# Tasks

1) Investigate and identify real-world customer problems. Document what the needs of our customers are - All
2) Obtain access to Cyber@UC server in ERC - Noah
3) Research appropriate Frontend framework - Nick
4) Setup frontend project - Nick
5) Develop user interface prototype - Nick
6) Test user interface with customers - Nick
7) Refine user interface utilizing customer feedback - Nick
8) Finalize back-end services design, API design, and data design - Sam, Noah, Korey
9) Identify deployment strategy for back-end and front-end apps - Nick, Noah
10) Set up continuous delivery / continuous deployment for back-end and front-end - Nick, Noah
11) Research the deployment of an OpenStack operation as a foundation for our Infrastructure - Sam, Korey
12) Build core backing services (Message Broker, Databases, Datastores, etc.) for custom services to interact with - All
13) Test back-end app deployment strategy to Cyber@UC's servers in ERC - Noah
14) Test front-end app deployment strategy - Nick
15) Build API Gateway for interacting with the back-end - Sam
16) Choose authentication strategy and service (possibly OpenStack Keystone) - Sam
17) Research CLI Docker commands to launch containers that will emulate virtual machines - Korey
18) Research how to set up Docker containers to communicate in networks - Korey
19) Design and build container orchestration service for virtual machine and networking simulation - Korey
20) Build core application services - Korey, Noah, Sam
    a) Network service
    b) Traffic service
    c) Software service
21) Investigate the possibility of using the Elastic Stack and Kibana to visualize network traffic - Korey, Sam