

Climedo Health - Backend

v.3.0 2021

Introduction

Dear software engineer, with this test we want to assess the level of your skills. **Please make sure to read the full document before you start implementing.**

Task Description

In this test you need to implement the **backend** part of a web application for a simple [identity management system](#). The **RESTful API** routes that you will implement should enable a imaginary frontend engineer to create at least the following functionality:

- register a new user with email and password
- sign the user in
- allow all users to edit their own credentials
- allow specific admin users to fetch and edit the details of all users
- sign the user out

Notes

- For the completion of this task please use the following frameworks
 - **Backend:** (ExpressJS, NodeJS, MongoDB) (latest stable versions)
 - **Other:** Feel free to use any existing open source npm packages
- Each user profile should hold at least the following information of the user
 - The email
 - The password
 - The full name
 - The birthdate
 - The time of his/her last login
- **Feel free to “read between the lines”** and add any fields, collections or features that you deem necessary
- The API responses as well as the data sent to the API should be in **JSON** format
- Session management must be handled using JWTs
- Email confirmation or a password reset is not required
- Provide comments and documentation as you see fit

Bonus tasks

In case you are finished early, feel free to implement some or all of the following requirements:

- Unit/Integration tests
- Automatic seed data injection
- API hardening
 - A password policy
 - Header & Input sanitization
 - Brute Force protection for the sign in
 - Request throttling
 - ...
- Graceful server shutdown
- An appropriate docker or docker-compose file

Evaluation criteria

- Javascript best practices
- Show us your work through your commit history
- We're looking for you to produce working code, with enough room to demonstrate how to structure things in a small program
- Completeness: did you complete the features?
- Correctness: does the functionality act in sensible, thought-out ways?
- Maintainability: is it written in a clean, maintainable way?
- Testing: is the system adequately tested?
- Timing: please spend around 3-4 hours on this task but It is also fine if you want/need to spend more time on it. We will consider the quality/quantity/time ratio.

Deliverables

Please create a **PRIVATE** [github](#) repository and work there. When you are finished please invite [ClimeddoHealthCodingTests](#) to the repository. We will download your solution from there, review it internally and come back to you with next steps. **Please add this PDF to the root of the repository as well.**

Please do not use a PUBLIC repository as a way to deliver the result and do not expose this test to anyone apart from yourself.

Please organize, design, test, and document your code as if it were going into production and add a Readme where you will explain how to start/test the app. Additionally at the bottom of the Readme please add **application details section** containing:

- **Name:** Your full name

- **Email:** The email that you used to apply for the job at climedo
- **Position:** The position you are applying for

Because those things might not be 100% clear from your github user details.

Good luck and have fun!