

## **Virtualization of a Turing Machine Weekly Report: 1-31-2021**

Outlined in this document details the work and progress toward the making of the Virtualization of a Turing Machine Project for weeks 1-24-2021 and 1-31-2021.

During these weeks, preparations were made to facilitate the project in a git repository via github.com. Additional documentation was created to aid other team members in commands and the basic workflow of git development. The document included general knowledge and supplemental video sources found on the internet. A feature taken advantage of in github is that it allows for github-pages to host projects on dedicated websites through their platform.

Using this feature, a basic website structure was implemented to host our project for public view. Included in this website are several tabs of information for the user to view. Currently, two tabs in the website contain information. The Documentation tab includes documents created in the previous semester, including the requirements, specification, and design document respectively. The Schedule tab includes our Gantt chart for the projected workflow the team will follow. Excel online offers the ability to embed the spreadsheet in websites, and can be remotely updated if need be. This allows website visitors to view the chart in real time and download the file if they so desire.

Preparations on the user interface were worked on throughout the week, this includes the Editor View, Console View, and Tape View. These interfaces will be placed in the Home tab of the website. Eventually these views will be able to toggle visibility of each view.

During the week, discussions were also made for what kind of language the user should develop the machine with. Suggestions were using a natural language or some sort of short-hand. In the end, there was an agreement to implement both as a convenience for the end-user.

Throughout the week, each team member contributed to the project in the following ways. Brett George and Jisue Lee started development on the user interface, which includes the Editor View, Console View, and Tape View through a combination of HTML, CSS, and JavaScript elements. James Merenda created the github.com repository for the convenience of the team with additional documentation on the basic workflow through git. He also implemented most of the basic structure of the website and hosted the website through github pages. Jisue Lee and James Merenda worked on the weekly report and powerpoint and will be updated to the website accordingly.

Some problems the team faced during the week include the following. Brett George encountered some issues regarding JavaScript and a lack of experience with said JavaScript. Specifically, the issue was injecting HTML into a webpage. The suggested fix was suggested by Jisue Lee and James Merenda to insert the HTML to the website outright instead of injecting it.