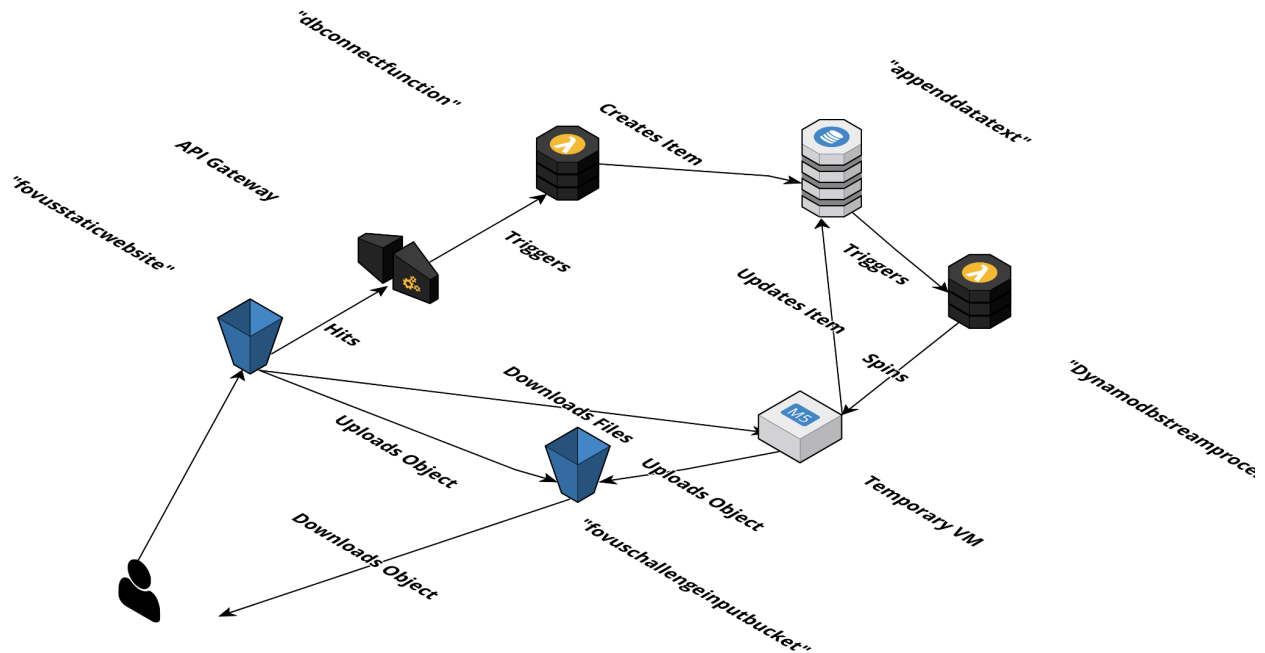


Fovus Assessment

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Website URL: <http://fovusstaticwebsite.s3-website-us-east-1.amazonaws.com>

Architecture:



Challenges faced:

1 - CORS ISSUE

- After creating all the resources and the website, I was trying to do an integration test. It was failing again and again.
- After checking all the links between services I figured out that it has to be the CORS issue. I updated settings in "fovuschallengeinputbucket" Bucket, API and in Lambda headers.
- After that my test successfully passed. Information was being passed to the DynamoDB table.

2 - nanoid module in Javascript

- I followed the link which was attached in DOC. I used commonJS standards to work with nanoid module.
- From the start we were using the 4.0.0 version But in lambda it was giving me errors. After checking numerous stackoverflow pages I found out that the version I was using was the latest version and it's not supported now.
- I moved backwards and installed the 3.0.0 version. After that it started working properly.

3 - File permissions issue in script.sh

- This was the most traumatic one because it took me more than 2 hours to figure out what was the issue.
- Since I am running this script in ec2 userdata, it runs under a different user than ubuntu. Script was not performing a few tasks and was having permission issues when it tried to append a string.
- I almost created and terminated 60-70 instances to check logs and figure out the error. After carefully understanding permissions, I modified it a little bit and it started working fine.

Future Scope:

1 - Automation

This is a very tiring and error-prone infrastructure setup. It takes a lot of time and effort when done manually. All of the infra can be setup automatically using CloudFormation or using AWSCDK. It can reduce human errors. This is very helpful to manage a big infra like this and also automation comes handy when we go multi-region.

2 - Dependencies

In my code I have hard-coded resources' names at someplace. Which can cause problems in future.