

Group 7

Professor Johnson

EECS 448

17 November 2021

Maintenance Plan

For Our final project in EECS 448, our team decided to create a stock and cryptocurrency tracker. We completed this by using creating a webpage and using various APIs to pull data from different sources in order to accomplish the goals of our web application. The way we currently designed our web application allows us to maintain our web application without spending any money. This way is great for simple demos and school projects, but there would obviously need to be major changes if our application were to go commercial, besides needing to purchase items such as servers and other things to support our goals.

The first and most important part of our maintenance plan for our web application is paying for the premium version of the API's we are currently using. Right now both the API's we are using, finnhub and financial modeling prep, have a freemium model. Which mean they offer us a basic version of their services for free, while keeping a more advanced version of their service behind a pay wall. In finnhub's case they limit the amount of API calls we can make at 60 calls per minute, as well as excluding features such as global market data, more detailed company data, and press releases. In financial modeling prep's case they also limit the amount of API calls we can make at 250 calls per day and they also have premium endpoints that we cannot access. Obviously if we were to go commercial, we would need to pay for the premium versions of each of these APIs. This would amount to charges of 1000 dollars a month for finnhub's

services and 75 dollars a month for financial modeling prep. Besides purchasing the premium versions of the APIs there is also a question of labor.

After doing some light research into the matter there a couple of options that we can go with when it comes to labor for the maintenance of our web application. The first route that we could go is simply maintaining the web application by ourselves. Although we aren't professional web developers by any means we did learn a lot throughout this project. With more research and knowledge eventually our team could handle maintenance of the current web application. Since we would be working on this ourselves there wouldn't be a need for a set rate of pay for labor. We would compensate ourselves based on how well we are able to monetize the web application. The second route we could take is hiring a single freelance fullstack developer to maintain the application for us. After doing some research into the going rate for an experienced fullstack developer can vary quite a bit depending on the project. For small project such as ours the price would probably be an hourly rate of seventy-five to one-hundred dollars for the creation of a more robust web application and then a rate of five-hundred dollars a month for maintenance.

With all of these costs in mind maintaining our web application can have a wide range of costs. If we sprung for all of the bells and whistles, and hired a fullstack developer our costs could be anywhere from 7075 dollars for the first month of development to as low as 5000 dollars. If we were to maintain this for a year our cost would be around 12,500 dollars. Overall there a multitude of ways we could go about maintaining a web application such as ours, but I would say hiring a full stack developer would definitely be the way to go for the time being.