

Requirements

tab23

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1 From the User

I would like to use this software to be able to look for scientists who lived in Wales, and who made some amazing contributions to science. Specifically, I would like to be able to find relevant results if I were to search for several different keywords, like a name, field of study, location or a date, or any combination of those. I would also like to be able to sort the results as best I see fit, whether that's alphabetical based on title, or date of publication, or how relevant they are to my keywords. Finally, this software should allow me to read a summary of a specific scientist, as well as provide other locations where I could find out more information if I wanted to.

2 Functional Requirements

2.1 User interface

The user interface in this system is a webpage that contains a simple search bar and, once a query has been submitted, displays extracts of information pertinent to the query. The default ordering for this information will be date of birth of a person, or the date of which an event occurred.

1. Search for a specific keyword, and return all instances of that keyword
2. Search for several keywords, and return instances where those keywords overlap
3. Allow the results to be reordered to best suit the users' needs.
4. Summarize the information about a specific person in cases where a specific name is returned or searched for
5. Provide sources for where the information came from originally, specific to the news article that it was discovered from

2.2 Data storage

All the data gathered will be stored in a database.

1. Store a list of names, dates, and the fields they worked in
2. Return this information when queried
3. Also store events in the person's life, and dates of when they occurred - birth, marriages, children and death, if these can be found.
4. Format general information about a person so that it is returned only when a request for that person specifically is made in some way.

5. Store as many references to where this information has come from as possible, particularly if it did not come from the National Library of Wales newspaper archives

2.3 Information Extraction

This part of the system will search the National Library of Wales newspaper archives, categorize the data found and decide what is relevant enough to store and what is not.

1. Search for names, dates and specific keywords as according to a separate text file
2. Once names are found, search for other articles bearing the same name, and search that text as well
3. Store information found in the data storage system
4. Correct any egregious spelling or scanning mistakes