



Cycode Senior Support Engineer Assignment

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# Introduction

This exercise is being used to evaluate a candidate’s eligibility for a position within the Support team with Cycode. This is a hands-on role that requires familiarity with tools used in the SDLC as well as cloud and container technologies.

The technical assignment demo and support will assess the following:

* Your hands-on technical capability and creativity relevant to the role in the Application Security space.
* Your communication skills - how you can convey relevant technical information and how well you understand and solve the queries of the customer.

Please read the entire document before starting this exercise. This exercise is divided into two parts:

1. Technical Exercise
2. Customer Ticket Example

# Technical Exercise

Deploy a vulnerable microservice application into an environment of your choosing. You can choose how and where you deploy the application, and we encourage creativity. It can be as simple as running Docker Desktop or as rich as a commerce website.

Examples of such applications could be [OWASP Juice Shop](https://github.com/juice-shop/juice-shop) or [OWASP WebGoat](https://github.com/WebGoat/WebGoat), but you can choose any other application you’d like.

1. Create or use an existing GitHub account.
2. Fork the application project in GitHub
3. Install a Git client and clone the forked repository to your desktop
4. Follow the instructions from the GitHub project and run this sample microservice application.
5. Create an **output.md** file that captures all the steps you followed to run the application and provide a screenshot of the homepage.
6. Merge this file directly into the **master** branch of your forked project
   1. Is there anything wrong with committing the file directly to the **master** branch?
   2. How would you prevent that?
   3. If you made changes to the repository settings, then add it to your answers in the **output.md** file and merge.
7. Replace the WebGoat image with your own image of your choosing to the main page. Include the steps of the changes you made in the **output.md** file you created in Step 5 and a screenshot of the page with the additional image.
8. Send the URL of the forked project in GitHub to your hiring manager.

# Customer Ticket Example

The following is an example of a customer ticket and covers a common scenario here at Cycode. For this scenario, we will be referring to the <https://openlibrary.org/developers/api> site, as this pertains to how to use the APIs to gather information. There are several things that should be covered in this example:

* A knowledge base article covering how to obtain the information being requested (including any improvements to the existing documentation, if necessary)
* A response to the customer with the relevant information (including the knowledge base documentation)

Please keep in mind that the answer should not only include the API call(s) you will need to gather the requested information, but it should also contain a method to use those API commands to get the requested information. This can be done through code (i.e. Python, Java, C#, etc.), through **curl** commands, or even with Postman or another tool that tests APIs. Regardless of the method, it should be clear on how to use that method to gather the information requested (i.e. if using a script, it should contain instructions on how to use it) and you should at least reference where in the response(s) to find the specific details.

Hi there,

I have a list of ISBN numbers for various books and I’m trying to not only identify the books and their authors, but I would also like to get a list of other books (i.e. 3 other books) from those authors that match the genre of each ISBN I have. I also need to gather the first year each book was published, the number of pages, and the covers for each, including the recommended books.

I have not been able to get this information with the documentation provided and would like to get this data with very few API calls, due to the fact that I have a limited number of requests I can make. Any help getting this data would be greatly appreciated.

Best regards