**Uptime Monitoring API**

**Project Specifications:**

* Start the server
* Create, Edit, Delete User
* Token based authentication
* Logout Mechanism
* Set Links & Up/Down
* Edit/Delete links & rate limit
* Check up/down time

File System, Row node API

**Note:** to use node environment variable first need to run this command into cmd or vs code terminal: NODE\_ENV=production. Here production means environment variable value

res.setHeader("content-type", "application/json");

use this to notify client that which type of data server pass to client

* Handle error handling while passing realData means post data. Use trycatch and if any error occur then set realData as empty object otherwise in try block set it to realData.
* Do it into another function(realData)… inside ‘parseData(jsonString)’ use try catch and use one variable. Return actual data inside try block and return empty inside catch block
* /\*
* \* Title: Utilities
* \* Description: Important utility functions
* \* Author: Masud Rana
* \* Date: 26/10/2023
* \*/
* // Dependencies
* // module scaffolding
* const utilities = {};
* // parse JSON string to Object
* utilities.parseJSON = (jsonString) => {
* let output = {};
* try {
* output = JSON.parse(jsonString);
* } catch (error) {
* output = {};
* }
* return output;
* };
* // export module
* module.exports = utilities;

**Crypto module for password hashing:**

We can hash a password using node core module crypto

We use HMAC to hash. Here we can put own secret key

**Random password generator:**

Let charset = ‘desire character string which want to include in my password’;

Now how many length password I want this specify or we can generate it random. Now continue a loop n times means length of random password and pick a character at this index from charset. And store them gradually one by one or concatenation into one new variable.

// create random string

utilities.createRandomString = (strlen) => {

  let len = strlen;

  len = typeof strlen === "number" && strlen > 0 ? strlen : false;

  if (len) {

    let possibleChar = "abcdefghijklmnopqrstuvwxyz1234567890";

    let output = "";

    for (let i = 1; i <= len; i++) {

      let randomCharacter = possibleChar.charAt(

        Math.floor(Math.random() \* possibleChar.length)

      );

      output += randomCharacter;

    }

    return output;

  } else {

    return false;

  }

};