Greetings everyone. Firstly, I would like to thank you all for taking time to attend my presentation. Today I am going to present a small thing which I have made for myself which I use it very frequently. Probably we can call it as a small tool which I have developed. During this COVID times I have been browsing different websites and there are few websites which I have been frequently using and I refresh them every hour or so. I am no big fan of using so many applications each and every time I want to get some updates.

Being more specific about the type of updates, I would like to get updated news which includes headlines, My college news and sports updates.

This is what planted a thought in my mind that why can’t it be automated and get all the things we browse frequently together. Maybe I got this thought out of laziness :-p. So yeah, the tool I designed has helped me reduce navigating to different applications.

What this tool does is it runs every hour and captures the content from the site and saves it as an image. And my work became pretty much simple since then. What I have to do is just refresh the link and my updates are ready.

So, let me give you a quick walk through on how this flows I mean the infrastructure of this tool. So, I have an ec2 with windows server hosted on it. As I said there will be some images captured, these images are stored on the local repo and then they are copied into the S3 bucket. Along with these images I have written a static html page to view all the images in a single page. For EC2 to get permission to access the S3 bucket I have attached an IAM role granting access to S3 bucket. And the S3 generates a URL for all the HTML page and using that URL I get my news updates. I just refresh the URL and my work is done now.

Now that the infrastructure part is clear, I will go walk you through the technologies I used to develop this tool. I have used PowerShell script which installs the selenium module that helps navigating to the desired web page and capture the screenshot of that page and copy them to the S3 bucket instantly.

For this process to run every hour, I have scheduled a task using the windows task scheduler which runs this script every hour.