

Opinion *Mining* For Game For Games and Gamers

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ABSTRACT

This idea offers an advanced game evaluation system that rates games depending on the players' opinions. Stability, tutorial, and treatment to the beginners will be used for the evaluation of the game. The system takes opinion of various users, based on the opinion; system will decide whether the game is worth playing or not. The system uses opinion mining methodology in order to obtain desired functionality. A database of sentiment based keywords along with positivity or negativity weight in database will be used and then depending on the sentiment, the comment will be ranked

the game meets their expectations in terms of factors such as stability, graphics, type, etc. The entrance to the system will be provided by an interface that distinguishes the admin, who are privileged to add games and improve the features of the games or the system, and the players who are going to be choosing a game and will be able to see the rating for that game, display comments or comment themselves for the specified game, and recommendations for the player logging in.

1. INTRODUCTION

Our goal in here is to provide an interface to the players who have been searching for new adventures through games to their interests, however were spending their time inefficiently playing it, trying to figure out if

2.1 Data Exploration

The machine learning consists of two important parts; data preprocessor and classification. Game comments must be preprocessed before being used. In the preprocessing phase, firstly the data must be converted to lower case. Then, stop words should be removed from the comments like a,

the, some vb. The purpose of this step is to simplify the process by reducing the number of words in the comments. Secondly, the data needs to be normalized. Normalizing data for english is making verb "went" to "go" or validate misspelled words or converting verb "am/is/are" to verb "be". The next step is tokenization. In this step, sentence split into words. The last step of the data processor is determination of important words. The significant words is read from file. Each word has a point. Words are classificate according to points of words. The point -5 and -4 are very negative word. The point -3, -2, -1 are negative words. The point 1, 2, 3 are positive words. The point 4 and 5 are very positive words. In this phase, we has processed comments and significant words. The next step is extracting features for machine learning algorithm.

2.2 Prediction Methods

The feature extracting is counting the very negative, negative, positive and very positive verbs. In the future, we design more complex features. In machine learning part, we design two classification algorithm; bayes classification and SVM. After extracting feature, SVM algorithm runs on this data. Algorithm use comments for training to find game rates. Evaluated games are recommended to the user fitting his/her trends

Trend in here refers to the systematic inference through the game types that are commented by this user. Using this trend, system combines the rate of the games which have been commented by this user and user trend and recommends a number games fitting to this purpose.

2.3 Part of Machine Learning

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2.4 Tables

There are three main table used in this project for storing data. Fist table store personal information of users like name, password, trends, prefences etc.

Second table is responsible from storing games knowledges about their features and properties like name, kind, quality of pixels, online, isWar etc. That table contains 156 specific game feature columns. It updates with streaming datas which comes from users' comments. Finally, last table, CommentTable, is responsible from storing user comments and

the games which are commented by users. It continuously takes live comment datas from website on glassfish server. This table's main purpose is sharing datas with AI and Machine learning algorithms on process. Write and read process for all database level is controlled by layer of DBLayer which is written by JAVAs. It written by JAVAs because of safety of personal informations.

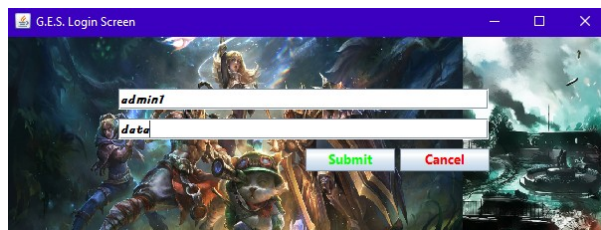
3. Results

ML Analysis;

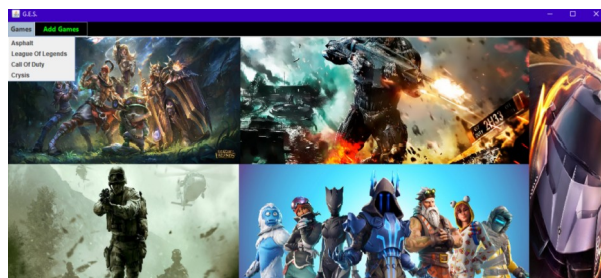
Experimental Data Set; Number Of Instances 13147, Correctly Classified Instances 7441, Success Rate 56 %.

Interface;

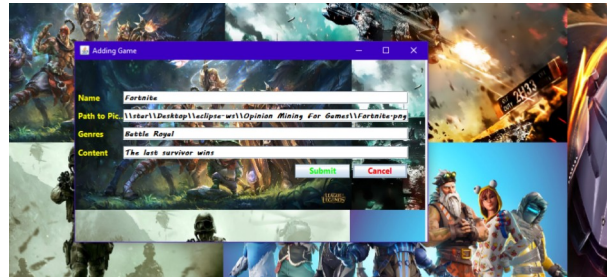
Login Screen



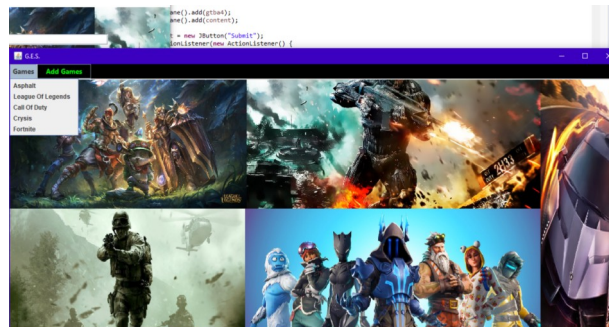
Admin Logged In



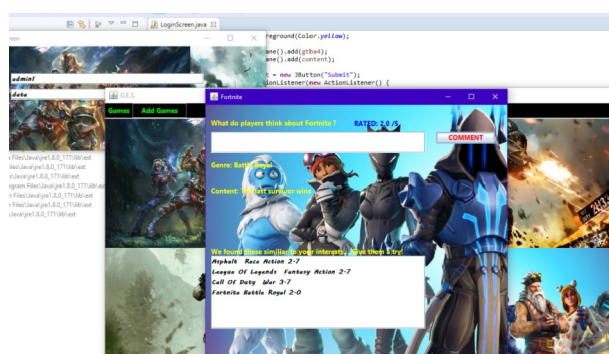
Adding Game



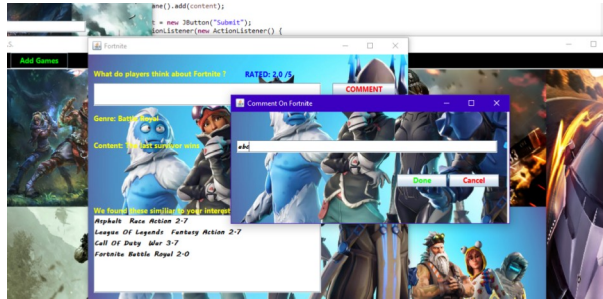
After Adding Game



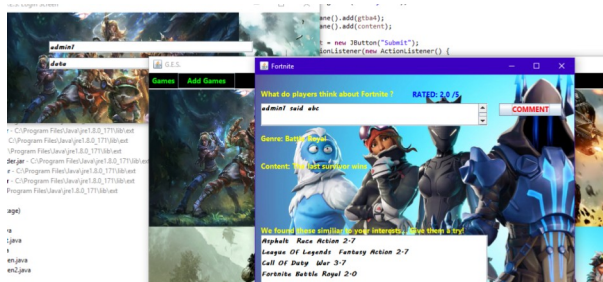
Added Game



User Comments



After Comment



4. Conclusion

In progress...

5. Acknowledgement

This project will fulfil a requirement for Bil
476 Data Mining course

6. ADDITIONAL AUTHORS

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