REPLICON TECHNICAL ASSESMENT

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**Features:**

Features 1 and 2 were implemented. Two employees are assigned per shift and all time off requests are granted.

**Tool Use:**

This web app was created as a Node.js application and developed using Visual Studio Code as a text editor. The *Express* middleware package was used for hosting public static files such as stylesheets, client side JQuery, images, and fonts.

**Running the Project:**

**Navigating to Hosted Domain:**

Visit the web app at this address:

**On Local Host on Windows:**

Download Node.JS here: <https://nodejs.org/en/download/>

After you’ve installed Node.js, open command line in the directory of the project (or navigate to the directory). Use command npm install to automatically install all dependencies for the project\*.

\*if this does not work, try installing dependencies manually – look at the *package.json* file and look trough the “Dependencies” section to determine what to install.

Example:

> npm install express -g

After the dependencies are installed, the app can be run by using command node server or nodemon server for auto-updating and auto-restarting the server upon any changes to files. If everything has gone smoothly you can now open your favorite browser and navigate to localhost:8000 to use the app.

**Design:**

An MVC architecture is used where the data Models retrieve data from the API and stores the data within JSON files. To calculate the employee schedules for the month of June, a greedy algorithm is used (i.e. the first employee to be found to be available for a shift is assigned to said shift).

**Discussing Implementation of Features 3 & 4:**