Assignment 3

Assignment 3 is a group project (4 members) that involves **writing an individual review** and **making a group presentation** for one of the research papers given at the end of this document.

ℹ️ Grade weight: **3.5/10** of the final grade
⏱️ Group enrollment deadline: **9 May (earlier the better)**
⏱️ Group presentations: **22 and 29 May**
⏱️ Individual reviews due: **29 May**
⚠️ Please follow the timeline given in the ✔️ **Checklist** below

The assignment has two parts:

1️⃣**Part 1 (individual, 2 points):** Write a 500-word critical review of the paper your group has selected. You can discuss the paper in your group, but the reviews should be written by each student separately and they should reflect the student's own thinking. The reviews should at least answer the following questions in a concise way (based on "*Reading a Computer Science Research Paper*" by Philip W. L. Fong):

1. What is the purpose of the study?
2. How do the authors achieve this purpose? Why is this particular approach adopted?
3. Do you think the purpose has been achieved? Discuss after summarizing the main results.
4. Was there anything you found particularly interesting or inspiring in the paper?
5. What are some potential areas for further research related to this topic?

2️⃣**Part 2 (group presentation, 1.5 points):** Give a 10-minute group presentation (including Q&A) of the paper you reviewed. ⚠️ *All group members should be in attendance* and be able to answer the questions related to the paper or the presentation. While the presentation should cover subjects similar to the individual reviews, it should be made more engaging with visual materials, demos or audience interactions (you don't need to do all of these). Allocate 8 mins for the presentation and 2 mins for questions and answers. Try to make the subject interesting, engaging and easy to understand.

See 💡Tips below for guidance on preparing the reviews and presentations.

✔️ Checklist

- **As soon as possible, latest by 9 May** (23:59), in the following order:
  - Assemble a group of four and enroll on Brightspace (do this as early as possible)

    - Once you have 4 members enrolled on Brightspace, check the last comment on this Brightspace thread to find out the available papers and dates.
    - Copy the last comment and add your group name to the list. Add this new list as a new comment, indicating the paper and the date that you prefer to present.
    - ⚠️ Paper and presentation date selections are done on a *first-come, first-served* basis without waiting for the deadline.
- **Before your presentation** (22 or 29 May), submit the slides used in the presentation (one submission per group).
- **By 29 May** (23:59), submit your individual review (one submission per student).
  🎉 *Congratulations! You have completed the assignment.*

🗓️ **Presentation dates:** Because groups presenting on 22 May have one week less to prepare, we will adjust for this disadvantage by being more lenient **if a meaningful disparity is detected**.

💡 Tips

Additional clarifying tips will be presented in the upcoming lectures. Please attend the lectures or view the recordings on Brightspace.

Paper assignments: All ten papers are of similar difficulty and length. Please choose an available paper you find most interesting as a group.

External sources: Presentation videos for some papers may be available online (e.g., on YouTube). Utilize these and other external resources to better understand the paper.

Review guidelines:

- Reviews should be original, accurate, and answer the questions outlined in Part 1.
- In your response, try to capture the study's high-level contributions, as well as technical challenges that the authors solve in creative ways (if any).
- Refer to these resources on writing reviews:
  "*Writing reviews for systems conferences" (esp., 4. Structure of a review)*
  https://people.inf.ethz.ch/troscoe/pubs/review-writing.pdf
  "*Reading a Computer Science Research Paper"*
  http://pages.cpsc.ucalgary.ca/%7Epwlfong/Pub/inroads2009.pdf
- Keep reviews under 500 words (strict), not including references.
- Write reviews in your own words and please do not use generative AI tools.
- Simply rephrasing text from the paper is highly discouraged.
- Finding weaknesses in the research and suggesting improvements or related future work are highly encouraged.

Presentation Tips:

- Involve multiple (or all) group members in the presentation.
- Include the group name and members' names on the cover slide.

Submission format: Submitted reviews and slides should follow this naming convention:

- Review file: s012345.pdf (student number)
- Group slides: A3_12.pdf or A3_12.pptx (group number)

💬 Help

- Look for groups or members on the Matchmaking forum: https://brightspace.ru.nl/d2l/le/427013/discussions/topics/109089/View
- Ask your clarification questions about the assignment on Brightspace: https://brightspace.ru.nl/d2l/le/427013/discussions/topics/111496/View

📄 Papers

1. **(Un)informed Consent: Studying GDPR Consent Notices in the Field**
   https://arxiv.org/pdf/1909.02638
   Utz et al., ACM Conference on Computer and Communications Security, 2019.
2. **WebGraph: Capturing Advertising and Tracking Information Flows for Robust Blocking**
   https://www.usenix.org/system/files/sec22-siby.pdf
   Siby et al., USENIX Security Symposium, 2022.
3. **Won't Somebody Think of the Children? Examining COPPA Compliance at Scale**
   https://petsymposium.org/2018/files/papers/issue3/popets-2018-0021.pdf
   Reyes et al., Proceedings of the Privacy Enhancing Technologies Symposium, 2018.
4. **Privacy Risks with Facebook's PII-based Targeting: Auditing a Data Broker's Advertising Interface**
   https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8418598
   Venkatadri et al., IEEE Symposium on Security and Privacy, 2018.
5. **"Unacceptable, where is my privacy?" Exploring Accidental Triggers of Smart Speakers**
   https://arxiv.org/pdf/2008.00508
   Schoenherr et al. arXiv, 2020.
6. **Sneaky Spy Devices and Defective Detectors: The Ecosystem of Intimate Partner Surveillance with Covert Devices**
   https://www.usenix.org/system/files/usenixsecurity23-ceccio.pdf
   Ceccio et al., *USENIX Security Symposium, 2023.*
7. **Web Runner 2049: Evaluating Third-Party Anti-bot Services**
   https://www.securitee.org/files/webrunner_dimva2020.pdf
   Azad et al., Detection of Intrusions and Malware & Vulnerability Assessment, 2020.
8. **Tracking, Profiling, and Ad Targeting in the Alexa Echo Smart Speaker Ecosystem**
   https://dl.acm.org/doi/pdf/10.1145/3618257.3624803

Iqbal et al., Proceedings of the 2023 ACM Internet Measurement Conference, 2023.

9. **Fingerprinting the Fingerprinters: Learning to Detect Browser Fingerprinting Behaviors**
   https://web.cs.ucdavis.edu/~zubair/files/fpinspector-sp2021.pdf
   Iqbal et al., IEEE Symposium on Security and Privacy, 2021.
10. **Leaky Forms: A Study of Email and Password Exfiltration Before Form Submission**
    https://www.usenix.org/system/files/sec22-senol.pdf
    Senol et al., USENIX Security Symposium, 2022.