COMP4801 Final Year Project Year 2023-2024

Game Testing and Evaluation Platform with Machine Learning for

Game Developers

Project Proposal

Grouping Information:

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Project Description:

Our project aims to empower game developers with valuable insights into their game and development process through tester evaluation and rating.

With modern platforms that allow for game testing and reviews, such as Steam and OpenCritic, they serve for players to evaluate the worth of a game they want to purchase. However, there exists a few downsides that we aim to address:

- 1. Lack of Automated Analysis of Reviews for Developers
- 2. Lack of Easily Accessible and Consolidated Information regarding the reviews
- 3. Lack of Direct Channel between Game Developers and Players

Machine Learning will be used to enable sentiment analysis on the reviews and evaluations and keyword analysis. By utilizing Natural Language Processing, this platform will allow game developers to analyze keywords and phrases associated with either positive or negative sentiments. With more granular analysis, game developers can better understand the need for improvement and facilitate development.

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We aim to deliver our project through a highly accessible media: a web app. The end product and services should be able to access through various platforms, like website-like interfaces, and on mobile. The web app will allow testers/players to leave reviews and comments regarding the game. Developers will also have consolidated information regarding the game based on the reviews left by players to further improve their games with clear directions.

Project Area of Interests:

- 1. Modern Web Technologies
- 2. Machine Learning: Sentiment Analysis, Keyword Extraction
- 3. Data Processing and Analysis

Potential Supervisor:

1. Prof. TW Chim (Agreement/Consent Obtained via Email)