SHOWCASE

Project name: GrammarChecker

Description: GrammarChecker is a project developed by a UNED spin-off company called OnlySolutions. It is a web-based platform designed to help students learning English by detecting and correcting mistakes in their writing. Its developers decided to use a cloud-based infrastructure from 1&1 Spain that allows Grammar Checker to scale and adapt to its users' needs. At its beginnings their developers didn't know how many users could have and how much computing power would be needed to give them service. Thus, they decided to start the project using a cloud infrastructure. In particular, server variables such as number of CPU, RAM memory or hard disk quota may be modify on the run to adapt the user demand in any moment. During its four years of life Grammar Checker has notably increased its number of users, so many developer effort would have been needed to move from the initial server to a more powerful one. Also, the cloud infrastructure allows their founders to pay the exact number of resources (CPU, memory, disk quota) used in the project in each moment, so no resource is underused in any moment. The decision of using the cloud infrastructure improves Grammar Checker's efficiency and competitiveness.

The cost associated to the basic configuration of the dynamic cloud server in 1&1 Spain (1 virtual machine with 1 CPU core, 1 GigaByte (GB) RAM and 100 GB) is 31 euros per month (VAT included). This price allows the start-up company to launch the project with a low cost and to be able to scale when needed. The resulting server includes a CentOS 6 operating system with remote management through a Parallels Plesk Panel 10. Developer can also accessed through ssh. 1&1 charges per minute of use of CPU cores, GB of RAM and GB or hard disk (the unit is 100 GB). They charge 0.01 euros per CPU core, 0.01 euros per 1 GB of RAM and 0.01 euros per 100 GB of hard disk. With these costs the company can scale their hardware requirements according to their needs in real time. An invoice is sent at the end of the month indicating the uses done during the month and the total charge.