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Development Centric Player Feedback Analysis for Video Games: DevSpec

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ABSTRACT

Using player feedback found abundantly on the internet to analyze and produce useful information for the development process of video games is a promising research area. A proper analysis of the feedback collected from the players will allow the developers to identify crucial features requested by the players as well as bugs and imbalances present in a video games. Currently most development teams spend large amount of resources to manually carry out the feedback analysis process. In the recent past, various approaches have been taken by researchers to create a solution to analyze the vast amount of player feedback available publicly. The various approaches taken in these studies have many limitations and concerns when considering the practicality of applying these methods to the feedback analysis process such as the requirement of annotated data and the inability to analyze feedback according to the different genres of games and different aspects within a game. Therefore in this study an unsupervised approach is suggested for classifying and summarizing user generated feedback. The feedback will be classified using topic modeling and the summarization will be done using a sentence scoring algorithm. This method is capable of producing results that are on par with the previous approaches while being able to capture the dynamic aspects of games without the requirement of annotated data.

Key Words: NLP, Text analysis, Text categorization, Text summarization, Word embedding, Topic Modeling.