imgur-app

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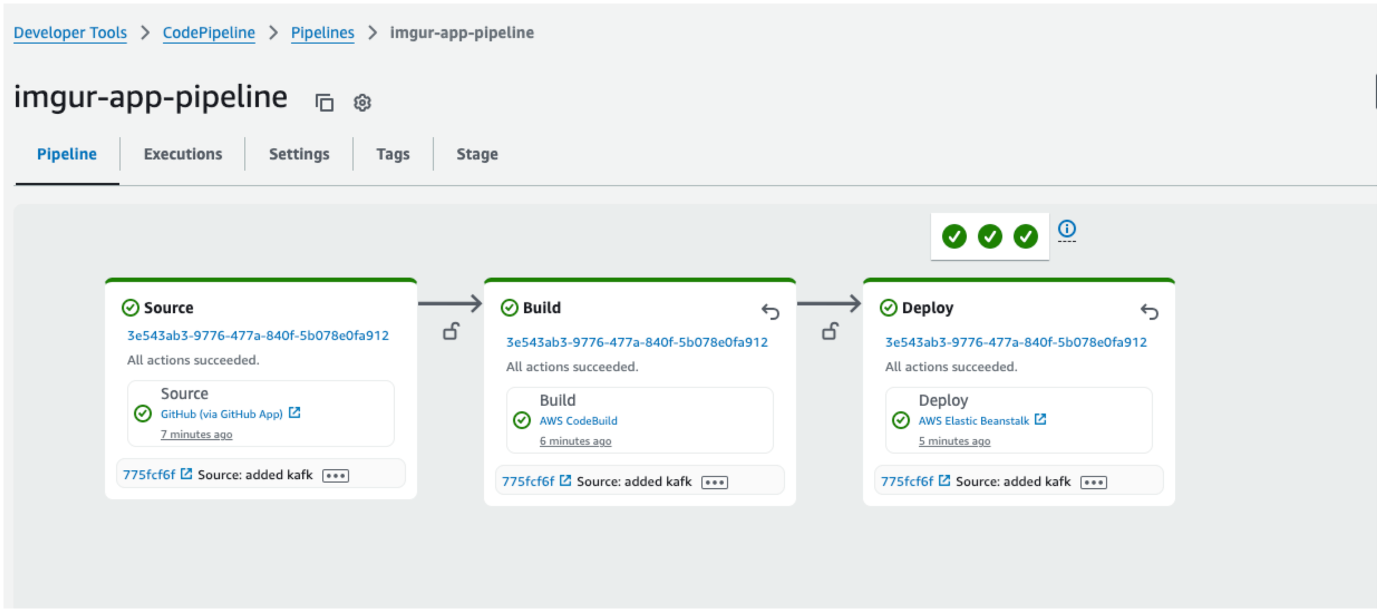
GitHub Link: https://github.com/balakumaran-sugumar/imgur-app
elasticBeanStalk URL: http://imgur-dev.eba-prfmpc3c.us-east-1.elasticbeanstalk.com:8080/

User Flow interaction

- User needs to register using: http://localhost:8080/api/users/register
- Once registered, image can be uploaded here: (POST) http://localhost:8080/api/media/upload
- Can view the images uploaded using: (GET) http://localhost:8080/api/media
- Can download images: (GET) http://localhost:8080/api/media/download/1
- Can Delete the image: (DELETE) http://localhost:8080/api/media/2

Some of key Consideration for this implementation

The code is managed in AWS and is deployed using AWSCodeBuild and AWSPipeline to deploy to elasticbeanstalk



Developer Tools > CodePipeline > Pipelines > imgur-app-pipeline
imgur-app-pipeline
Pipeline
Executions
Settings
Tags
Stage

Source
3e543ab3-9776-477a-840f-5b078e0fa912
All actions succeeded.
Source
GitHub (via GitHub App)
7 minutes ago
775fcf6f Source: added kafk

Build
3e543ab3-9776-477a-840f-5b078e0fa912
All actions succeeded.
Build
AWS CodeBuild
6 minutes ago
775fcf6f Source: added kafk

Deploy
3e543ab3-9776-477a-840f-5b078e0fa912
All actions succeeded.
Deploy
AWS Elastic Beanstalk
5 minutes ago
775fcf6f Source: added kafk

- The Code deployment is controlled by **Webhooks on while merging** from develop to main in github. App is deployed as elasticBeanStalk: http://imgur-dev.eba-prfmpc3c.us-east-1.elasticbeanstalk.com:8080/
- This is not a secured URL and has been considered for this implementation.
- Service will be decommissioned post demo.

Code Uses Caffiene Cache

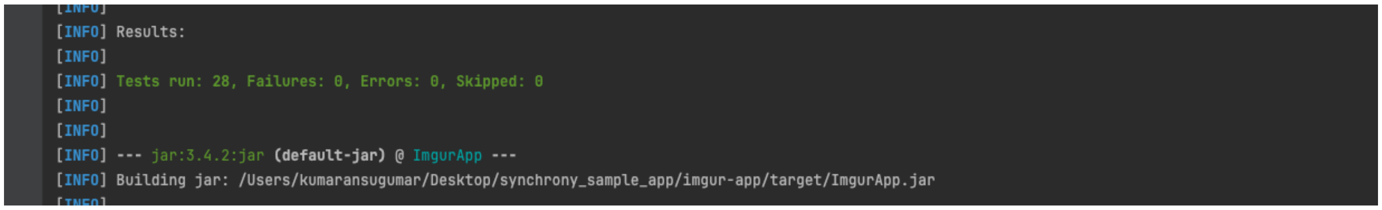
- The implementation uses local cache for faster retrieval of data to handle large volume of traffic, serving as a intermediate cache between the database

Code Uses Kafka Implementation

- The code implements kafka to publish and retrieve data from local cluster.
- Test cases are written using embedded kafka.

Unit test coverage

Total: 28 test-cases, with statement coverage of 85%



```
[INFO] Results:
[INFO]
[INFO] Tests run: 28, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO]
[INFO] --- jar:3.4.2:jar (default-jar) @ ImgurApp ---
[INFO] Building jar: /Users/kumaransugumar/Desktop/synchrony_sample_app/imgur-app/target/ImgurApp.jar
```

Few Challenges

- OAuth2 integration - provisioning a independent OAuth server
- Frequency of Imgur returning 429 TOO MANY REQUEST and 503 Service Unavailable was high