

Timeline

Task #	Task	Start (wk)	End (wk)	Milestone
1	Investigate and identify real-world customer problems. Document what the needs of our customers are	1	1	v0.1.0
2	Obtain access to Cyber@UC server in ERC	1	1	v0.1.0
3	Research appropriate Frontend framework	1	2	v0.1.0
4	Setup frontend project	1	1	v0.1.0
5	Develop user interface prototype	2	4	v0.1.0
6	Test user interface with customers	5	5	v1.0.0
7	Refine user interface utilizing customer feedback			v1.0.0
8	Finalize back-end services design, API design, and data design	2	5	v1.0.0
9	Identify deployment strategy for back-end and front-end apps	1	1	v0.1.0
10	Set up continuous delivery / continuous deployment for back-end and front-end	1	2	v0.1.0
11	Research the deployment of Kubernetes as the foundation for our Infrastructure	1	2	v0.1.0
12	Build core backing services (Message Broker, Databases, Datastores, etc.) for custom services to interact with	2	5	v1.0.0
13	Test back-end app deployment strategy to Cyber@UC's servers in ERC	2	3	v0.1.0
14	Test front-end app deployment strategy	2	3	v0.1.0
15	Build API Gateway for interacting with the back-end	5	5	v1.0.0

16	Choose authentication strategy and service	2	3	v1.0.0
17	Research CLI Docker commands to launch containers that will emulate virtual machines	5	8	v1.1.0
18	Research how to set up Docker containers to communicate in networks	5	6	v1.1.0
19	Design and build container orchestration service for virtual machine and networking simulation	6	8	v1.1.0
20	Build core application services - Network, Traffic, and Software services	6	8	v1.1.0
21	Investigate the possibility of using the Elastic Stack and Kibana to visualize network traffic	8	10	v1.2.0