



## **Server Observer**

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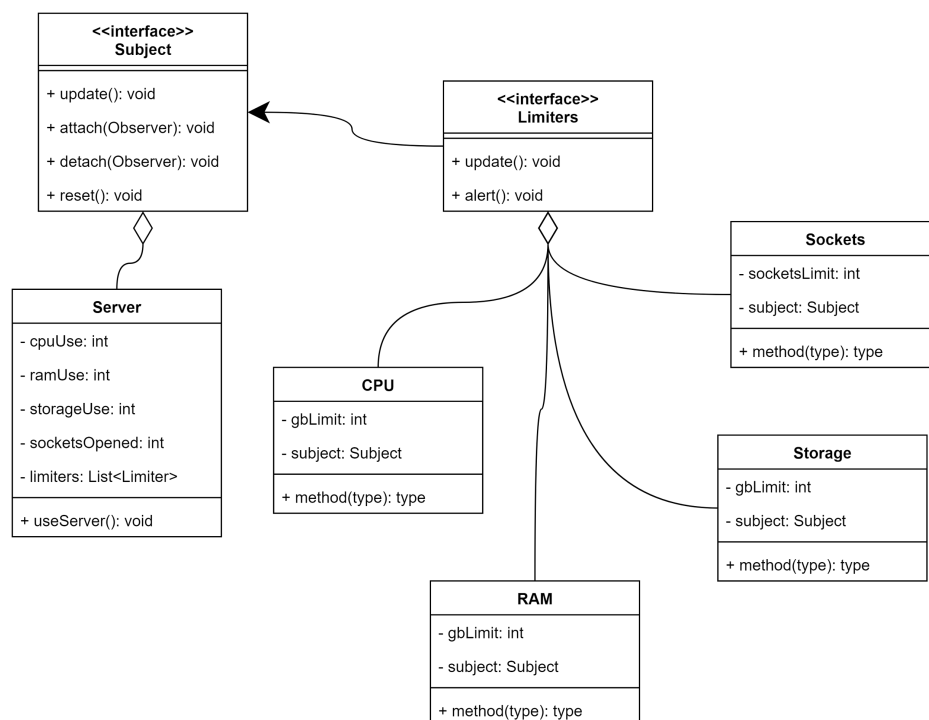
# Context

On a server, a latent problem is the use of resources and processing, and the company ServerCloud doesn't have any kind of system that vigilantes the equipments and verifies that everything is functioning correctly, so they invest on the idea of creating a simulation of server management and how to detect dangers on the servers and what to do on that cases.

## Architecture

### Diagram

We are going to consider the CPU usage, RAM memory limit, storage memory limit (SSD or HDD), the limit of parallel processes created, the number of ports opened, and the temperature.



In this case, the server is our subject of observation, and the subscribers or observers are different types of controllers for a server, CPU, RAM, Storage and Sockets.

The software will simulate a server usage every time, where the limiters will act depending on the situation that the server is passing through.

# Unit tests

This project was tested during its final production, just requiring some few refactoring to improve the performance of the software and its production. The report of its coverage was of an acceptable 89% percent of the complete software being tested and all the unit tests output correctly results.