Display the current time from an Atomic Clock

The whole exercise should be done over three days – three stages

Requirements

Display the local regional atomic time. This is the time retrieved from an Atomic Clock server for the region that you live in.

The time should be displayed in the following format "<day> <month> <year> <hh:mm:ss>. It should be in a font and style that makes it very noticeable.

The time must retrieved from a time server – recommended server location https://www.ntppool.org/en/. Time servers that can be reached easily are at https://www.pool.ntp.org/zone/europe, and http://www.ntp.org/.

Stage 3 – time to complete 5 hours

- They must deliver two MVPs
    - MVP 1 - Develop the app so that it functions on any local machine served by a web server running locally
    - MVP 2 – Deploy the application onto remote servers that have been setup by the Ops Team. There should be two nodes; CDN node for ReactJS app, and application server node for Time service

Requirements

Operations Team

Provide some hardware that allows an application to be deployed onto it. The application can be written in a Java, Python, or C#. The application will serve the current time to web clients.

The Time server cannot run on same sever as the web server. The Time server cannot expose data on any other port other than port 80.

Deployment → build and test: local machines, Deployment: Linux server in the cloud

Web server will be deployed on a Windows Host. Time server will be deployed onto a Linux Host.

A build pipeline must be setup so that to cover the complete development lifecycle, test, build, and deployment. To this end, the deployable artefact should be deployed through the pipeline.

Several options are available to you for automated cloud deployment

- AWS CodeStar
- AWS Beanstalk
- AWS Amplify