

Project Schedule

Description: Will be developing an application that will simulate Dijkstra's shortest path first algorithm using nodes contained within docker. These nodes will be Flask, a REST API that will create GET request to fellow routers in the routing domains for their current SPF tree in order to generate their own. The result of this project will provide a visual to the user of what the shortest path is to every other node in the domain. The user will also have the ability to manipulate the cost of each link via the Compose file that docker uses to generate environment for each of these nodes.

Team Members: Just me

Hardware/Software Requirements:

- Python v3.10 and up
- Python Flask module
- Python Requests module
- Docker

Schedule:

- Week 8: Create environment to which every node can communicate with all other nodes defined in the routing domain.
- Week 9: Have each node perform Dijkstra's SPF algorithm upon the request of the user
- Week 10: Display the SPF tree to the user in a visual and easy to read manner. Also comment and provide documentation for project.