JUSTIFICATION OF CHOSEN TECHNOLOGY

The technologies I chose for this project are Docker and a custom Makefile. I chose Docker because of how fast it is to setup, create, and run an image on a container. Using Dockerfile makes it convenient to write, understand, and edit the environment. An initialization script was made to run any specific applications before running the main application inside the container. The custom Makefile makes running the application more convenient. It makes customizing how the docker container is deployed more flexible for future technologies and testing, such as deploying on AWS or running a test shell script after running the container. The Makefile also makes labelling an image with name, version, and developer's name more convenient.

Some ways to improve on this deployment setup are to include some tests to ensure that the image built and ran correctly, and to make a Makefile or shell script for Windows users. Currently, there are no tests that check if the image has been built and ran correctly. Tests should include if all files and libraries were installed correctly, if Redis is running correctly, and if the website can be loaded and run through localhost:3000. The current Makefile does not support Windows users, unless a third party application such as MinGW, is installed in the local system. This will make building, running, and testing more convenient for Windows users, rather than constantly writing the build and run commands given in the README.md file in the command prompt.