Berner Fachhochschule
Haute école spécialisée bernoise
Bern University of Applied Sciences

Connected Computing
Block B -
AWS Fundamentals Lab

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AWS LAB

- **You will get and email to your students address for an aws user, set a PW and 2FA**
- **For the following lab us: aws cli or/and python with boto3**
  - https://docs.aws.amazon.com/cli/latest/userguide/getting-started-install.html
  - https://boto3.amazonaws.com/v1/documentation/api/latest/guide/quickstart.html

AWS LAB

- **Your start URL is: https://cc-bfh.awsapps.com/start**
- **Once installed aws cli open a terminal and use**
  - *aws sso configure*
  - to get a session and use your session with –profile <profilename>
  - *(Once configured you can use: aws sso login –-profile <profilename>)*
- **Your user will be very restricted to the lab task, you may hit some access denied which is normal. All tasks are possible to do with the access you have.**

AWS LAB

- Find the lambda to generate your student file
- Invoke the lambda with follow payload:
  - '{"student_id":"student<ID>"}' (hint use: --cli-binary-format raw-in-base64-out)
- Find your file in a s3 bucket called student<ID>.txt which the lambda has created (hint: it is in a subfolder of /incoming)
- Download the file
- Look at the file and copy the secret number
- Find the lambda to generate the hash
- Invoke the lambda with the follow payload:
  - '{"student_id":"student<ID>","number":"<secret number from s3 file>"}'
- Create a file called student<ID>_hash.txt and add your hash and ONLY your hash there
- Upload this file in the same S3 Bucket under /hash/student<ID>/
- Find the DynamoDB table to write your result
  - The DynamoDB table has follow atributs: student_id, md5_hash
- Automate everything with boto3 -> use your personal session for it

AWS LAB

- Your student file is created : 1 point (individual)
- Your md5 hash file is uploaded : 1 point (individual)
- Your md5 hash is filled in the DynamoDB : 1 point (individual)
- You automate the whole process: 2 points (group of two)
  - One of you must deliver to code in Moodle, please add your names in a comment
- Total 5/5

- -> Code deliveries on Moodle