

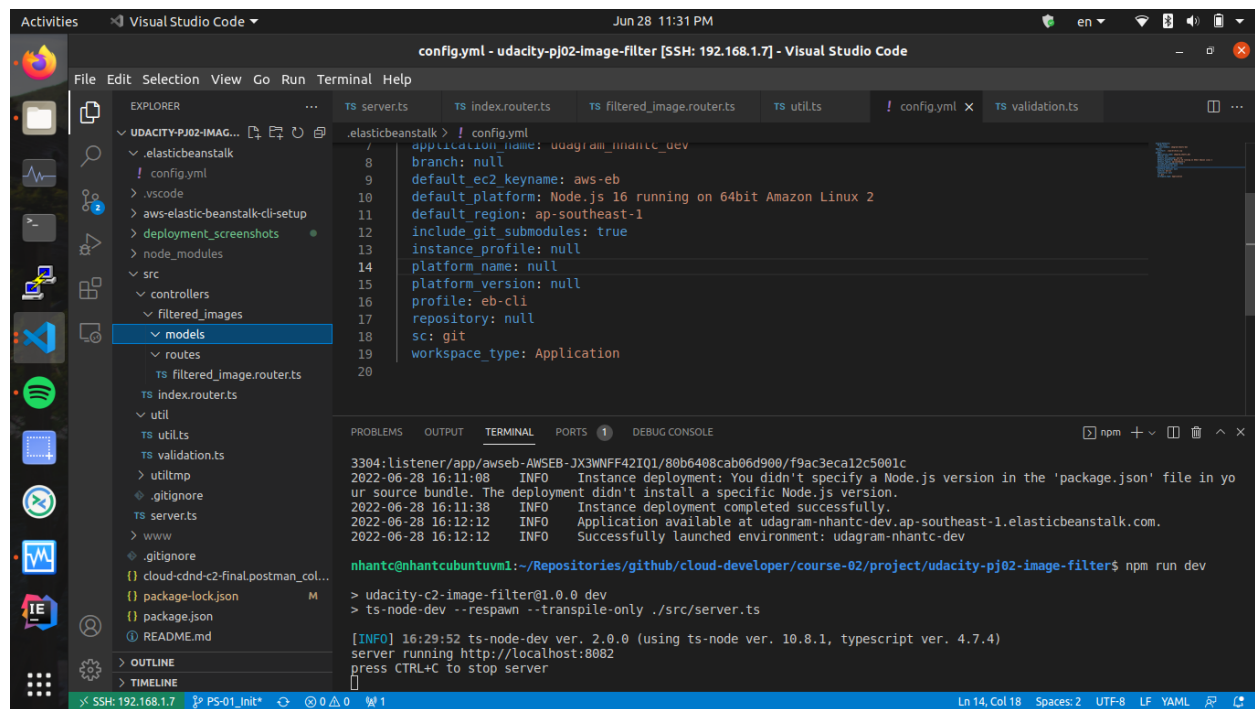
## Engineering Process and Quality

All project code is stored in a GitHub repository and this link has been submitted for review. There are at least two branches - one for development (dev, development) and one master. Master should contain the most up-to-date, stable code at the time of submission.

<https://github.com/nicktran69/udacity-pj02-image-filter>

## Development Server

Starting the server with `npm run dev` runs a local instance of the server with no errors



The screenshot displays the Visual Studio Code interface with the following components:

- Explorer:** Shows the project structure for 'UDACITY-PJ02-IMAG...'. The 'models' directory is selected.
- Editor:** Displays the 'config.yml' file for the 'udacity-pj02-image-filter' application. The configuration includes:

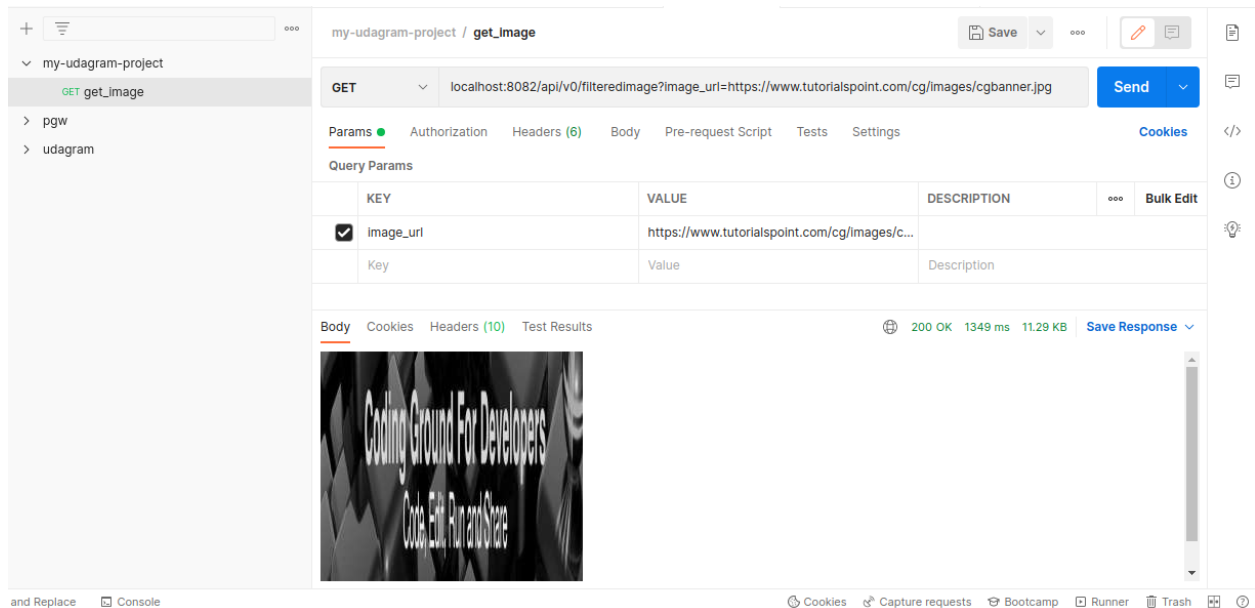
```
application_name: udagram_nhantc_dev
branch: null
default_ec2_keyname: aws-eb
default_platform: Node.js 16 running on 64bit Amazon Linux 2
default_region: ap-southeast-1
include_git_submodules: true
instance_profile: null
platform_name: null
platform_version: null
profile: eb-cli
repository: null
sc: git
workspace_type: Application
```
- Terminal:** Shows the output of the deployment and development process:

```
3304:listener/app/awseb-AWSEB-JX3WNFF42IQ1/80b6408cab06d900/f9ac3eca12c5001c
2022-06-28 16:11:08 INFO Instance deployment: You didn't specify a Node.js version in the 'package.json' file in yo
ur source bundle. The deployment didn't install a specific Node.js version.
2022-06-28 16:11:38 INFO Instance deployment completed successfully.
2022-06-28 16:12:12 INFO Application available at udagram-nhantc-dev.ap-southeast-1.elasticbeanstalk.com.
2022-06-28 16:12:12 INFO Successfully launched environment: udagram-nhantc-dev

nhantc@nhantcubuntuvm1:~/Repositories/github/cloud-developer/course-02/project/udacity-pj02-image-filter$ npm run dev
> udacity-c2-image-filter@1.0.0 dev
> ts-node-dev --respawn --transpile-only ./src/server.ts

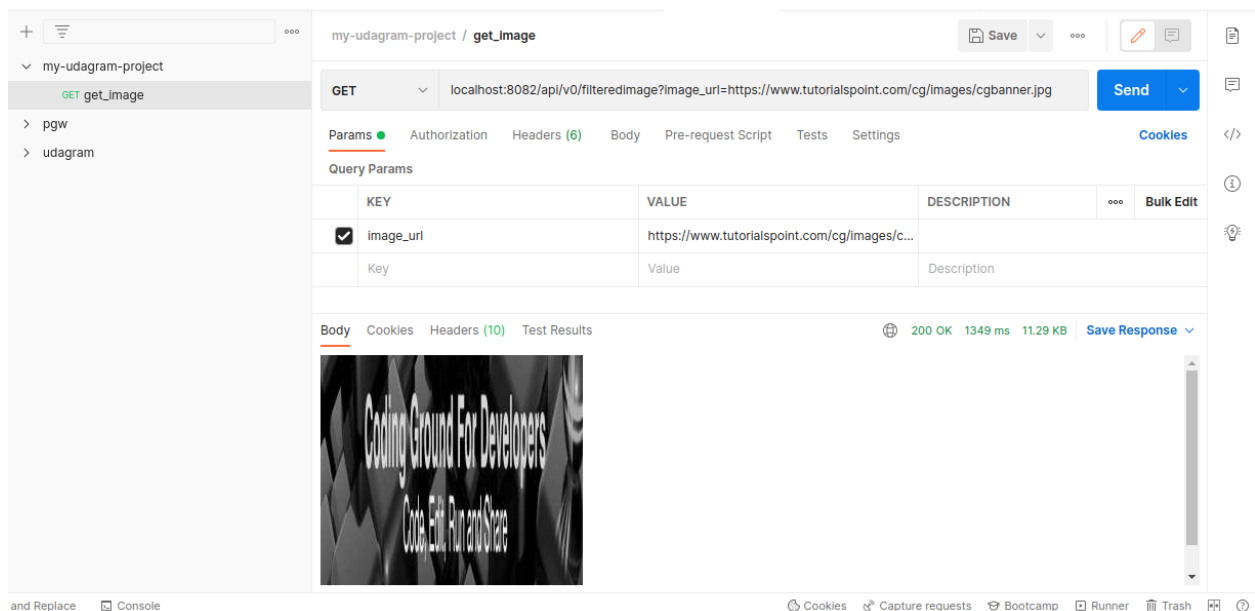
[INFO] 16:29:52 ts-node-dev ver. 2.0.0 (using ts-node ver. 10.8.1, typescript ver. 4.7.4)
server running http://localhost:8082
press CTRL+C to stop server
```

The stubbed `@TODO1` endpoint in `src/server.ts` is completed and accepts valid requests including `localhost:8082/api/v0/filteredimage?image_url=https://www.tutorialspoint.com/cg/images/cgbanner.jpg`

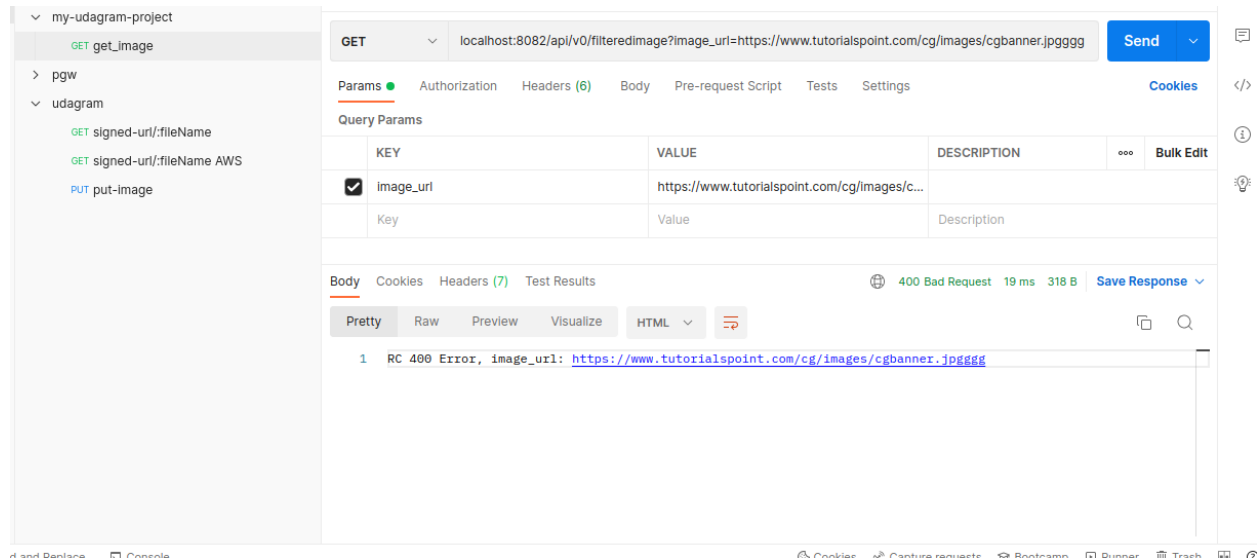


Successful responses have a 200 code, at least one error code for caught errors (i.e. 422)

RC 200 SUCCESS



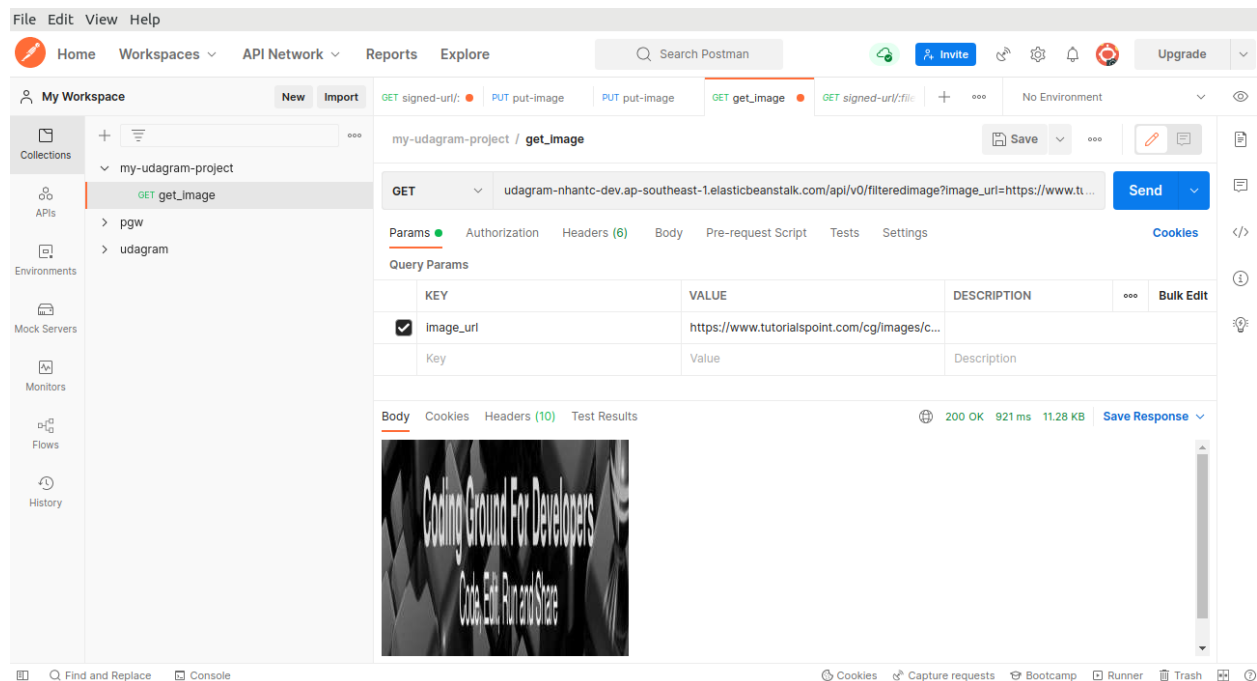
RC 400 ERROR



## Elastic Beanstalk Deployment

An endpoint URL for a running elastic beanstalk deployment (EB\_URL) has been submitted along with the project submission. This endpoint responds to valid GET requests including:

[udagram-nhantc-dev.ap-southeast-1.elasticbeanstalk.com/api/v0/filteredimage?image\\_url=https://www.tutorialspoint.com/cg/images/cgbanner.jpg](https://udagram-nhantc-dev.ap-southeast-1.elasticbeanstalk.com/api/v0/filteredimage?image_url=https://www.tutorialspoint.com/cg/images/cgbanner.jpg)



The project was deployed using the AWS Elastic Beanstalk CLI `eb init`, `eb create`, and `eb deploy` commands.

```
nhantc@nhantcubuntuvml1:~/Repositories/github/cloud-developer/course-02/project/udacity-pj02-image-filter$ eb create
Enter Environment Name
(default is udiagram-nhantc-dev-dev): udiagram-nhantc-dev
Enter DNS CNAME prefix
(default is udiagram-nhantc-dev):

Select a load balancer type
1) classic
2) application
3) network
(default is 2):

Would you like to enable Spot Fleet requests for this environment? (y/N): n
Uploading udiagram_nhantc_dev/app-0b2a-220628_160904704544.zip to S3. This may take a while.

Uploading udiagram_nhantc_dev/app-0b2a-220628_160904704544.zip to S3. This may take a while.
Upload Complete.
Environment details for: udiagram-nhantc-dev
  Application name: udiagram_nhantc_dev
  Region: ap-southeast-1
  Deployed Version: app-0b2a-220628_160904704544
  Environment ID: e-jtxpcvgtgc
  Platform: arn:aws:elasticbeanstalk:ap-southeast-1::platform/Node.js 16 running on 64bit Amazon Linux 2/5.5.4
  Tier: WebServer-Standard-1.0
  CNAME: udiagram-nhantc-dev.ap-southeast-1.elasticbeanstalk.com
  Updated: 2022-06-28 16:09:07.677000+00:00
Printing Status:
2022-06-28 16:09:06 INFO createEnvironment is starting.
2022-06-28 16:09:07 INFO Using elasticbeanstalk-ap-southeast-1-471778123304 as Amazon S3 storage bucket for environ
ment data.
2022-06-28 16:09:28 INFO Created target group named: arn:aws:elasticloadbalancing:ap-southeast-1:471778123304:targe

Uploading udiagram_nhantc_dev/app-0b2a-220628_160904704544.zip to S3. This may take a while.
Upload Complete.
Environment details for: udiagram-nhantc-dev
  Application name: udiagram_nhantc_dev
  Region: ap-southeast-1
  Deployed Version: app-0b2a-220628_160904704544
  Environment ID: e-jtxpcvgtgc
  Platform: arn:aws:elasticbeanstalk:ap-southeast-1::platform/Node.js 16 running on 64bit Amazon Linux 2/5.5.4
  Tier: WebServer-Standard-1.0
  CNAME: udiagram-nhantc-dev.ap-southeast-1.elasticbeanstalk.com
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ment data.
2022-06-28 16:09:28 INFO Created target group named: arn:aws:elasticloadbalancing:ap-southeast-1:471778123304:targe

TBC86FK2U:policyName/awseb-e-jtxpcvgtgc-stack-AWSEBAutoScalingScaleUpPolicy-1T08MVMKMBJP5
2022-06-28 16:10:45 INFO Created CloudWatch alarm named: awseb-e-jtxpcvgtgc-stack-AWSEBCloudwatchAlarmHigh-1R2U6WDO
OD9RT
2022-06-28 16:10:45 INFO Created CloudWatch alarm named: awseb-e-jtxpcvgtgc-stack-AWSEBCloudwatchAlarmLow-E9RL3T1Z6
M6E
2022-06-28 16:11:01 INFO Created load balancer named: arn:aws:elasticloadbalancing:ap-southeast-1:471778123304:load
balancer/app/awseb-AWSEB-JX3WNFF42IQ1/80b6408cab06d900
2022-06-28 16:11:01 INFO Created Load Balancer listener named: arn:aws:elasticloadbalancing:ap-southeast-1:47177812
3304:listener/app/awseb-AWSEB-JX3WNFF42IQ1/80b6408cab06d900/f9ac3eca12c5001c
2022-06-28 16:11:08 INFO Instance deployment: You didn't specify a Node.js version in the 'package.json' file in yo
ur source bundle. The deployment didn't install a specific Node.js version.
2022-06-28 16:11:38 INFO Instance deployment completed successfully.
2022-06-28 16:12:12 INFO Application available at udiagram-nhantc-dev.ap-southeast-1.elasticbeanstalk.com.
2022-06-28 16:12:12 INFO Successfully launched environment: udiagram-nhantc-dev

nhantc@nhantcubuntuvml1:~/Repositories/github/cloud-developer/course-02/project/udacity-pj02-image-filter$
```

A screenshot of the elastic beanstalk application dashboard is included in a `deployment_screenshot` directory.

Elastic Beanstalk

Environments

Applications

Change history

▼ udagram\_nhantc\_dev

Application versions

Saved configurations

▼ udagram-nhantc-dev

Go to environment

Configuration

Logs

Health

Monitoring

Alarms

AWS Graviton now supported

AWS Graviton, an arm64-based processor, can offer up to 40% better price performance over the comparable x86 processor. To upgrade to an arm64 instance type, choose it in the 'Capacity' settings in 'Additional configuration.'

Elastic Beanstalk > Environments > udagram-nhantc-dev

udagram-nhantc-dev


udagram-nhantc-dev.ap-southeast-1.elasticbeanstalk.com (e-jtxpcvgtgc)

Application name: udagram\_nhantc\_dev

Refresh

Actions

Health



Ok


Causes

Running version

app-0b2a-220628\_160904704544

Upload and deploy

Platform



Node.js 16 running on 64bit Amazon Linux 2/5.5.4

Change