Cloud School - Tasks

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Hint: Make sure to always save your changes in Cloud9.

1 Migrating a monolith to serverless functions

- Split up the monolith and transform it to several serverless functions
- Are there any other changes to consider? Think of meta files
- Deploy the functions: `cd task1/src && sls deploy`
- Together we
  - check if the functions have been deployed
  - have a look at the logs

2 Develop an HTML image uploader

Hint: For all tasks, take care of appropriate logging. This makes life easier :)

2.1 Provide a simple HTML upload form

- Have a look at the commons package
- Complete the corresponding function in image.py
- Deploy the function & call it

2.2 Create a S3 bucket via the AWS UI to store images

Extra question: Would you do that the same way in a real software project?

2.3 Bring the uploader to life

- Implement an upload function that
  - decodes the form data
  - stores the uploaded files in the S3 bucket
- Upload an image via the HTML upload form provided in task 2.1
- Have a look into the S3 bucket. Did the upload succeed? If not, try to increase logging. Did you take precautions regarding access rights? Have a look at IAM role statements for the serverless framework.

2.4 Deliver an uploaded image to the client

- Parse the client's request (you may provide the image's name as a query parameter)
- Retrieve the corresponding S3 object
- Encode the S3 object and deliver it to the client

2.5 Provide a list of uploaded images

- Retrieve the keys of all stored S3 objects
- Generate HTML markup displaying the uploaded images (you may use the endpoint created in task 2.4)