

Estimated Cost Proposal: NeoCharge

Components:

There are components in our implementation that will incur costs:

1. Travis CI
2. Cognito (AWS Authentication)
3. WattTime

Development Support (January through June 2020)

These costs are for the development period between January 2020 to June 2020. During the development period, we estimate to incur a cost for utilizing Travis CI for testing the software. The total expected cost to be incurred is **\$315**.

Travis CI

For a private project, such as ours, Travis CI is free for the first 100 trial builds and 2-concurrent jobs. It is likely that the team will surpass the 100 build limit during the development phase of the application.

Plans available through Travis

	Bootstrap	StartUp	Small Business
Amenities	1 Concurrent Jobs Unlimited build minutes Unlimited repositories Unlimited collaborators	2 Concurrent Jobs Unlimited build minutes Unlimited repositories Unlimited collaborators	5 Concurrent Jobs Unlimited build minutes Unlimited repositories Unlimited collaborators
Cost	\$63/month	\$118/month	\$228/month
Total Cost	\$63 * 5 months = \$315	\$118 * 5 months = \$590	*228 * 5 months = \$1,140

For a team of five people, the bootstrap option is the best plan for our team. We estimate to develop for six months and with the first month free, we expect to incur a cost of **\$315**.

Production Projection (After June 2020)

Cognito

Amazon Cognito is the AWS product that we plan to use in order to handle user authentication and access for the NeoCharge mobile application. Cognito is free for the first 50,000 users and we estimate the number of users who will login to the NeoCharge application to stay within the free tier.

Cognito

Users	Cost
Small ~10,000 Users	Free
Medium ~100,000 Users	$\$0.00550 * 50,000 = \250
Large ~1,000,000 Users	$0.00460 * 900,000 + \text{Medium} = \4390

WattTime (Stretch Goal)

The WattTime API provides access to realtime emissions data and other grid data that we aim to provide for the users of the NeoCharge application in order to determine the best times to charge their electric vehicles. The cost estimates are only available upon request and we currently do not have the information at this time.