

## Assessment 1 of 2 for CMP2808M Cloud Computing

### Criterion Reference Grid (CRG)

This assessment is worth 40% of the total module mark. Your assignment will be marked using the following, **weighted**, criteria:-

Criteria	LO	Weight	Third	2.2	2.1	First
<b>Cloud infrastructure-as-code (YAML file)</b>  Create a YAML configuration file, that imports associated Jinja template files that when deployed using the Google Deployment Manager will create and deploy your cloud service solution. Your configuration file should adopt best practices, for example using custom template properties and predefined environment variables. Core compute, storage, and networking resource must be imported from template files.	2	0.3	<p>YAML configuration file demonstrates minimal configuration and cloud resource deployments. The configuration file is mostly a simple rehash of workshop materials with little independent work evidenced. Resource types for compute, storage, and networking are included. Code comments are used but are basic.</p> <p>YAML configuration file runs and completes defined deployment.</p>	<p>The YAML configuration file demonstrates a good configuration with a range of suitable cloud resources for deployment via the template files that should meet the needs of the business to a good standard.</p> <p>The YAML configuration file and imported templates run to completion without errors.</p>	<p>The YAML configuration file presents a well-considered configuration that should fully support the business growth needs. Mainly IaaS resources have been defined and deployed via template imports, including some of the more advanced deployment manager techniques not extensively covered in the module. Code comments are verbose and demonstrate good understanding of the configuration code.</p> <p>The YAML configuration file imports associated templates to fully deploy all defined cloud resources to completion without errors.</p>	<p>Your YAML configuration file presents a well-considered and innovative deployment configuration that should fully support the business growth needs. A solidly informed range of cloud IaaS (and some PaaS if relevant) resources, with security attributes, and robust redundancy have been defined and deployed, including some of the advanced deployment manager techniques not extensively covered in the module. Code comments are informative and reflect a solid understanding of the configuration code presented.</p> <p>The YAML configuration file, Jinja2 templates, and associated schema file fully deploy all defined cloud resources to completion without errors.</p>
<b>Cloud infrastructure-as-code (Jinja template files)</b>  Create one or more separate Jinja template files that are imported by your YAML configuration file. The template files must contain cloud service resource types that are part of your YAML configuration file and should demonstrate re-use. Compute, storage, and networking resource types must be included.	2	0.7	A basic Jinja template is imported by the YAML configuration file.	<p>Two or more Jinja template files have been utilised and are imported by the YAML configuration file with reasonable complexity. Regional resources have been considered and implemented to a good standard. Code comments are clear and detailed.</p>	<p>Three or more sufficiently complex Jinja template files have been utilised and are imported by the YAML configuration file. Some use of custom template properties is evidenced. Regional and multi-regional resources have been considered and implemented to a high standard.</p>	<p>Advanced features such as (but not limited to) extensive Jinja schema file use, external/internal load balancing, VPNs, custom template properties and predefined environment variables are evidenced. At least five well-considered Jinja templates have been developed and imported by the YAML file. Regional and multi-regional resources have been considered and implemented using best practice techniques.</p>