COMP9321 HeavyWeights Assignment1 Design Doc

# Team Communication Methods:

* Online Chat (FB group chat)
* GitHub repository. <https://github.com/Bennyhwanggggg/Data-Meshup-Application>
* Team meetings.

# Tasks and roles

Data publication APIs – Alex

Data analytic APIS - Benny

Mashup application – Steve and Wayne

# Datasets for the mashup

All data sources can be found on Kaggle

1. Goodbooks-10k: provides dataset on ten thousand most popular book’s rating invluding their tags/genre, author and year.
2. TMDB top 5000 movies: provides dataset on the top 5000 movies. Data include year, rating, genre and budget.
3. Anime Recommendation Database: Includes rating, genre and other information on anime movies/TV shows

# Use-case scenario

The aim of this mashup application is to help user find a comparison between movies, anime and books. The application will show how different genre compare across different medias through use of table and charts. For example, a user can filter by horror and see if which of horror books, horror movies, horror anime have better ratings etc. The user can also filter/sort by year to see how different anime/movie/book compare at a specific year. Furthermore, user will be able to see how the different media’s popularity has changed throughout time. Of course, the application will allow user to find a specific title of their interest for them to check out its ratings.

# System architecture and components

Architecture: Single page web app architecture. Client side has a JavaScript layer that can freely communicate and use REST API calls to interact with the back-end systems.

Database choice: MongoDB. Application will be one web server with one database.

Data structure: One class to store and different data sources will be processed before stored into the data structure and database. The data structure may be modified as project progresses.

APIs: Data publication and analytic APIs.

Client application: UI, most likely single page only.