

In order to create and manage the branches for the version control simulation SBA, I carefully followed the steps provided in the module. Additionally, I used information and code from previous examples, modules, and projects, to help me. I started by creating a new repository in Github with the name "version-control-simulation-Melvin-Kpachavi." I then cloned the repository into VScode by copying the URL from the Github repository into the terminal by using the command "\$ git clone (URL)." Next, I created a new branch for the header section by using "\$ git checkout -b feature/header" in the terminal and created a simple index.html file, with a basic HTML structure with a header. I staged and committed the changes by using "\$ git add index.html" and "\$ git commit -m "Added header section to index.html." I switched back to the main branch using "\$ git checkout main" then I repeated the steps for creating a new branch for a feature called feature/footer. I added a footer section of the webpage in index.html then repeated the steps for staging and committing the changes. After this, I switched back to the "feature/header" branch and changed the index.html file by changing something in the "footer" section to simulate a conflict. I merged the "feature/footer" branch into the main branch using the commands "\$ git checkout main," then "\$ git merge feature/footer." When I tried merging the "feature/header" branch into the main branch using "\$ git merge feature/header," I encountered a merge conflict.

To resolve this conflict, I opened the conflicting file, reviewed both versions of the file, and decided which parts of the header and the footer needed to be deleted and kept in the final file. I removed the conflict markers so that the file would work properly. I tested the changes using "\$ git status" and after seeing that the conflict was resolved, I staged the resolved file with "\$ git add index.html" then "\$ git commit."

The pull request process helped me ensure code quality and collaboration by giving me insight into the process for requesting and adding new features. This process involves peer reviewing branches and features before they are added to the main branch. This prevents unnecessary or bad changes that could negatively impact the main branch.

## Peer Review:

I reviewed Melat Ghebru's pull request on Github. The pull request looks well done and correct, and I approved the change.

<https://github.com/mghebru/version-control-simulation-melatghebru/commit/adb6401d1f1b3c422624193174043594cfe015f4>

