

Team Name:DDJAN-Landscape

Key Tools:

- Github, is used as a collective repository of our groups files.

Reason Being: Github allows for our group to have all of our files for the project in one online repository. Each group member has the ability to push files into the repository or pull files from it. This will allow for every team member to have an easy way to share their work with other team members and access other members' work. It also allows for our work

- Google docs, is used primarily for documentation

Reason Being: Google Docs allows for the group to collaborate on a word document which will allow for the team to synchronously create documentation for the project. Another use is to create information for the user which will give directions on how to use the website. Google docs also has the ability to download documentation as a PDF or a word document which will allow for further security of our documentation.

- Microsoft Visual Studio, is used for writing source code for program

Reason Being: Visual studio provides many powerful, yet easy to learn features and libraries that will make coding our program much more streamlined and simple. One key feature is its robust GUI, which will help a lot in designing our program. We will use this program in conjunction with github to code our project collaboratively.

- Discord, is used as primary communication device for group

Reason Being: Discord allows us to communicate efficiently through both desktop and mobile devices. It has many features like quick and easy file sharing that make it a viable program to communicate with. It also allows for high quality group video calls, which is essential for remote group meetings.

Technologies:

- HTML

We will use HTML because it can provide a lot of the front-end and basic structure of the website. It can communicate with the browser to display exactly what we want to the user. However, it is a markup language, so we will need more technologies than just HTML for our site to be functional and user interactive.

- CSS

We will use CSS on top of HTML to give us more versatility in creating the website. CSS will open many possibilities in making our page look more modern and clean, which is a priority for our project. If the website does not look modern and clean, the company is less likely to gain new customers from it.

- JavaScript

Javascript is beneficial for programming the function of the website. It will allow us to make the website interactive, which will allow potential customers to gain vital information about the company, as well as potentially contact the business if necessary. Javascript is more simplistic than using its counterparts and more ideal for web development. There is also extensive documentation online that could help us if we need it because it is such a popular language for website design.

- Git

We chose to use git because it allows us to access files on local computers. One major advantage of Git is that you download and work on local copies. This means that everyone can work on the files independently. When done, we can push the changes to the server so that we can share the new changes with everyone. Git also provides tools to merge changes and resolve conflicts. Another advantage of git is the branch support. This allows for us to work on the same file and not be interrupted and impacted by others' work. A branch is created when we want to work on some changes either individually or with others. The advantage of the branch is that you can push it to the server and it does not affect the main branch. Other people can work on the branch too. When finished with the work, the branch can be merged into the main branch. In other words, a branch is an independent copy of the main branch that we can work on and merge into the main branch when we are finished.

Process Model:

The Process Model to be used is the spiral model.

- Risk analysis is a key point. This being that while developing and designing our website at each round of our cycle a risk analysis is performed to determine the flaws in the project. By continuously performing an analysis at each cycle of our project and fixing any flaws will result in mitigating any larger risks to our project.
- Feedback is essential in this project because it will allow us as a team to see what is missing and what needs to be added. As well as what needs to be changed or adjusted in order to make our project be the best it can be. This model can also facilitate customer feedback for every phase of the development cycle which allows for changes to be made before the product deployment.
- Systematically structured with multiple cycles of development. Each cycle in development represents a phase of the software development process. Within each

cycle objectives are identified, a risk analysis is performed, a test is made, and the overall product is reviewed and evaluated.

- The spiral model is flexible and requirement changes can be incorporated easily. This is because the model facilitates feedback and allows for the product to easily be evaluated and changed at each development phase.
- The cost of this project will increase with this process model. This is because of the costs of running a website's security and maintenance. With this process the radius of our spiral is the total expenses of our project although this doesn't apply to our project which reduces the drawback.
- Analyzing each version of our website design will take time. This means that there are more design choices to be made in order for the website to be accessible and usable for multiple customers. Eventually the time taken for these designs might be too long, since there are a lot of cycles to go through for each step of the spiral model. For our project, the spiral model is still the best choice of action. This is because it will allow our group to create and plan out new versions later in advance.