



TRADELINE

Assignment for the Developer position

Our objective is to build a tool for managing the deployment and monitoring of a set of web services containers. For this we will use Docker containers, and it's Remote API.

The minimum functionality is for the tool to be able to do the following:

- **Build a Docker Image from a given Dockerfile and an application (a simple 'Hello world' web app would be fine)**
- **Start a few instances of the Docker Image in different containers**
- **Validate that the container instances are running**
- **Monitor the resource usage of each container (CPU, I/O, etc)**
- **Consolidate the log output of all the container instances into one centralized log file.**

Tool can use any of Python/Ruby/nodejs/Go/Java ecosystem, and either a command-line or web based tool is acceptable.

Finally, you are free to include any additional features/performance optimizations that you may find relevant or could showcase your skills but please bear in mind that you should cover the core requirements first before attempting any improvements.

Deliverables

The final deliverable should contain:

- A private repo in Bitbucket/Github with a simple Readme.md that will describe the way to build and use the application along with any other external systems that you may have used.
- A simple command-line would suffice for the assignment. A web based GUI would be nice also. But concentrate on the robustness of the solution.

Notes

You will need to provide a working prototype of the application. You are free to implement your project in any technology stack you prefer between Java/Ruby/Python/JS.

Your solution will be judged based on the requirements listed above and programming best practices ie. TDD.