Project: Midterm Report

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[1]CS 412 Group G6

November 6th, 2024

1 Title

starting with group id, please also include names of group members []

2 Abstract

summarizing the project

3 Introduction

a self-contained intro to the problem, including motivation (why the problem is interesting/important, etc.)

4 Motivation

A few sentences on why the project is of interest from a data mining and/or real world application perspective.

5 Related work

in the literature, and in kaggle/related forum. Having just 1-2 references or no references to papers/books will lead to low scores.

5.1 scope

Any change in scope from original proposal, please see guidelines above.

6 Methodology

what you are doing / planning to do from a data mining perspective. This can include any exploratory or statistical data analysis, visualization, efficient data storage/compression, fitting predictive models, clustering, pattern mining, etc. If you are doing / planning to do a comparative study, discuss the methods you are considering, including any methods being used as baselines. Please include a clear evaluation plan, including train-val-test splits, cross-validation, hyper-parameter tuning, and explain clearly how you will do these. You have to highlight alignment of the project with the course clearly, especially if you have received feedback on concerns regarding limited alignment with the course.

7 (Current / Preliminary) Results

what you have so far in terms of initial results and analysis of initial results. Please see comment on figures/tables above, especially the fact that good captions go a long way to making things readable.

8 Plan of Work

what are the next steps before the final report. Please be as precise as possible. Note that you will have about a month to finish the project, so make suitably calibrated plans, e.g., do not over/under promise.

9 Conclusions, discussions

References

[1] Elias Aboujaoude. Problematic internet use: an overview. *World Psychiatry*, 9(2):85–90, June 2010.

[2] Hilarie Cash, Cosette D Rae, Ann H Steel, and Alexander Winkler. Internet addiction: A brief summary of research and practice. *Curr. Psychiatry Rev.*, 8(4):292–298, November 2012.

[3] Mauro Pettorruso, Stephanie Valle, Elizabeth Cavic, Giovanni Martinotti, Massimo di Giannantonio, and Jon E Grant. Problematic internet use (PIU), personality profiles and emotion dysregulation in a cohort of young adults: trajectories from risky behaviors to addiction. *Psychiatry Res.*, 289(113036):113036, July 2020.

[4] Anita Restrepo, Tohar Scheininger, Jon Clucas, Lindsay Alexander, Giovanni A Salum, Kathy Georgiades, Diana Paksarian, Kathleen R Merikangas, and Michael P Milham. Problematic internet use in children and adolescents: associations with psychiatric disorders and impairment. *BMC Psychiatry*, 20(1):252, May 2020.

[5] Adam Santorelli, Arianna Zuanazzi, Michael Leyden, Logan Lawler, Maggie Devkin, Yuki Kotani, and Gregory Kiar. Child mind institute — problematic internet use, 2024.