Winston Logging Strategy

Ref: https://stackify.com/winston-logging-tutorial/

Winston is the most popular logging library in Node.js.

Winston provides more powerful features than console.log()

- **Streams:** Winston uses Node.js <u>streams</u>, which is a performant way of chunking up data processing—for instance, data manipulation on large amounts of data. Streams break tasks down into small, manageable chunks so it's easier for your Node.js system to handle
- **Transports:** Logs need to go somewhere. By default, console.log goes to your standard output file. However, you may also want to stream your logs to a central location, or store them in a database for querying later. Winston allows you to do that easily with a concept called <u>transports</u>. What's also nice about using Winston is that you can have as many transports as you like
- Formatting: Your regular console.log, by default, only deals in strings. We'll come back to
 why this is problematic later. But Winston has some advanced features for formatting log
 code before stashing it away. For example, Winston offers JSON formatting, coloring log
 output, and the ability to fiddle with formats before they're posted off to your end log
 locations.
- Levels: Winston adds another interesting layer, which is log levels. Log levels are metadata for logs. In plain English, this translates to data about data. Log levels tell you the severity, ranging from as severe as a system outage to as small as a deprecated function. The reason for having log levels in the first place is so you can quickly see which logs need attention. Log levels also allow you to configure environments to log the correct amount of data, with amounts of detail.

Install winston

npm install winston --save

Logging

```
const winston = require('winston');
const logger = winston.createLogger({
    transports: [
        new winston.transports.Console()
    ]
});

logger.info('What rolls down stairs');
logger.info('alone or in pairs,');
logger.info('and over your neighbors dog?');
logger.warn('Whats great for a snack,');
logger.info('And fits on your back?');
logger.error('Its log, log, log');
```