# Backend Node.js Challenge

## Project Overview

We have a request to develop a task scheduling solution. This solution is divided into two major bits, a backend on Node.js which provides API endpoints to various functions and a frontend based on React.js which consumes these endpoints.

## The end points

You have been provided with two end points whose base URL is [https://cstonboarding.azurewebsites.net](https://cstonboarding.azurewebsites.net/) :

## POST /personnel/login

**Request Body:**

phone: 0722222222

password: 123456

**Sample Response Data - Success:**

{

"reset\_password": 0,

"accessToken": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJwZXJzb25uZWxfaWQiOjcsInBlcnNvbm5lbF9vbmFtZXMiOiJXYWNoaXJhIiwicGVyc29ubmVsX2ZuYW1lIjoiU2Nob2xhc3RpY2EiLCJwZXJzb25uZWxfcGhvbmUiOiIwNzI3NTE2ODgxIiwicGVyc29ubmVsXcyI6MSwicGVyc29ubmVsX3R5cGVfaWQiOjIsImlhdCI6MTU2MTYyNjc5NSwiZXhwIjoxNTYxNzEzMTk1fQ.OzX1LAUoNiqBGBYYemGSHBoPg75NLjJi3\_xt6WIhlK8",

"expires\_in": "24h"

}

**Sample Response Data – Error**

{

"error": {

"password": "You have entered an incorrect password"

}

}

## GET /tasks/assigned?page=1&limit=10&order=created&orderMethod=DESC

**Request Headers:**

Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJwZXJzb25uZWxfaWQiOjcsInBlcnNvbm5lbF9vbmFtZXMiOiJXYWNoaXJhIiwicGVyc29ubmVsX2ZuYW1lIjoiU2Nob2xhc3RpY2EiLCJwZXJzb25uZWxfcGhvbmUiOiIwNzI3NTE2ODgxIiwicGVyc29ubmVsXcyI6MSwicGVyc29ubmVsX3R5cGVfaWQiOjIsImlhdCI6MTU2MTYyNjc5NSwiZXhwIjoxNTYxNzEzMTk1fQ.OzX1LAUoNiqBGBYYemGSHBoPg75NLjJi3\_xt6WIhlK8

**Sample Response Data:**

{

"totalTasks": 3293,

"page": 1,

"perPage": 10,

"tasks": [

{

"task\_id": 23115,

"customer\_first\_name": "Mary",

"personnel\_first\_name": "John",

"personnel\_other\_name": "Otieno",

"customer\_last\_name": null,

"customer\_phone": "+254725007691",

"agentId": null,

"assigned": "2019-06-27T07:42:02.000Z",

"in\_progress": "2019-06-27T08:03:17.000Z",

"completed": null,

"deferred": "2019-06-27T08:03:43.000Z",

"status": "Deferred",

"location": null,

"gender": null,

"age": null,

"access\_code": null,

"splash\_page": null,

"mpesa": null,

"autoplay": null,

"comments": "no answer",

"registration": "Self"

},

{

"task\_id": 23116,

"customer\_first\_name": "Grace",

"personnel\_first\_name": "John",

"personnel\_other\_name": "Otieno",

"customer\_last\_name": null,

"customer\_phone": "+254729302372",

"agentId": 1983,

"assigned": "2019-06-27T07:42:02.000Z",

"in\_progress": "2019-06-27T08:01:20.000Z",

"completed": "2019-06-27T08:01:57.000Z",

"deferred": null,

"status": "Completed",

"location": "chaka",

"gender": "Male",

"age": 40,

"access\_code": 1,

"splash\_page": 1,

"mpesa": 1,

"autoplay": 1,

"comments": "",

"registration": "Self"

}

]

}

## Your challenge

You need to develop the backend using Node.js that supplies these endpoints so that a user can:

1. Login using the details provided in the sample above. Passwords are encrypted with bcrypt
2. Fetch and display tasks using the second endpoint (5 per page)
3. Implement pagination by passing the page and limit
4. The endpoint to fetch tasks is secured using jwt and passport

## Constraints

1. Time limit: 48 hours from the time the assignment was given
2. Mandatory technologies: Node.js, express, JWT, bcrypt, passport, sequelize
3. Marks will be scored on implementation, time and ability to follow instructions and how well you understood the above narrative
4. Once completed please provide a Github link to your solution
5. Database structure is attached – MySQL database
6. You do not need to finish 100% of the tasks only demonstrate your understanding of Node