# UiO : Department of Informatics

University of Oslo

DIGHEL4360 – Autumn 2023



# Workshop - Security I

(no submission for these tasks required)

### Task 1 – Password Cracking

<u>Use case</u>

A Norwegian website has been breached and several usernames and password hashes have been leaked. You can find a sample of the leaked data in the table below.

| Username | Password hash   |
|----------|---|
| hans     | \$6\$3pjqlzcJh1jAE0NF\$lxUVS50X/sj2iXMWxhXK0xlBgUaYg0il5UHeK9.RT.<br>qJG.fLNpNkwJGs8dGGvGRiIsYN6pPcgsfIkc/i23E8/. |
| astrid   | \$6\$WINCxQuuFxJFP9q5\$f5yOtFb55BwlS2gwgzsNN/ZJmSzzbB./RfO3rsgu1<br>Co4SBK7WFoIPu9fWBR4ePc7x7SzLHOub7yuvCLQkjplF/ |

Your goal is to sign-in to a given website with both users from the table above. Use the provided dictionary attack web tool to access their credentials and test them on a given website.

Note: The login website and the dictionary attack tool are only available during the workshop.

## Task 2 – Account Security



Sign-in to your Google account and

- a) Make a list of the different authentication and recovery methods that you have enabled
  - Have you enabled MFA? If yes, which methods?
  - Did you set up a recovery account?
- b) Check if Google suggests any improvements in your account set up in the "Security Checkup".

If you do not have a Google account, you can also check your Apple ID account instead.

### Task 3 – Phishing quiz

Please do the phishing quiz on the following website: <u>https://phishingquiz.withgoogle.com/</u>

#### Task 4 – Email Tracking

Check if any of your favorite websites that also provide a newsletter conduct Email Tracking. It is highly recommended NOT to use any of your personal or work email addresses for this task:

- a) Get a temporary email address by opening: <u>https://temp-mail.org/en/</u>
- b) Open a website with a newsletter and register using the temporary email address from a).
- c) Upon receiving the newsletter, download the email "Source" and open it with a text editor, such as Notepad.
- d) Observe the email source code and check if you find any tracking indicators in any of the images (<img src="...">) or other links.

You can compare the emails sent to two different email addresses by repeating the steps above. To get a different temporary email address, you can either delete the email address or do the steps above from another private browser session or a different browser.

Also, you can make use of the DuckDuckGo Email Protection feature. See the following website for more information: <u>https://duckduckgo.com/duckduckgo-help-pages/email-protection/what-is-duckduckgo-email-protection/</u>