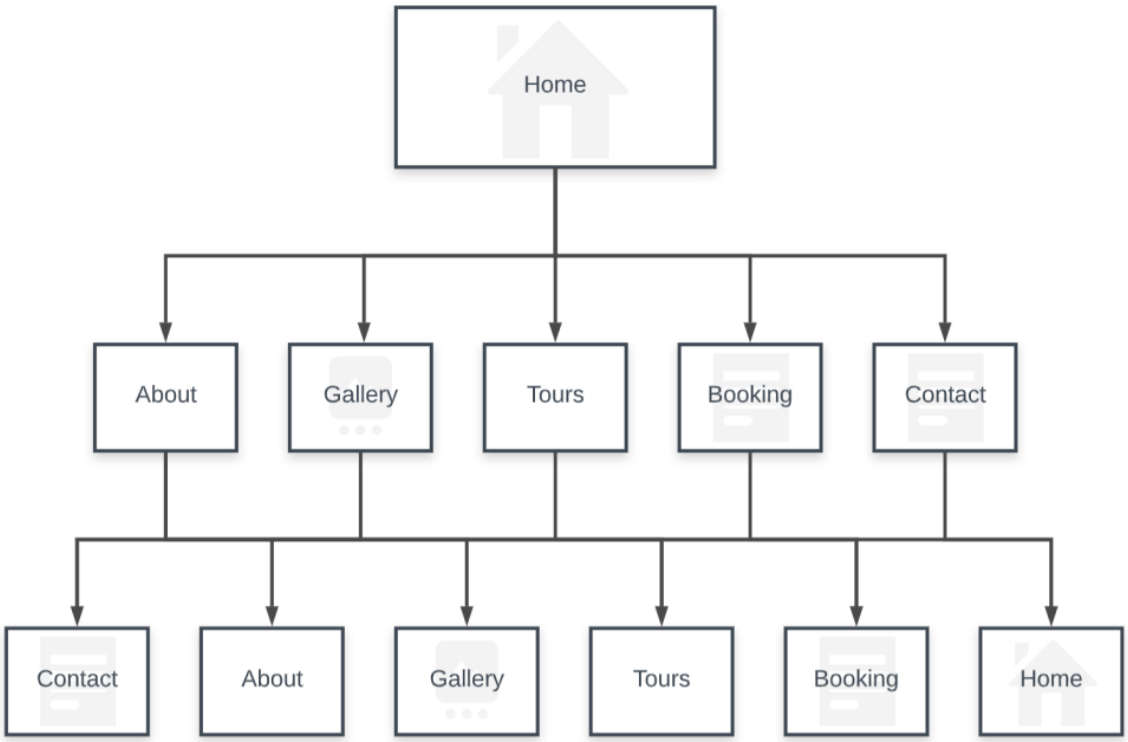
In this section we will discuss the project and its requirements put forward by Lynette, as seen in the Needs and Business Analysis and determine the feasibility of completing the project successfully and to a high standard. This will be determined by several factors including the following:

- Monetary Cost
- Time Requirement
- Skill Requirement
- Project Scope
- The Weight of the Requirement
- Team Member Availability
- Legality

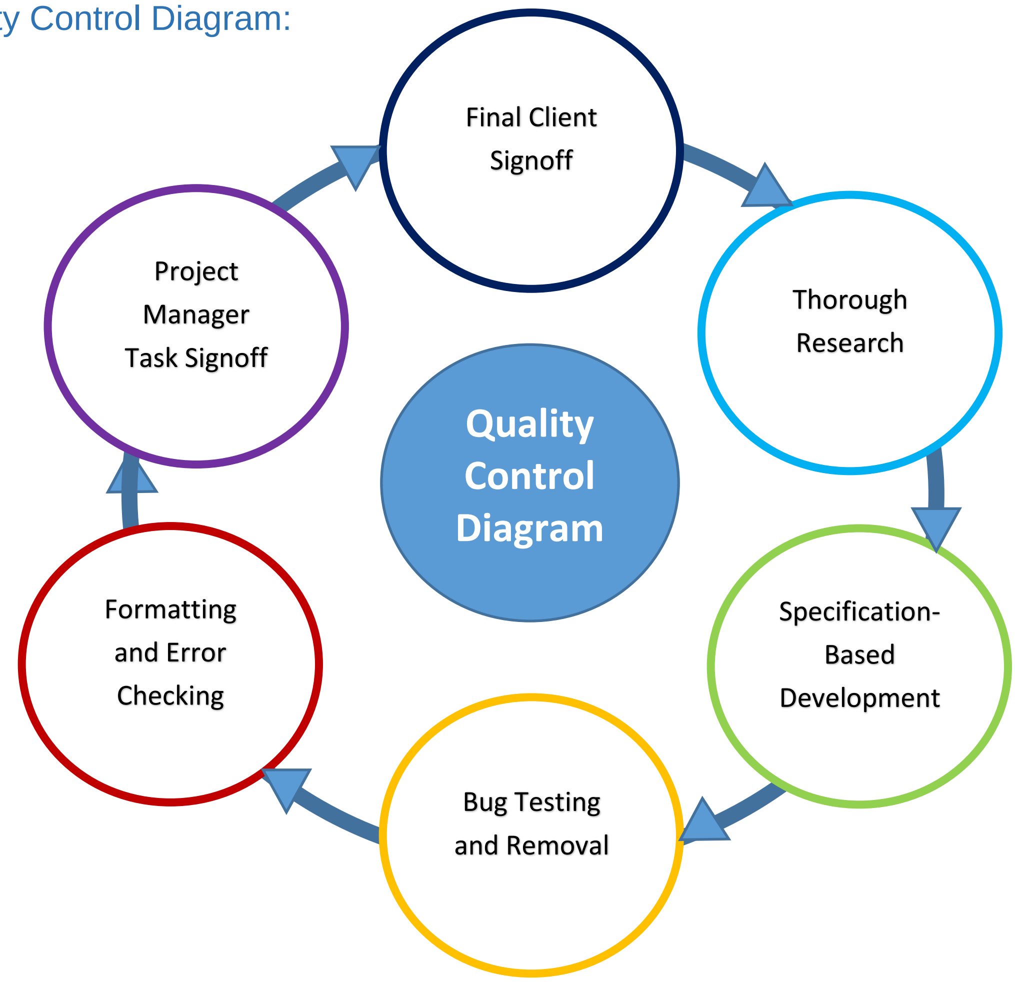
WebTech will be operating without a defined budget throughout the duration of the project, and we have been informed that monetary spending should be kept to a bare minimum, and as a last resort. This means that the tools and techniques available for the project may be limited, however there are numerous options that are still open for us to utilise freely and without cost. These will be discussed in further depth as we analyse each need individually.

The time allotted to WebTech to complete the project is from the 19th of July 2019, to the 31st of October 2019. Because the scope of the project is currently limited to the production of a commercially viable static website, and the establishment of a more refined social media presence, this will provide WebTech with more than enough time to complete the project within the given timeframe.

Appendix Two: Site Map



Quality Control Diagram:



Appendix Three: Risk Identification Matrix

Environment	Risk Identification			Risk Assessment		
Internal Context	Event	Cause	Impact	Probability	Impact	Risk Rating
Human Resources	Team Member hit by a Bus		Loss of Files or progress More work for other team members	Unlikely	Major	Tolerable
	Client hit by a Bus		Must correspond with a new client that takes over the running of the business Business shuts down due to no one taking it over resulting in incomplete project	Unlikely	Catastrophic	High
	Team Member Sickness/Ill		Get behind on work More work for the others	Likely	Minor	Very High
Natural Disaster	Earthquake		Loss of files due to destruction of files Inability to use the Internet due to Connectivity issues	Possible	Catastrophic	Very High
Technology/Security	Loss of Files	Inadequate Storage and Backup Plan in Place of Data	Loss of Records Loss of Progress Loss of Documentation	Possible	Catastrophic	Very High

	Website goes Offline	Due to Technical Reasons of the Provider Hackers	Inability to be able to work on the project Loss of files Loss of Progress	Possible	Major	High
	Content gets uploaded by outside Parties	Hackers hack the website due to lack of Security Accidental Security Breach of Credentials	Reputation Damage for the business & Team Inability to access content on the website	Unlikely	Catastrophic	High
	Website/Domain Provider closes	Due to Financial Reasons (outside of our control)	Website is closed down Progress is lost More work involved (researching and choosing a new Provider)	Unlikely	Major	Tolerable
Funding	Inability to pay for Hosting/Domain		Unable to purchase a Domain Unable to develop a website on a Hosting Provider Must restart work on new free/cheaper provider	Possible	Major	High
Human Resources	Behind in Work	Commitment Issues Organisation Issues Management Issues In-effective Project Manager	Getting Behind in Work Unable to Meet Deadlines Incomplete Project	Possible	CATASTROPHIC	VERY HIGH

	Team break down	Lack of communication Harassing/Bullying/Pressuring Bad Gossip In-Effective Project Manager	Inability to work as a team Failures to accomplish and meet Deadlines Incomplete Project	Possible	CATASTROPHIC	VERY HIGH

Appendix Four: Risk Treatment

Risk Treatment				
Event	*Action*	*Plan/Control*	*Risk Owner*	*Resolve By*
Loss of Files	Share	Implement Backup Procedures for Files: Use of Google Drive to share Files within a Shared Folder Uploading any Hard Copies of Files (such as Wireframes) allowing them to be stored in the cloud and accessed by other Team Members Use of Google Docs/Sheets/Slides which automatically saves file as the work is done	Project Manager	31 October 2019
Website goes offline	Share	Implement Backup Procedures for Website and Code: Ensure that the Website is routinely backed up Ensure that copies of the code are kept on file If downtime is long, consider other Web Hosting/Domain Providers	Team Member Client (long-term)	31 October 2019

Content gets uploaded by outside parties	Reduce	Implement Security Procedures: Ensure that each Team Member understand the important of Security when provided with login credentials Ensure that the password is at least 8 Characters, with lowercase and uppercase letters as well as Special Characters and Numbers Ensure that the logon Credentials are stored securely, such as in a Password Manager with a reliable reputation.	Project Manager Client (long-term)	31 October 2019
Inability to pay for Hosting/Domain	Accept	Ensure that the Client is informed and has a clear understanding of what's involved Ensure the Client understands from Day One that there will be likely a cost involved with the Domain/Webhosting Agree on a Budget, with specific minimum & Maximum monetary figures. Ensure that a range of options are researched and looked at and provide these to the client with their Advantages & Disadvantages clearly listed.	Project Manager	31 October 2019
Behind in Work	Reduce	Implement clear rules and guidelines as a Team:	All Team Members	31 October 2019

		Ensure that all Team Members regularly communicate and keep in contact with each other. Set clear deadlines of targets to reach, as well as implementing (and enforcing if required) consequences Ensure that Members regularly add and check the Trello Board to see what they need to do, and what is assigned to them If a Team Member is sick or away for a period ensure that other Team Members are informed, and a catch-up plan is established between all members of the Team with the Project Managers sign off Use the Gantt Board to easily see deadlines and milestones throughout the Project Ensure that the Project Manager regularly communicated with the Team and ensures that everyone is UpToDate and not falling behind in work.		
Team Breaks Down		Implement clear rules and guidelines as a Team: Ensure that the Project Manager helps addresses any concerns that arise	All Team Members	

		Ensure that there is clear communication between team members including the Project Manager Ensure that chats only related to the project are discussed in the Project Management Group Chat/Discord Server Establish Clear Boundaries between assigned work and other things		