

i. Used at least five modern and open-source technologies, regardless of architectural layer (frontend, backend, etc.)

BE examined the requirements set forth by the Government, the Epics and User Stories built during design activities and the possible solutions and decided to utilize the following open-source technologies for the BE Safe prototype:

#	Open Source Technology	Description
1.	NodeJS	A cross-platform server-side technology that allows us to develop, test, and deploy on Windows, Mac, and Linux systems.
2.	AngularJS	A model-view-model framework for creating routable and extensible web applications.
3.	Bunyan	A logging facility for Node that is customizable for both development and production.
4.	Bootstrap	A CSS framework that provides cross-browser compatible styling and components for a robust user interface.
5.	Morgan	An Express logging facility for tracking all HTTP requests, responses, and errors.
6.	Express	A web framework for Node that provides both our web application as well as our backend API.
7.	Travis CI	A continuous integration tool that pulls from GitHub, runs tests, and auto-deploys to AWS.
8.	Docker	A container-as-a-service platform for packaging our application in addition to AWS auto-deploy.
9.	SQLite	An embedded database that we use for storing subscriptions as well as adverse reaction reports.

Figure 1: Open Source Technologies Used for BE Safe

BE has selected and utilized these same technologies on other projects **including our work with 18F on the MIDAS project**. Because we already had experience using these open tools, and already had them installed and configured, our ramp up time for beginning prototype development was short.