# ARGO WORKFLOWS

## EXERCISE 2

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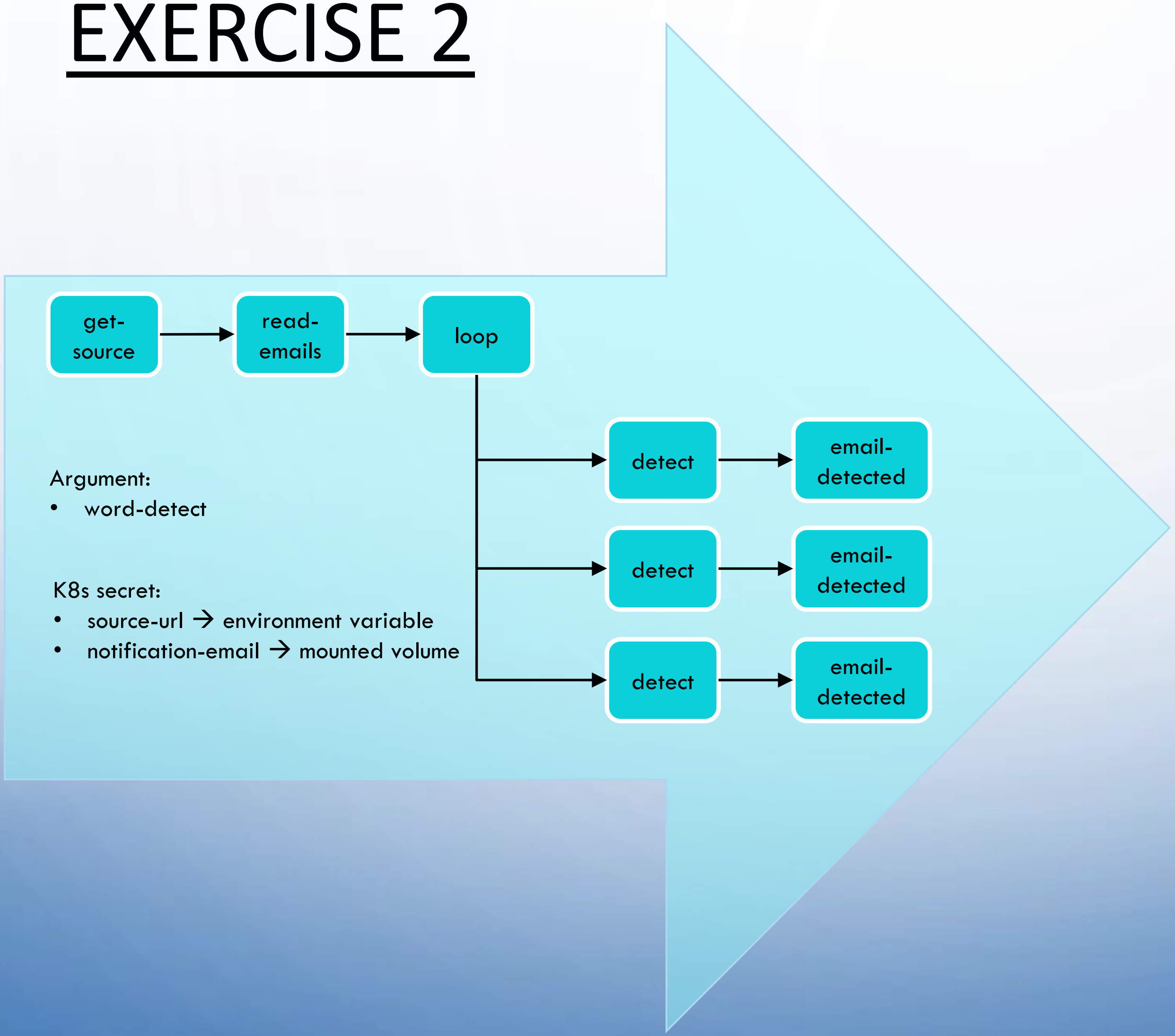

Argument:
- word-detect

K8s secret:
- source-url → environment variable
- notification-email → mounted volume

- **get-source:**
  reading emails.csv from S3 and output as artifact on MinIO
- **read-emails:**
  take emails.csv from MinIO and print to stdout in list format as json for each entry ([{“text“: “…“, “sender“: “…“, {“text“ …])
- **loop:**
  loop over output from read-emails
- **detect:**
  If the email contains the argument word-detect print „DETECTED“ to stdout. Otherwise print „OK“
- **email-detected:**
  print out that email was sent to notification email + sender + text and output the email as artifact to MinIO only if task *detect* detected the word-detect

Source URL: https://udemy-sources-bucket.s3.eu-central-1.amazonaws.com/emails.csv

# EXERCISE 2 HINTS

- **get-source:**

  image → ubuntu:20.04
  sh commands → apt-get update; apt-get install –y curl; mkdir source-file;
  cd source-file; curl &SOURCE_URL –o emails.csv
  environment variable → SOURCE_URL from secret
  artifact output → emails.csv

- **read-emails:**

  image → python:3.8-slim
  python commands → import json; import sys; with open("/tmp/text", "r") as f:;
  lines = f.readlines(); lines = [x.strip().split(";") for x in lines];
  json.dump([{lines[0][0]: i[0].strip("""), lines[0][1]: i[1]} for i in lines[1:]], sys.stdout)
  artfiact input → emails.csv

# EXERCISE 2 HINTS

- **loop:**

  template → DAG

- **detect:**

  image → python:3.8-slim

  python command → if "{{inputs.parameters.word-detect}}" in "{{inputs.parameters.text}}": print("DETECTED")
  else: print("OK")

- **email-detected:**

  image → python:3.8-slim

  python command → with open("/secrets/notification_email", "r") as f: notification_email = f.read()
  3 x print("...")
  f = open("/tmp/email_detected.txt", "w")
  2 x f.write("Sender: {{inputs.parameters.sender}}")
  f.close()

  input parameters → text, sender

  mounted volume → notification-email

  artifact output → email-detected

# GOOD LUCK!