

Summary of SSL Certificate Research

January 26, 2020

After consulting with a member of a previous taxi app group, we decided that want to connect our app to our server using POST and GET requests. In order to do this securely we need to have a secure connection. The easiest way to do create this connection is by making an SSL or https connection. In order to do this we need an SSL certificate.

In order to use a SSL certificate easily, we need a domain name. The domain name will likely only ever be used by the app and will never be visited by customers. The cheapest place to register a domain is either at godaddy.com or through Google. They have similar prices– with most godaddy domains at about \$18 per year, and Google domains mostly about \$12. There was one domain on godaddy that is \$10 per year. Given our integration with other Google products, it might be easiest to get a domain from google.

After having a domain, we can get an SSL certificate easily. Getting a certificate for an IP address is possible, but there are not many tutorials and not much support from certificate authorities. While some SSL certificates can cost upwards of \$200 per year, there is also a free certificate from letsencrypt.org. The setup for this certificate is easy and can be accomplished with a few shell commands on our VPS. After a certificate from letsencrypt is set up, it can be automatically renewed using the linux program, cron.

There are benefits to using a paid SSL certificate, however, including customer service and warranties. For example, Digicert offers at least a one million dollar warranty on their certificates.