

Final Project – Full Stack App (Image Processing Microservice) on AWS

1. The source for the project is at https://github.com/raerrab/aws_fullstack
2. URL of deployed application is: <http://final-project-full-stack-apps-on-aws-dev.us-east-1.elasticbeanstalk.com/>
3. Screenshot of the Elastic Beanstalk application dashboard after deployment

The screenshot displays the AWS Elastic Beanstalk console for the environment 'final-project-full-stack-apps-on-aws-dev'. The interface includes a top navigation bar with 'Elastic Beanstalk' and 'Environments' breadcrumbs. The main content area is divided into two columns. The left column, titled 'Environment overview', shows the environment's health as 'Ok' with a green checkmark, the environment ID 'e-ghmpbjagkr', the domain 'final-project-full-stack-apps-on-aws-dev.us-east-1.elasticbeanstalk.com', and the application name 'final-project-full-stack-apps-on-aws'. The right column, titled 'Platform', shows the platform as 'Docker running on 64bit Amazon Linux 2/3.7.1', the running version 'app-240218_151325267136', and the platform state as 'Supported' with a green checkmark. Below these columns is a horizontal menu with tabs for 'Events', 'Health', 'Logs', 'Monitoring', 'Alarms', 'Managed updates', and 'Tags'. The 'Events' tab is selected, showing a list of events with columns for 'Time', 'Type', and 'Details'. The events list shows four entries: two 'INFO' events from February 19, 2024, and two 'INFO' events from February 18, 2024. A search bar and pagination controls are located above the events table.

Elastic Beanstalk > Environments > final-project-full-stack-apps-on-aws-dev

final-project-full-stack-apps-on-aws-dev [Info](#)

[Refresh](#) [Actions](#) [Upload and deploy](#)

Environment overview

Health
🟢 Ok

Environment ID
e-ghmpbjagkr

Domain
final-project-full-stack-apps-on-aws-dev.us-east-1.elasticbeanstalk.com [Link](#)

Application name
final-project-full-stack-apps-on-aws

Platform [Change version](#)

Platform
Docker running on 64bit Amazon Linux 2/3.7.1

Running version
app-240218_151325267136

Platform state
🟢 Supported

[Events](#) [Health](#) [Logs](#) [Monitoring](#) [Alarms](#) [Managed updates](#) [Tags](#)

Events (100) [Info](#)

[Refresh](#)

Time	Type	Details
February 19, 2024 05:30:34 (UTC-6)	INFO	Environment health has transitioned from Severe to Ok.
February 19, 2024 05:29:34 (UTC-6)	WARN	Environment health has transitioned from Ok to Severe. 91.2 % of the requests are erroring with HTTP 4xx.
February 18, 2024 17:57:57 (UTC-6)	INFO	Environment health has transitioned from Unknown to Ok.
February 18, 2024 17:56:57 (UTC-6)	INFO	Removed instance [i-080068a904fa43d65] from your environment.

4. Environment Variables for Application

Environment properties	
Key	Value
AWS_ACCESS_KEY_ID	AKIA44IGH67ZQLX3M7G
AWS_REGION	us-east-1
AWS_S3_BUCKET_NAME	udacity-raj-bucket
AWS_SECRET_ACCESS_KEY	wPP5iCnCF6BVgX41skxDD3RMwjomLo+wwAWQHebO
AXIOS_POST_URL	http://final-project-full-stack-apps-on-aws-dev-us-east-1.elasticbeanstalk.com/filteredImage/upl...
LOCATION_OF_DOWNLOADED_IMAGE	/tmp/delete.jpg
PORT	8080

5. Successful URL Get Request to Upload Image to S3 bucket ([udacity-raj-bucket](#))

http://final-project-full-stack-apps-on-aws-dev-us-east-1.elasticbeanstalk.com/filteredImage?image_url=https://upload.wikimedia.org/wikipedia/commons/7/77/Delete_key1.jpg

The screenshot shows a REST client interface with a GET request. The URL is `http://final-project-full-stack-apps-on-aws-dev-us-east-1.elasticbeanstalk.com/filteredImage?image_url=https://upload.wikimedia.org/wikipedia/commons/7/77/Delete_key1.jpg`. The request is sent, and the response is a 200 OK status. The response body is `Image S3 Upload Success`.

Key	Value	Description
image_url	https://upload.wikimedia.org/wikipedia/comm...	

S3 bucket with uploaded image

The screenshot shows the AWS S3 console for the bucket 'udacity-raj-bucket'. The 'Objects' tab is selected, showing a list of objects. One object is listed: '1708375083729_file_delete.jpeg'.

Name	Type	Last modified	Size	Storage class
1708375083729_file_delete.jpeg	jpeg	February 19, 2024, 14:38:04 (UTC-06:00)	15.2 KB	Standard

6. Different Version of Same Implementation using Blobs. URL GET request

http://final-project-full-stack-apps-on-aws-dev.us-east-1.elasticbeanstalk.com/filteredImage_v2?image_url=https://upload.wikimedia.org/wikipedia/commons/7/77/Delete_key1.jpg

The screenshot shows a REST client interface with a GET request. The URL bar contains the full request URL, which is highlighted with a blue box. Below the URL bar, the 'Query Params' section is expanded, showing a table with two rows: 'Key' and 'Value'. The 'Key' is 'image_url' and the 'Value' is 'https://upload.wikimedia.org/wikipedia/commons/7/77/Delete_key1.jpg'. The 'Body' tab is selected, showing the response body as 'Image S3 Upload Success'.

Key	Value	Description
image_url	https://upload.wikimedia.org/wikipedia/commons/7/77/Delete_key1.jpg	

Body: Image S3 Upload Success

S3 bucket with uploaded image

The screenshot shows the AWS S3 console for the bucket 'udacity-raj-bucket'. The 'Objects' tab is selected, showing a list of objects. There is one object listed: '1708379332632_file_delete.jpeg', which is a JPEG file, 15.2 KB in size, and was uploaded on February 19, 2024, at 15:48:53 (UTC-06:00).

Name	Type	Last modified	Size	Storage class
1708379332632_file_delete.jpeg	jpeg	February 19, 2024, 15:48:53 (UTC-06:00)	15.2 KB	Standard

Image Processing Microservice on AWS

Development Server

Success Criteria	Result
The project demonstrates a working NodeJS service	<u>Yes</u>
The project demonstrates RESTFUL design principles	<u>Yes</u>
The project demonstrates an appropriate use of HTTP status codes	<u>Yes</u>

Elastic Beanstalk Deployment

Success Criteria	Result
The project uses AWS Elastic Beanstalk's CLI and Console Dashboard	<u>Yes</u>
The project includes functional cloud deployments	<u>Yes</u>