

Task: Create POST request for creating instance on GCE & Implementation of HealthCheck instance.

- Application name: **GCEOps.go**
- Technology used: **Google Go Lang**
- API used: **Google GC API**
- OS platform: **Windows 10 64bit**

Brief:

Application accepts several parameters & based on parameters it performs different operations like Instance and/or HealthCheck creation on Google GCE.

Usage:

GCEOps.go -pn=PROJECT_NAME -zn=ZONE -in=VMNAME -mt=MACHINE_TYPE -si=SOURCE_IMAGE_PATH -ops=TYPE_OF_OPERATION

Where:

-pn (Type string): PROJECT NAME
-zn (Type string): ZONE, e.g. us-central1-a
-in (Type string): INSTANCE NAME (VM NAME), e.g. mynewvm
-mt (Type string): MACHINE TYPE, e.g. f1-micro
-si (Type string): PATH TO SOURCE IMAGE, e.g. centos-cloud/global/images/centos-6-v20170620
-ops (Type string): TYPE OF OPERATIONS e.g. I for create new instance, H for create new HealthCheck, B for creating new VM & HealthCheck instance and default is HealthCheck response.
-hin (Type string): INSTANCE NAME (VM NAME), e.g. mynewhealthcheck

e.g.

GCEOps.go -pn=crygce-test -zn=us-central1-a -in=mynewinstance001 -mt=f1-micro -si=centos-cloud/global/images/centos-6-v20170620 -ops=I -hin=hc001

Functional details:

- Function name **createVMinstance**:
 - Parameters: Project_Name, Zone, Instance, Machine_type, Source_IMG
 - Purpose:
 - Create new VM instance
 - Prints status of newly created instance
 - Prints Internal & external IP of an Instance
 - Return value: N.A.

E.g. **func** createVMinstance (pname **string**, zone **string**, instanceName **string**, machineType **string**, scrimage **string**)

- Function name **createHealthchk**:
 - Parameters: Project_Name, Zone, Project_URL, Instance_Name
 - Purpose:
 - Crate new HealthCheck instance
 - Prints HealthCheck status
 - Return value: N.A.

E.g. **func** createHealthchk (project **string**, zone **string**, myprojURL **string**, hcName **string**) {

- Function name **HealthStatusGet**:
 - Parameters: Project_Name, Instance_Name
 - Purpose:
 - Checks for HealthCheck on given instance
 - Return value: resp.HTTPStatusCode (int)

E.g. **func** HealthStatusGet (project **string**, hcName **string**) **int** {}

- Function name **getresponse**:
 - Parameters: Project_Name, Zone, VM_Instance_Name
 - Purpose:
 - Checks for current status of an instance
 - Return value: resp.Status (string)

E.g. **func** HealthStatusGet (project **string**, hcName **string**) **int** {}