Centennial College

API Engineering and Cloud Computing – COMP 306 – Quiz

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# Question 1.

Please Explain what the cloud is.

The cloud is basically what current technology allows us to use to be able to distribute our resources over the internet and scale outwards as opposed to upwards. This can either be in the form of sharing resources, simply for storage or distributing processing power. We need this technology because of our increasing computing and storage demands and the exponentially increasing costs of scaling upwards.

# Question 2.

Please explain what SaaS is, PaaS, IaaS, and CaaS using examples.

SaaS stands for Software as a Service. It is basically what allows us to use software via the cloud anywhere we have internet access, as opposed to having to download and installing the applications locally. An example of this is the G-Suite. It allows us to use software similar to Microsoft Office (Word, Excel, PowerPoint) on the cloud (Docs, Sheets, Slides).

PaaS stands for Platform as a Service. It basically allows us to develop software on the cloud without having local restrictions. For example, we can use Cloud 9 as an online IDE and have that integrated with GitHub version control and CI/CD to Heroku platform.

IaaS stands for Infrastructure as a Service. It basically allows us to have our infrastructure provided on the cloud, so we don’t need to have it in house. Well known examples of these are Microsoft Azure and Amazon AWS services.

CaaS stands for Container as a Service. It basically allows us to be able to start up an environment (containers) in a matter of seconds as opposed to minutes or days. Examples of this include Docker.