# Technical Assessment Yahoo PE Team

Answer the below questions within this sheet with as much description as needed.

Time : 60 mins

Name :

Email:

**Docker**

1. **How do you create a docker container from an image?**

**Answer:**

**->Simply I can write command “docker run image-name”**

**Firstly it searches in directory if not present it will pull it from the Docker hub directly.**

**If we want to check the images that are created run command “docker images”**

**If we want to check the container running give command “docker ps”==>for containers that only running**

**“docker ps –a" for all the conatiners present.**

**->Suppose I want to run a Image by my own then I create a Dockerfile and run**

**Cat Dockerfile ---> to give standard input**

**FROM ubuntu**

**RUN apt-get –y python python-pip**

**RUN pip install flask**

**COPY app.py /opt/app.py -->the source code to be copied from app.py to the /opt/app.py**

**ENTRYPOINT FLASK\_NAME=opt/app.py flask run –host=0.0.0.0**

**Run it “Docker build .”**

1. **Suppose you have 3 containers running and out of these, you wish to access one of them. How do you access a running container?**

**Answer:**

**Run docker ps -->gives the list of containers present**

**Take container Id from that which container we want to run**

**Run the command “docker run container\_id” so the specific conatiner we are going to access**

**Or we can attach to the command**

**Docker attach container\_id**

**Git**

1. **What is the process for reverting a commit that has already been pushed and made public?**

**Answer:**

**Go to git history**

**Right click on the commit you want to revert**

**Select revert commit**

**Click revert**

**AWS (Amazon Web Services)**

1. **A Solutions Architect is designing a web application that will serve static content in an Amazon S3 (Service 3) bucket and dynamic content hosted on Amazon EC2 instances behind an Application Load Balancer (ALB). The application will use Amazon CloudFront to make the content available to the end users.**  
   **Explain in detail the services, Security, authentication, and other configurations that the solution architect must do to make the static/dynamic content available to the user.**

**Answer:**

**S3:**

**Coming to amazon S3 we have to create a bucket with unique name and later we should add files**

**In which we have written the code (eg: index.html,bird.jpg ,etc) now upload to s3 bucket.**

**While we are creating we has to give public access to the internet which are default stop us from accessing through internet . And also we has to give S3 bucket policy like Read only access to user or list buckets to user like least prevised access.**

**Now we have static website hosting option in s3 bucket so turn it on and we will get an URL we can access them through internet**

**EC2:**

**Security groups are assigned to EC2 for which ports the instance can access like SSh for sshing from terminal and also http for accessing through internet. We user User data at the starting of creating an instance and it is given only once while starting an instance .Here we has to give installing software's and updating software's .We use and AMI which is an is an image we used normally I use Amazon Linux 2.and also we can create many number of instances using a AMI .**

**ALB:**

**Application load balancer is used to distribute the load across the EC2 instance. When the load increases single instance can't manage the load so we need to distribute the load to other instances so there ALB comes into existence.**

**CloudFront:**

**It is a Global service which acts as a content delivery network. The main advantage of the CloudFront is that caching the data at the nearest data centre**

**For suppose a clint is in us east-1 and accessing instance from Sidney the first time the nearest data centre will approach the data centre that is present in Sidny and give info to the client it takes some seconds to get the data. If some other user wants to access the same instance from Sidny and he is present in us east-1 then he will get info within fraction of time.**

**Linux:**

1. **Do you know how the shell command ‘find’ works?  If you did not have access to this**

**how would you script this same functionality?**

**Answer:**

**Here Find is going to locate the file path.**

**Find . -type d /etc**

**Here “.” represents current directory**

**We get the directories that are ends with /etc**

**We can use Locate if Find doesn't works**

1. **What is shell script and list out types of Linux shell? To write a shell program to count no of characters, lines, and words in a file?**

**Answer:**

**Shell Script means accessing any of the files directories through shell. we have to write command to access files . We have bash scriting for automation and scheduling. Python scripting etc. To cound we use command “wc”**

1. **Finally, you are also required to Upload your solutions to respective GitHub and make it public . Share the repository URL Below**

**Answer:**