COMP5048 Assignment 2: Group Work

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COMP5048 Visual Analytics 2023
Assignment 2: Group Assignment

Deadlines: Week 13, May 25, THU 11:59pm

Choose one data set below per group and produce ***good visualisations*** to support ***tasks*** of the data. You can

- Use any existing tool
- Design/implement new algorithms/methods
- Implement existing algorithms
- Design/implement a new visual analytic system

You must acknowledge all your sources.

Data Sets:

1. Top 100 popular movies (https://www.kaggle.com/datasets/georgescutelnicu/top-100-popular-movies-from-2003-to-2022-imdb)
2. Global Video Game Sales and Ratings (https://www.kaggle.com/datasets/thedevastator/global-video-game-sales-ratings)
3. Game Recommend onkozyriev/game-recommendations-on-
4. Google scholar pub asets/victoryerz/ms-data-science-universit
5. Food.com - Recipe l/foodcom-recipes-and-reviews)
6. Google Books (http)
7. Australian Football (https://www.kaggle.c
8. Unicorn Companie icorn-companies-dataset)
9. Car Specification D n/car-specification-dataset-1945-2020)
10. Earthquake datase ke-dataset)
11. Freedom Ranking 2028/freedom-in-the-world-2013-2022

Submission Instruction

Group report (40 marks): Canvas → Assignment 2 Group Report

- Only one submission per group
- Submit group report with group cover page (declare individual contribution with signature) as one PDF
- Submit any animation/demo movie in one mp4
- Submit source codes in a zip file

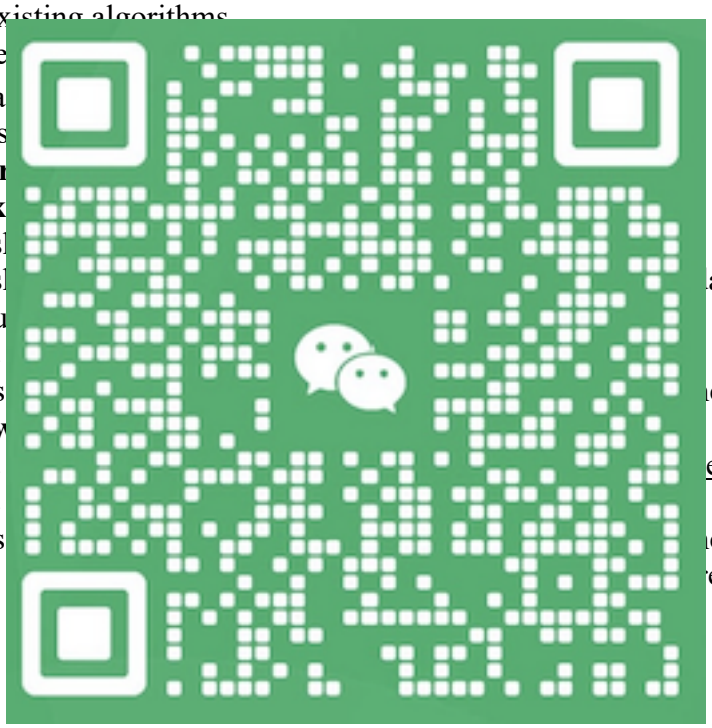
Individual report (20 marks): Canvas → Assignment 2 Individual Report

- One submission per student
- Submit your individual report with individual cover page as one PDF
- Submit any animation/demo movie in one mp4
- Submit source codes in a zip file

Instructions:

For the selected data set:

1. **Design**
   - **1.1. Tasks**: Define tasks based on various aspects of the data, including:
     - Simple tasks: Overview, simple statistics, e.g., ranking.
     - Middle-level tasks: Identify important information, similarity, clusters, correlation.
     - Complex tasks: Identify relationships, temporal dynamics, comparison.
   - **1.2. Data processing**: **Extract subsets from the selected data for each data type:**
     - High-dimensional data
     - Graph data
     - Dynamic data
   - **1.3. Analysis**: Analyse the data to support tasks
   - **1.4. Visualisations**: Construct good visualisations for each data type
2. **Implementation: You can**
   - Use any existing tools
   - Design/implement new algorithms/methods
   - Implement existing algorithms
   - Design/imple
3. **Evaluation:** Eva
   - Visual analys
4. **Demo of your gr**
5. **For group work**
   - Each group sh
   - Each group sh ata processing, analysis, visu
   - Each student
   - Each visualis e same group
6. **For individual w**
   - Each student e
   - Each student
   - Each visualis e same group
7. **Report writing:** e notes



Marking Rubric:

Group marks (40 marks):

- Quality of Design (10 marks)
- Quality of Implementation (12 marks)
- Quality of Results and Evaluation (12 marks)
- Quality of Writing (6 marks)

Individual marks (20 marks):

- Quality of Design (5 marks)
- Quality of Implementation (5 marks)
- Quality of Results and Evaluation (6 marks)
- Quality of Writing (4 marks)

Group report: should be in the following format (*min 20 pages*):

1. Introduction
   1.1. Data set
   1.2. Summary of Contribution
2. Design
   2.1. Tasks
   2.2. Data processing
   2.3. Analysis
   2.4. Visualisation
3. Implementation
4. Evaluation
   4.1. Results (for each visualisation)
      4.1.1. Visualisation
      4.1.2. Visual analysis, Storytelling
      4.1.3. Pros/cons
   4.2. Discussion: Summary, Limitation
5. References
6. Appendix (not included in page limit):
   6.1. Weekly meeting minutes, including attendance, discussion, plan (0.5 page per week: week 6-12).
   6.2. Codes

Individual report: shou

1. Introduction
   1.1. Data set
   1.2. Summary of
2. Design
   2.1. Tasks
   2.2. Data process
   2.3. Analysis
   2.4. Visualisation
3. Implementation
4. Evaluation
   4.1. Results (for
      4.1.1. Visual
      4.1.2. Visual
      4.1.3. Pros/cons
   4.2. Discussion: Summary, Limitation
5. References
6. Appendix (not included in page limit):
   6.1. Individual notes: progress and plan (3 lines per week: week 6-12).
   6.2. Codes