



Linnéuniversitetet
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Assignment 3



Författare: Mohammed Basel Nasrini
Termin: HT-2019
Ämne: Server-based web programming
Kurskod: 1DV523

URL to the application: cscloud743.lnu.se

Security:

- The application proxy using HTTPS and all http requests will be redirected to https protocol.
- All secret tokens are saved as environment variables so client side do not have access to the application data or its logic.
- I always check the post requests from Github using the secret token.
- I used reversed proxy Nginx that will be as a firewall in front of the application and will manage all the traffic going to our node app.

Reversed Proxy:

Nginx reversed proxy is a server between the node application and the clients. Using reversed proxy will add an additional layer of security to our server in front of the node application. The request from the client to our application will go through the reversed proxy and then it will forward it to our application. It will act as a firewall that secure our node application

Process Manager:

I used PM2 application as a process manager that can help to manage our application when it crashes. PM2 will take care of the application reloading after crash occurs and keep application online. It has other benefits like load balancing and monitoring server.

TLS certificate:

I used a self-signed certificate for the HTTPS between the reversed proxy and the client as it is not a real situation so it is enough for assignment but in real production, one have to use a paid certificate that will be trusted.

Environment Variables:

I used environment variables to save the personal tokens and secrets that application use in safe place than typing them in the code. It is also good to use them when need to use common variables in many places so changing them will be easy.

Development and Production:

Difference between development and production was that in production we can use environment variables unlike in production. I had two git branches for production and development. In

development. I used nodemon to restart the application after each save And Ngrok to have domain name for the localhost so I link it to the webhook and test the application in the development. In production, the application will not download the modules that are related to development like nodemon and eslint.

Extra Modules:

ExpressJS

Socket.io: to manage the web socket between the client and server side.

Octonode: to handle the github API calls.

Body-parser: A middleware for express to parse the incoming request bodies.

Crypto: a module for the cryptographic function of checking Github post calls.

Extra Features:

I implement closing issue and the home page showing the comments of the issues unlike the demo video of the assignment