Google Cloud Platform: App Engine Flexible

➤ **App Engine** : Flexible App Engine overcome the constraints of Standard App Engine.

➤ App Engine allows developers to focus on what they do best: writing code. Based on Google Compute Engine, the App Engine flexible environment automatically scales your app up and down while also balancing the load.

➤ In flex App Engine, You can customize runtimes or provide your own runtime by supplying a custom Docker image or Dockerfile from the open source community.

➤ **Features**

➤ **Customizable infrastructure** - App Engine flexible environment instances are Compute Engine virtual machines, which means that you can take advantage of custom libraries, use SSH for debugging, and deploy your own Docker containers.

➤ **Performance options** - You can specify how much CPU and memory each instance of your application needs, and the flexible environment will provision the necessary infrastructure for you.

➤ **Native feature support** - Features such as microservices, authorization, SQL and NoSQL databases, traffic splitting, logging, versioning, security scanning, and content delivery networks are natively supported.

➤ **Managed virtual machines** - App Engine manages your virtual machines, ensuring that:

➤ Instances are health-checked, healed as necessary, and co-located with other services within the project.

➤ Critical, backwards compatible updates are automatically applied to the underlying operating system.

➤ VM instances are automatically located by geographical region according to the settings in your project. Google's management services ensure that all of a project's VM instances are co-located for optimal performance.

➤ VM instances are restarted on a weekly basis. During restarts Google's management services will apply any necessary operating system and security updates.

➤ You always have root access to Compute Engine VM instances. SSH access to VM instances in the flexible environment is disabled by default. If you choose, you can enable root access to your app's VM instances.

See you in next lecture ...