Design Document

Augur: Open Source Software Health and Sustainability Metrics
Tool

Justin Nguyen, Noah Free, Ryan Bell, Greg Ryterski
CS 4320 – Software Engineering | 11/21/2021

Setting up Amazon EC2

Minimum Requirements

In this section, we will cover the minimum hardware and software requirements needed on the Amazon EC2 instance to be able to install Augur.

- Ubuntu AMI
- At least 30GB of storage space
- At least 4GB of RAM
- Both are free tier eligible

Creating Amazon AWS Account

First, developers wanting to use Augur to analyze the health and sustainability of GitHub repositories will need an Amazon AWS account in order to create an EC2 instance to host Augur. In the case that a user does not have experience using Amazon AWS, our documentation will show users where to go to create an AWS account.

Creating the Amazon EC2 Instance

Once the Amazon AWS account is created, we will need to provide steps to create an Amazon EC2 instance with the minimum requirements stated above. Our documentation will provide screenshots as well as descriptions to help users create an Amazon EC2 instance with the ability to run Augur. The user will need to create and save a key-pair on their local device in order to connect to the instance and run Augur, which will be demonstrated accordingly.

Setting Up SSH

SSH, or Secure Shell, is a way to connect to the recently created Amazon EC2 instance. In order to SSH into the EC2 instance, the user will need to update permissions for the key-pair (.pem file) and open a terminal in the same directory as the key-pair file before running the 'ssh -i "filename.pem" ubuntu@publicDNS' command to connect to the instance. These instructions will be well-documented and screenshots throughout the entire process will be provided in order to simplify the process for the user.

Installing Augur's Dependencies

In this section, we will cover how to install all of Augur's dependencies automatically by telling the user to run a new shell script that we will implement. After the user runs the script on their Amazon EC2 instance, it will then automatically start the install process.

Handling Errors in the Installation of Augur

This section itself won't be in the documentation as our deliverable. However, we will modify the installation scripts so that it will print a link that the user can follow to parts in the documentation to try to help them resolve their errors.