



# Task description

We think this task shouldn't take more than **2 hours** to complete, but please submit when you're happy with it.

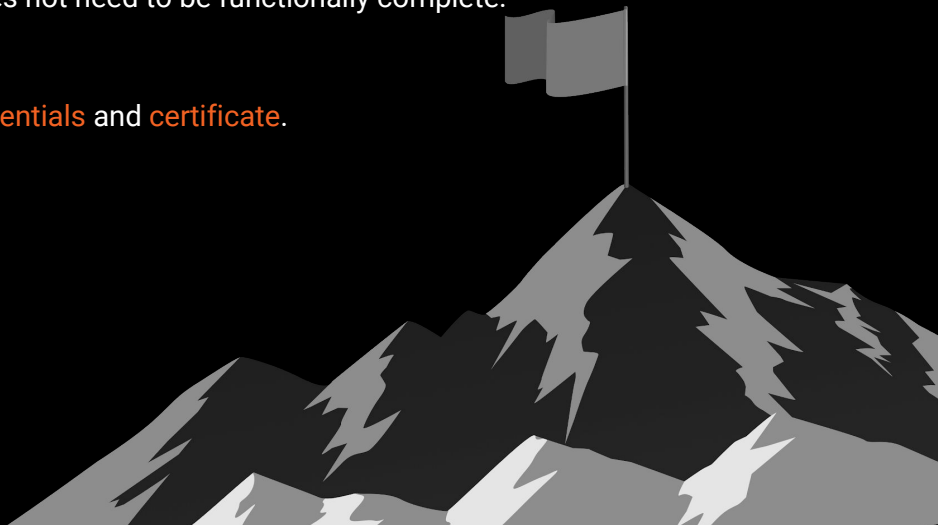
Once you've finished, you can either send us a ZIP file to [reiss@thisisbud.com](mailto:reiss@thisisbud.com) or submit the task through version control system (like Github, GitLab, Bitbucket) under the file title "**Bud Task**"

For you, the task is an opportunity for you to showcase your **coding skills, standards, best practices, patterns** and **testing** abilities. For us, we're less interested in application bootstrapping than we are in evaluating your classes and tests for the supplied specification. This means that the use of **frameworks** is optional, and your code does not need to be functionally complete. As for packageist libraries, feel free to use them if you see fit.

**Please note:** the URL in the test is not valid, so please mock the **credentials** and **certificate**.

## What should you deliver?

A clean, maintainable code, built using today's best practices and standards. We're using the latest technologies and versions here, so we encourage you to do the same. One final point: feel free to demonstrate your knowledge in patterns, but please don't overuse them.



# Task - part 1

You are R2D2 and you have to download part of the Imperial Operating System's Cybersecurity Center of Excellence API.

The base url is: <https://death.star.api/>

Each connection to the system requires an **Oauth2 token**. For the purposes of this exercise, this token will not expire. (but you will have to get it from the token endpoint)

The system requires an **SSL Certificate** and key to be sent with **every request**, including the token.

The endpoints are:

1. [/token](#)  
This endpoint accepts **POST** requests.
2. [/reactor/exhaust/1](#)  
this endpoint accepts **DELETE** requests only.
3. [/prison/leia](#)  
this endpoint accepts **GET** requests only.

## Endpoint details:

[/token](#)  
**POST**

[/reactor/exhaust/1](#)  
**DELETE**

[/prisoner/leia](#)  
**GET**

### Credentials:

Client secret: [Alderaan](#)  
Client ID: [R2D2](#)

### Response:

```
{
  "access_token": "e31a726c4b90462ccb7619e1b..",
  "expires_in": 9999999999,
  "token_type": "Bearer",
  "scope": "TheForce"
}
```

### Headers:

Authorization: [Bearer \[token\]](#)  
Content-Type: [application/json](#)  
X-Torpedoes: [2](#)

### Headers:

Authorization: [Bearer \[token\]](#)  
Content-Type: [application/json](#)

## Endpoint details:

/prisoner/leia

GET

```
{
  "cell": "01000011 01100101 01101100 01101100
           00100000 00110010 00110001 00111000
           01101111",
  "block": "01000100 01100101 01110100 01100101
            01101110 01110100 01101001 01101111
            01101110 00100000 01000010 01101100
            01101111 01100011 01101011 00100000
            01000001 01000001 00101101 00110010
            00110011 00101100"
}
```

## Task - part 2

As a quick-thinking astromech droid, you will be called upon by witless humans to hack complicated defence systems on a fly. To do this, you have decided to mock the response as a series of unit tests (long before you arrive at the **Death Star**).

These tests should cover success and failure. Each endpoint will be Droidspeak (known to humans as **Binary**), and will need to be processed and returned in Galactic Basic (commonly known as **English**).

Write a service to undertake this.

# Thank you

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