

Infrastructure description

Udagram consists of 2 applications:

- **An API:** Which is an Express application. The app takes care of receiving the requests from the frontend and making the appropriate CRUD operations, user and feed management. This application is deployed by AWS Elastic Beanstalk into an EC2 instance service.
- **A frontend:** Which is an Angular web app that allows user registration, login, authenticated requests, upload photos and so on. This application, once it is transpiled and built, is copied to an S3 Bucket configured to host a static website (an angular web app) so users that reach the URL can use it.

List of required AWS

- AWS RDS: PostgreSQL DB.
- AWS S3: media bucket, frontend bucket and server (API) bucket.
- AWS Elastic Beanstalk: used to automate the deployment of the Udagram app.
- EC2: it is used to host the NodeJS API. It is automatically created, updated and terminated by AWS Elastic Beanstalk.
- AWS IAM: Used to configure the appropriate account to create and modify other services. Adding, replacing or deleting objects from S3, for example.

List of AWS Tools used

- AWS CLI
- EB CLI

Other essential tools

- CircleCI: used to create an automated deployment pipeline.
Configured with 2 pipelines (server, frontend). Starts the pipeline triggered by a commit to the main branch of the code repository.
- Github: used as CVS.