Lambda

The final one of the aforementioned major compute services, AWS Lambda is a FaaS (Functions as a Service) offering provided by AWS, and allows us to run small self-contained pieces of code without having to provision and manage hardware infrastructure yourself. Usually marketed as both infinitely scalable and incredibly cheap, Lambda is particularly useful for minute tasks that need to be run on-demand in an irregular fashion, where renting a server or EC2 instance 24/7 may not be desirable.

It is also worth noting that whilst AWS Lambda is a serverless offering, we do have to specify the memory capacity allocated for every invoked lambda function (usually chosen during the creation stage of the lambda function). By default, all Lambda functions have 128 MB of memory allocated to them though we can increase that value up to 10 GB.

Though we usually deliver our function code to Lambda through packaged zip files, Lambda is also capable of running containerized images, which we can either upload directly or pull from **Amazon ECR (Elastic Container Registry)**, an AWS service designed to store and manage container images. The ability to run containerized images is especially useful in deployments which require external dependencies to be installed on the system (For example, imagine running python code in a system where python was not even installed to begin with).