

Game Search Engine

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Search Problem

- 1. Users want to search reviews of specific games.
- 2. Users want to search general game guides of specific games.
- 3. Users want to search detailed game guides for specific scenes in a game.
- 4. Users want to search certain kind of games they are interested in based on the descriptions provided in the review.

Major inputs / outputs

- Input:

- “All” , “Review” and “Guide” tabs to let users select document source that they are interested in.
- User query in natural language (English).

- Output:

- Hyperlink to the returned document
- KWIC (Key Word in Context)

Approach

- 1. Get game name list from IGN via web crawler
- 2. Follow the game name list to get all the documents of reviews and guides from IGN via web crawler, and save them in both files and database.
- 3. Preprocess the text (tokenizing, lowercasing, phrase detecting, removing stop words, stemming).
- 4. Create inverted term index via Lucene
- 5. Using vector space model to rank all documents (adding time and number of likes as variables to calculate the score for each document)
- 6. Evaluation

Time Schedule

| TIME | TASK | STATUS |
|------|--------------------------|---------|
| 3.15 | game list | done |
| 3.21 | get all require document | ongoing |
| 3.25 | preprocess | |
| 4.1 | inverted index | |
| 4.8 | rank result | |
| 4.15 | front design | |
| 4.18 | system test | |
| 4.20 | prepare presentation | |