Project Proposal - CSCI 311: Web Programming – Spring 2023

Name of Project	Buildify (subject to change)
Team Name	Team Buildify
Team Members	
Jasper Charlinski	
Sebastien Van Den Bremt	
Naman Batra	

1. Project Description

Buildify will be a website building website that aims to solve the problem of high costs and lack of technical expertise required to build a website. Many individuals and small business owners struggle to create a professional-looking website due to the high cost of hiring a web developer or the lack of knowledge and skills required to build a website themselves. Buildify aims to solve this problem by providing a user-friendly platform that allows users to easily create their own website by filling out a simple form with their desired website content.

The solution offered by Buildify is a user-friendly form that guides users through the process of creating their own website. Users can input their desired website content such as text, images, and videos, and Buildify will generate a new website to the users' specifications. The website is generated using pre-designed templates that are optimized for mobile and desktop devices, ensuring that the website will be responsive and look great on any device. What sets Buildify apart from existing website building services is that we will provide the customer with the source code for their websites rather than keeping it hidden and forcing the user to use our hosting services.

In summary, Buildify is an easy-to-use website builder that allows users to easily create a professional-looking website without the need for technical expertise or high costs. The platform is designed to be user-friendly and guides users through the process of creating their own website, while also providing pre-designed templates that are optimized for mobile and desktop devices and search engine visibility. Buildify is an ideal solution for small business owners, entrepreneurs, and individuals who want to create a website quickly and easily.

2. Value

The Buildify project is valuable because it addresses a common problem faced by many individuals and small business owners: the high cost and technical barriers associated with creating a professional-looking website. By providing a user-friendly platform that allows users to easily create their own website, Buildify makes it possible for anyone to have a website without the need for technical expertise or high costs. This can provide a number of benefits to users, including increased online visibility, improved ability to reach customers, enhanced ability to sell products or services online, and having a place to have business information available to the public.

If Buildify does not perform effectively, there are potential risks that could arise. For example, if the platform is not user-friendly, it may be difficult for users to create their own website, which would defeat the purpose of the project. Additionally, if the platform does not generate websites that are optimized for mobile and desktop devices, users may find that their website does not look good on certain devices, which could negatively impact their online presence.

There are also risks that could make executing the Buildify project difficult. One of the main risks is that the platform may not be able to generate websites that are optimized for search engines, which could negatively impact the visibility of users' websites. Additionally, if the platform is not able to generate websites that are responsive, users may find that their website does not look good on certain devices. Additionally, if the platform does not offer enough templates or customization options, users may find that their website does not look unique or stand out from the competition.

3. Deliverables

The final Buildify deliverable for this project will be a fully functional website builder platform that allows users to create their own website by filling out a simple form with their desired website content. The platform will be designed to be user-friendly, with a clear and easy-to-use interface.

The Buildify website builder platform will have the following functionalities:

- The ability for users to input their desired website content such as text, images, and videos, and Buildify will generate a new website to the users' specifications.

- A library of pre-designed templates that are optimized for mobile and desktop devices, ensuring that the website will be responsive and look good on any device.

- The ability for users to adjust the generated website.

- The ability for users to send the creators (us) queries or comments.

- The ability for users to create and log in to a personal account

If enough time is available, the following functionalities will also be included:

- The ability for users to save the work from previous sessions.

- The ability for users to connect the generated website to their social media platforms.

- SEO optimization for the generated websites. Meta tags, site maps, backlinks, ect.

4. Development Roadmap

- Web Page Skeleton (HTML and CSS for the webpage)

  - Description:

    For this milestone we would like to create the outline for our main 3 pages, including the main home page, the build page, and the about/contact page. The outline will include the HTML skeleton, CSS styling, but no Javascript or PHP functionality. The basic webpage structure will have a clear layout, and a consistent design across all pages.

  - Team members: Jasper

  - Time estimate: 10 hours

- ○ Completions date: February 10th

- ● Database Creation (Create the basic need tables)

  - ○ Description:

    For this milestone, we seek to create a login form, member info and password database. We aim to do this with the oracle database on the viu server. Once this task is completed we should have a table that contains user name, email address, Date of Birth and userName. We should also have another table with the userName and password.

    This would allow for a smooth transition into the future task of implementing the javascript functionalities for the login form, as they now have somewhere to log to.

  - ○ Team members: Sebastien/ Naman

  - ○ Time estimate: 5 hours

  - ○ Completion date: Feb 10th

- ● Basic JavaScript Functionalities (Give some functionalities to the webpage and integrate JS with our DB for login form)

  - ○ Description:

    For this milestone, we aim to implement basic interactive features to enhance user experience. These include the website builder form functionality, responsive elements and some dynamic elements such as carousels and slide shows.

    The website builder form is a tool within the Buildify platform that allows users to input their desired website content and create their own website. The form will be designed to be easy and intuitive for users to use, with clear and concise fields for users to input their information. The website builder form will collect information such as the website name, page titles, text, images and videos that the user wants to include in their website. The form will also provide users with options for customizing their website, such as selecting a template, choosing a color scheme. It will store this information in a structured format, such as JSON or XML, making it easy for the generation program to read and interpret the information. The form will also include validation to ensure that the information inputted is complete and accurate.

  - ○ Team members: All team members

  - ○ Time estimate: 10 - 15 hours

  - ○ Completion date: Feb 10th

- Create 2-4 web page templates (HTML, CSS, JS)

  - Description:

    The program will have multiple base templates that the user can choose as a skeleton for their own website. The templates will be completely different themes of page layout that look modern and presentable. Each member will have to create one or two templates that are ambiguous enough to work with different color settings and image or text insertion. This will consist of HTML and CSS code and will later be interacted with by the interface.

  - Team members: All team members

  - Time estimate: 15 hours

  - Completion date: Feb 17th

- Create website generation program(JS)

  - Description:

    The program will take the information provided by the user through the form and use it to generate the necessary HTML, CSS and JavaScript code for the website. It will use pre-designed templates and styles, allowing the website to have a professional look and feel. The program will also use the information provided by the user to customize the website, such as adding the user's own logo, customizing the color scheme, and adding user's own content to the website.

  - Team members: Jasper

  - Time estimate: 10

  - Completion date: Feb 24th

- Create an interactive interface to modify the template(JS)

  - Description:

    This landmark consists of creating an interactive interface that the user can use to manipulate the aesthetic of their web page. It will be a series of sliding scales for color and size allocation that will reformat the whole website in a way that flows together seamlessly. It will also allow the user to insert images that will be automatically reformatted to size, and to input text boxes at designated locations. To implement this we will have to combine all of our JavaScript skills together as this will likely be the most challenging part of this project. We need to find the dependencies on our dynamic web page layout, as to systematically adjust them with every change to upkeep the webpage aesthetic.

  - Team members: All team members

- - Time estimate: 20 hours

  - Completion date: March 10th

- Create a payment method(JS, DB)

  - Description:

    The project will have a fully functional payment method for the users to make payment. We might integrate the payment method with an API or use our own database to store the data.

  - Team members: Naman

  - Time estimate: 10 - 15 hours

  - Completion date: March 20th

- Write a PHP Script for server hosting functionalities (PHP)

  - Description:

    The project will use PHP to script the server hosting for the web page. Once this landmark is complete, the web site should be hosted successfully and ready to use.

  - Team members: Sebastien

  - Time estimate: 5 hours

  - Completion date: March 20th

- Optimize

  - Description

    The optimization milestone is the final stage in a project where the team looks back at all the previous milestones and analyzes the system for any areas that can be improved. This includes evaluating the efficiency, performance, and overall effectiveness of the system, and making changes to optimize these factors. The goal of this milestone is to ensure that the final product is as optimized and functional as possible, before it is deployed or released to the public.

  - Team members: All team members

  - Time estimate: 5 - 10 hours

  - Completion Date: March 27th

5. Estimated Total Work

Month: February

Milestone 1 : Web Page Skeleton
Team members: Jasper
Time estimate: 10 hours

Milestone 2: Database Creation
Team members: Sebastien/ Naman
Time estimate: 5 hours

Milestone 3: Basic JavaScript Functionalities
Team members: All team members
Time estimate: 10 - 15 hours

Milestone 4: Create 2-4 web page templates
Team members: All team members
Time estimate: 15 hours

Milestone 5: Create website generation program
Team members: Jasper
Time estimate: 10 hours

Total work hours for February: 50 - 55 hours

Total work hours in February for Jasper: 20 hours

Total work hours in February for Sebastien: 5 hours

Total work hours in February for Naman: 5 hours

Shared work in February: 20 -25 hours

Month: March

Milestone 6: Create an interactive interface to modify the template
Team members: All members
Time estimate: 20 hours

Milestone 7: Create a payment method
Team members: Naman
Time estimate: 10 - 15 hours

Milestone 8: Write a PHP Script for server hosting
Team members: Sebastien
Time estimate: 5 hours

Milestone 9: Optimize
Team members: All members
Time estimate: 10 -15 hours

Total work hours for March: 45 - 55 hours

Total work hours in March for Jasper: 0 hours

Total work hours in March for Sebastien: 5 hours

Total work hours in March for Naman: 10 - 15 hours

Shared work in March: 30 - 35 hours

Total:

Total project work hours: 95 - 110 hours

Total work hours for Jasper: 20 hours

Total work hours for Sebastien: 10 hours

Total work hours for Naman: 15 - 20 hours

Total shared work: 50 - 60 hours

6. Maintenance and Upgrade Plans

If the website is functional and efficient, we aim to pursue monetizing this program as it serves a direct purpose that we believe could be an opportunity for capital gains. If we were to offer this commercially, then we would need to continue making new website templates, upgrading old ones, doing site maintenance and offering customer support.

7. Relevant Experience

Every member of the team has experience in developing front end web pages and interfaces in HTML and CSS, which we learned in the CSCI 115 and extra-curricular projects. Some of the team members have extensive experience in vanilla Javascript and Jquery, which would be helpful in the website's functionalities implementation. We also have some networking and server hosting experience which will come in handy with the PHP scripting. Overall, each team member is a competent programmer and we are all willing to tackle any challenges that might arise.

8. Additional Information

The market for quick, easy, and cheap websites on Vancouver Island is likely large because there are numerous local street markets and farmers markets whose vendors rarely have websites. These types of small businesses may not have the resources or knowledge to create and maintain a website, making them prime candidates for a service that offers quick, easy, and affordable website solutions. Additionally, having a website can be a valuable tool for these businesses to reach a wider audience and promote their products or services.