**Individual Report**

**Member name:**[Avani Mundra](mailto:amudra@asu.edu)

**Evaluated by:** [Rahul Nayak](mailto:rrnayak@asu.edu)

**Date: 10/09/2023**

**Tasks Assigned:**

* Reviewed and wrote an in-depth report for the paper ‘Predicting Abnormal User Behaviour Patterns in Social Media Platforms based on Process Mining,’.
* Evaluated [Yeshwanth Reddy Chennur](mailto:ychennur@asu.edu)’s individual progress report and in-depth report for the present week.

**Summary:**

* The research paper ‘Predicting Abnormal User Behaviour Patterns in Social Media Platforms based on Process Mining’ discusses the issue of cyberbullying, which has become a significant problem in the age of social media. Cyberbullying involves the transmission of harmful, false, or cruel content about individuals online. The paper emphasizes the need for automated processes to detect instances of cyberbullying, especially when it involves the combination of images and textual comments.
* The authors propose a system that combines data mining, process analysis, and other techniques to detect various forms of cyberbullying. The system aims to uncover hidden connections between individuals and groups with similar behaviors on social media platforms.
* The paper also mentions related work in the field, such as using machine learning techniques like support vector machines and deep neural networks to address cyberbullying. It highlights the importance of analyzing both textual and visual content on social media for a comprehensive understanding of cyberbullying.
* The methodology section describes how the authors collected data from various sources, including Twitter, and then preprocessed the data to prepare it for analysis. They used techniques like data cleaning, data transformation, and feature extraction.
* The paper discusses building a model for cyberbullying detection using recurrent neural networks and N-grams. It evaluates the performance of different classifiers, with Naïve Bayes showing the best precision.

**Outcome:**

In conclusion, the paper presents an innovative approach to cyberbullying detection using process mining and data analysis. The method could potentially be applied to other social media platforms and improved with the integration of visual data.

**References:**

[39] S. G, D. Chandrasekaran, M. D. Sre and M. Sathiyanarayanan, "Predicting Abnormal User Behaviour Patterns in Social Media Platforms based on Process Mining," 2023 International Conference on Intelligent and Innovative Technologies in Computing, Electrical and Electronics (IITCEE), Bengaluru, India, 2023, pp. 204-209, doi: 10.1109/IITCEE57236.2023.10091025.

**Evaluation of Report  
  
Evaluation by:** [Rahul Nayak](mailto:rrnayak@asu.edu) **Date: 10/09/2023**

**Is the weekly member report complete with all the major result(s) of the paper(s)? If not, provide as many examples of the major result(s) missing in the written report as possible. (in bullet form). [within 100 words]**

Yes, The weekly report is complete with all the major results. The paper discusses cyberbullying detection in social media using data mining and process analysis. It emphasizes the importance of automated methods, especially for text-image combinations. It cites related work involving machine learning techniques. Data collection and model construction methodologies are detailed, with Naïve Bayes achieving the best precision. The summary lacks clarity on whether all major results are presented in the paper.

**Is each section of the guidelines sufficiently completed? If not, point out what is missing. [Normally within 40 words].**

Yes, each section of the guidelines is sufficiently completed.

**Is the quality of this version of the written report satisfactory? If not, then why not? [Normally within 40 words]**

Yes the quality of this version of the report is satisfactory.

**Approved by:** [Krupaben Kothadia](mailto:kkothadi@asu.edu)

**Date: 10/09/2023**