Microsoft Azure 101

A quick guide for hackJam 2016
Microsoft Azure Web Portal (If you have your own account)

- [https://portal.azure.com/](https://portal.azure.com/)
Microsoft Azure Pass (sponsored by Microsoft)

http://www.microsoftazurepass.com/

Organizers will pass you the secret code
Promo codes Expiration Date: 12/21/2016.
Microsoft Azure Web Portal (after entering the secret code)

- **Warning:**
  - Students should register for a new Microsoft account to enjoy the credits rather using the school office365 one
  - The subscription may crash together with the Dreamspark offerings.
Activation

After the activation, you may need to wait for the few minutes. After that, you will be redirected to Microsoft Azure Web Portal.

This Azure Pass offer provides the following:
- $100 USD monthly credits (converted to local currency)
- 1 month duration
- View offer details

Get started now:

Activate ➔
Microsoft Azure Web Portal
Change language and regional format

• The Azure web portal will detect a default language
• If you are not comfortable with the default language, click the setting button
• Select English as the language and English (Hong Kong SAR) as the regional format
Create a Linux VM for web hosting
Select a VM template

• Creating a Ubuntu VM
  • Click **+New button** on the left
  • Select **Compute**
  • Select **Ubuntu Server 16.04 LTS**

• You can choose other VM template (e.g. Windows Server 2016) if you are more familiar with Windows Server
An Overview of VM

• Click **Create** to confirm
Setting up a VM instance

• Type in information for the VM instance
  • Name: Name of the VM
  • Username: The admin username
  • Select **Password authentication**
  • Type in the password twice
Setting up a VM instance

• By default, no resource group is created

• Resource group management
  • Resource group is useful to manage resources at cloud
  • Select **Create new** and type in a name to create a new resource group
  • Alternatively, you can select **Use existing** and select an existing resource group
Select a VM machine configuration

• For beginners, try the cheapest VM settings
Configure optional features

- For beginners, accept the default settings and click OK
Summary of the VM instance
Deploying the VM
All resources and Refresh
Copy the Public IP address

<table>
<thead>
<tr>
<th>Resource group</th>
<th>hackjam-Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Running</td>
</tr>
<tr>
<td>Location</td>
<td>East Asia</td>
</tr>
<tr>
<td>Subscription name</td>
<td>Azure Pass</td>
</tr>
<tr>
<td>Subscription ID</td>
<td>272ad1f2-7418-4f92-a28e-439247c368fd</td>
</tr>
</tbody>
</table>

Public IP address/DNS name label: 207.46.154.65/<none>

<table>
<thead>
<tr>
<th>Computer name</th>
<th>cspeter-ubuntu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating system</td>
<td>Linux</td>
</tr>
<tr>
<td>Size</td>
<td>Standard DS1 (1 core, 3.5 GB memory)</td>
</tr>
</tbody>
</table>

Public IP address: 207.46.154.65

<table>
<thead>
<tr>
<th>Monitoring</th>
<th>CPU percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>80%</td>
</tr>
</tbody>
</table>
SSH connect

Now, you have a full control in a remote VM. Install anything (e.g. Apache, node.js) for your deployment work.
SFTP – File Transfer (Filezilla)

Enter the hostname, select port 22, select SFTP, Enter username

Left (Local machine)  
Right (Remote Linux VM)
Configure Security Group

- Select All resources => Network security group => Overview
  - A unique instance of network security group
- By default, only 1 inbound rule (i.e. enable all SSH connections) is enabled
Configure Security Group (Testing)

- For a testing server (i.e. demonstration purpose during Hackathon), it is good enough for enable all inbound connections.
- For a production server, security rules should be carefully designed.
Setting up DNS name label
Using the DNS name label

- The public IP address may change when you restart the VM
- By setting up a DNS name label, you can use the same label to access the VM even it is restarted
Stop a VM

- You can stop a VM if it is no longer used, credits will still be charged for the storage
- You can also delete the VM and nothing will be charged afterward
Microsoft Azure Documentation

• https://azure.microsoft.com/en-us/documentation/