LAB PREREQUISITES

1. **Windows/ Linux/ MAC Laptop and Internet connectivity (Dongle/Hotspot whatever suits you).**
2. **Git bash installed - in case of Windows (If not already download it from https://git-scm.com/downloads)**
3. **Postman - optional - for serverless api demo using AWS Lambda**
   For chrome https://chrome.google.com/webstore/detail/postman/fhbjgbiflinjbdggehcddcbncdddomop?hl=en
   For FireFox https://addons.mozilla.org/en-US/firefox/addon/restclient/

LAB INSTRUCTIONS

URL to download the Lab Instructions in PDF format - https://bit.ly/2OOnsia

S3 and Cloudfront Labs

Lab 1: S3- Creating a Bucket and Upload Object

1.) Navigate to Services->S3
2.) Click on Create Bucket
3.) On Name and Region tab, Enter Bucket Name =<yourname>bucket
4.) Select Region= US East (N.Virginia)
5.) Click Create
6.) Search your bucket name

Congratulations! Your first bucket (storage space) is created in S3 on AWS

7.) Open your Bucket by clicking on the bucket name;
8.) Click Upload;
9.) On Select Files, Click on Add Files or Drag & Drop in the provided space;
10.) Use an image file (jpg/png etc.) to upload on S3
11.) Click Upload;
12.) File is Uploaded and displayed in the bucket;

Yes, You have successfully uploaded your file in your bucket.

13.) Click On image which you have uploaded
14.) Copy the link of the image uploaded from its details page.
15.) Open the link in a browser
16.) Click on Make public button;
17.) Refresh the page on browser again

Your image is visible NOW...

Lab 2 -Create CloudFront Distribution

1.) Navigate to Services->CloudFront
2.) Click on Create Distribution
3.) Click on Web->Get Started
4.) Select Origin Name as <your S3 bucket>
5.) Keep default values in all fields

6.) Click on Create Distribution

Yes, Your first CloudFront Distribution is created……..

7.) From the list view of Distributions, click on distribution created just now;
8.) Copy the Domain Name
9.) Open the browser, paste the cloudfront generated domain name and append the object name uploaded in s3 bucket.

Yes, It still shows the image when opened through cloudfront not disclosing the origin this time.

Lab 3 : S3- Versioning

1.) Navigate to Service->S3
2.) Search for your bucket created in Lab 1;
3.) Open the Bucket
4.) Upload a txt file with some content "This is test file version 1"
5.) View the file content after uploading.
6.) Navigate to Properties Tab of Bucket
7.) Click on Versioning
8.) Select Enable Versioning
9.) Click Save

You will notice that Versioning is set to Enabled.

10.) Navigate to Bucket Overview Tab

Notice that Version Hide/Show sub tabs are added above the object list.

11.) Update the same txt file in your system after modify the text saying "This is test file version 2".
12.) Now upload the same file again;
13.) Click on Show tab of Version

Now two versions are available for the same file with Version ID associated with second version and null for first version.

14.) Click on Hide tab of Version
15.) Select the object
16.) From More, Select Delete;
17.) Object is deleted.
18.) Click on Version-Show tab again
19.) The version of the object deleted displays the Delete Marker on it;
20.) To restore the deleted file, Select the version with Delete Marker and Select Delete;
21.) Click on Hide

And your file is Restored!!!

Lab 4 -S3-Lifecycle Management

1.) Open your Bucket.
2.) Navigate to Management tab
3.) Click on **Add lifecycle rule** button
4.) Enter the rule name **lifecyclerule_<yourname>**
5.) Click Next
6.) Configure transition , Select **Current version** checkbox
7.) For current versions of objects, click link **Add transition**
8.) Select **Transition to Standard-IA After**

9.) Keep **Days after creatio**n as 30 days

10.)Click next

11.) Select **Current version** checkbox

12.)Click Next

13.)Click Save

And you are DONE!!!

AWS EC2 Labs

Lab 5 -Create EC2 Instance on Cloud

1. Login to the Loves Cloud Labs (https://bit.ly/2nhKGAQ) and Goto EC2 from the Services section
2. Create an account if not already from the signup page with a Valid Email address to login.
3. Under Service section goto EC2 (make sure your region is N.Virginia) and "Launch Instance"
4. Select the image highlighted in the below example.
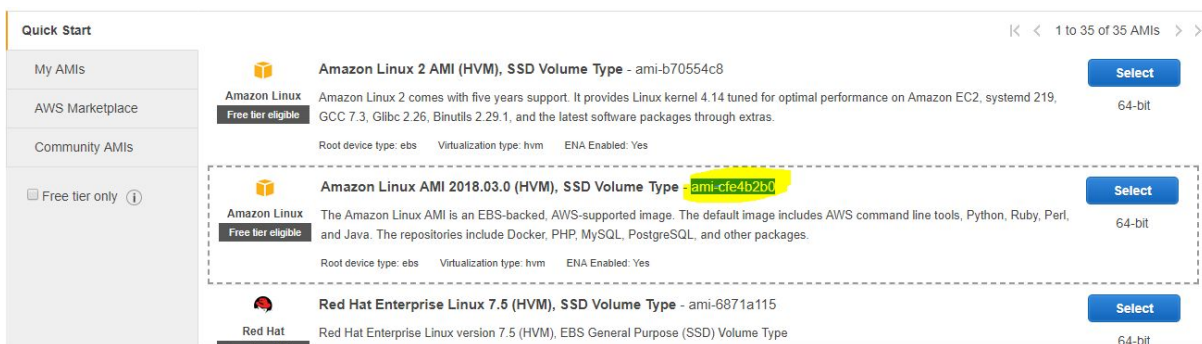
5. Select Launch Instance then select ami-cfe4b2b0 of type General purpose (t2.micro).
6. Download the userdata from https://pastebin.com/raw/5riBz7EX
7. At Step 3. Configure Instance Details, goto to Advanced Details and paste the userdata downloaded from the above link.
8. Let the remaining configuration as default and select the security group as aa-web-sg
9. You need to use PaytmEvent-Key when asked for a keypair while launching instances.
   Incase you need this key, it can be downloaded from the below link.

    https://s3.amazonaws.com/aws-workshop.loves.cloud-11-aug/key/PaytmEvent-Key.pem

    This Key is generic and can be used to ssh to the Instances if required.

10. **Copy the Instance ID. (VERY IMPORTANT)**
11. Once the instance state moves to Ready, wait for some time and then copy the Public Ip of the instance from the Ec2 Dashboard

and then try to browse it from any browser. If all steps were followed as per instructions you should see your website up and running.
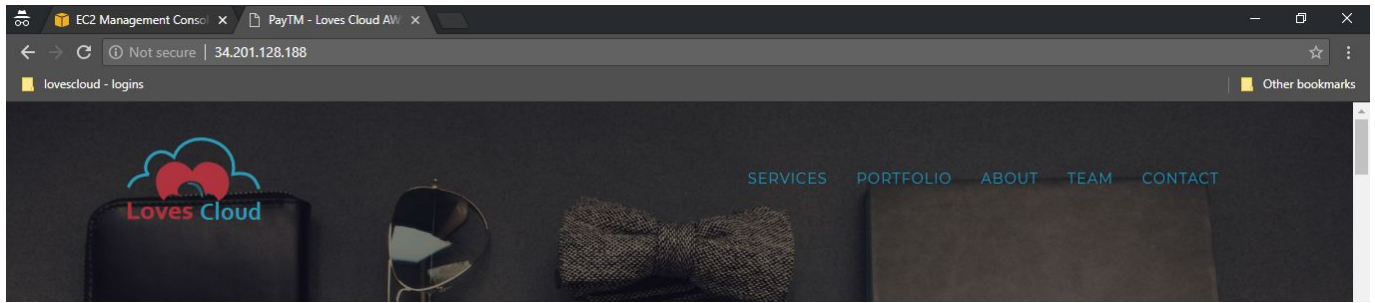

Static Assets for this site: https://s3.amazonaws.com/aws-workshop.loves.cloud-11-aug/css-js-img.zip

AWS Lambda Labs

Lab 6 -Serverless Notification Lambda Function

1. Go to Lambda Dashboard, Create function from Scratch.
2. Select Nodejs 8.10 for run time
3. Create Role, based on existing role select the service-role/test
4. Hit Create
5. Once the Lambda function is created goto the Environment variables section and below key value pairs
6. Now goto Configure test Environment and paste the below code (change email to your email address)
7. For Function code, select Upload File from S3 and add following url:
   a. https://s3.amazonaws.com/aws-workshop.loves.cloud-11-aug/Contact-us-Lambda(1).zip
8. The Lambda Test can be downloaded from https://pastebin.com/raw/87D9v9Kh
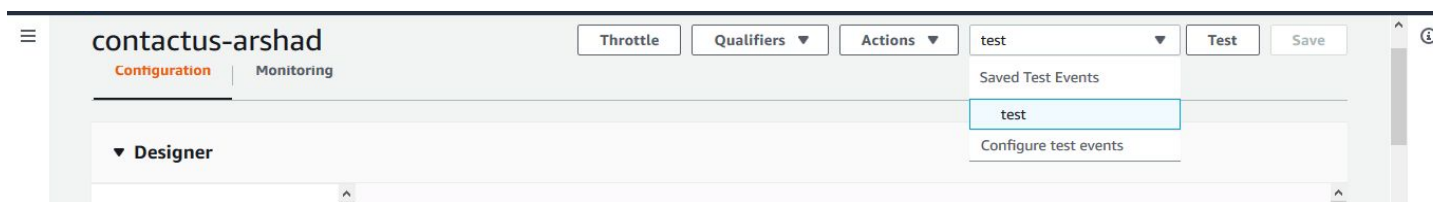
9. Select "Configure test event" as shown in the above screenshot and add the data you downloaded from pastebin.Please update the test data with your email and other details. And Hit Create new Event.
10. Select the event that you created in the above step and Hit on "Test". Wait for a couple of seconds and then check your email, you shall receive contact us email in some time.

Thanks all Folks. Thank You!!