



PANIMALAR ENGINEERING COLLEGE

AN AUTONOMOUS INSTITUTION
DEPARTMENT OF INFORMATION TECHNOLOGY

III year/VI Semester

Privacy in Personalised Web Search

Shahama Shahabudeen - 2020PECIT204

Soundarya S - 2020PECIT163

Tejashwini V - 2020PECIT168

Sumitha S - 2020PECIT166

ABSTRACT

- A search technique to enhance the efficacy and quality of web searches is personalised search results.
- Personalizing results for searches to make them more appropriate and suited to the client's preferences is the fundamental objective of personalised web search.
- But for personalization to be beneficial, user data—whether private or public—must be gathered and aggregated.
- The effectiveness of the customised online search system is impacted by users' reluctance to divulge certain confidential data when using search engines.
- This essay includes a poll on user choices in personalised web searches that are modelled as individual profiles.
- This study also discusses a personalised web search system that flexibly generalises individuals while taking into account viewer-specified confidentiality constraints.

LITERATURE SURVREY

Paper name	Author name	Problem defined	Methodology	Solution	Drawbacks
Web Personalisation based on User Interaction– 2021	Sumit Sakarkar, Vaibhav Chaudhari	To provide a personalized experience to the user while searching for data.	Scraping, Analysing and classification	Categorization of data and find relations between search result and user preference	Does not preserve the privacy of users
Multi-Group ObScure Logging A private protocol for Private Web Search - 2021	Mohib Ullah, Rafiullah Khan	Longer waiting period for users to obtain search results	Dividing the protocol based on user groups. (Static and dyanamic group).	The user either forwards the query directly or asks the peer user to forward the query	No grouping of users based on similar interest

EXISTING SYSTEM

Private Information Retrieval Schemes

Techniques proposed to privately retrieve information from databases by first partitioning the databases and then distributing the partitioned databases onto multiple servers by assuming that the multiple servers do not communicate with each other during information retrieval.

Proxy-Based PWS Schemes

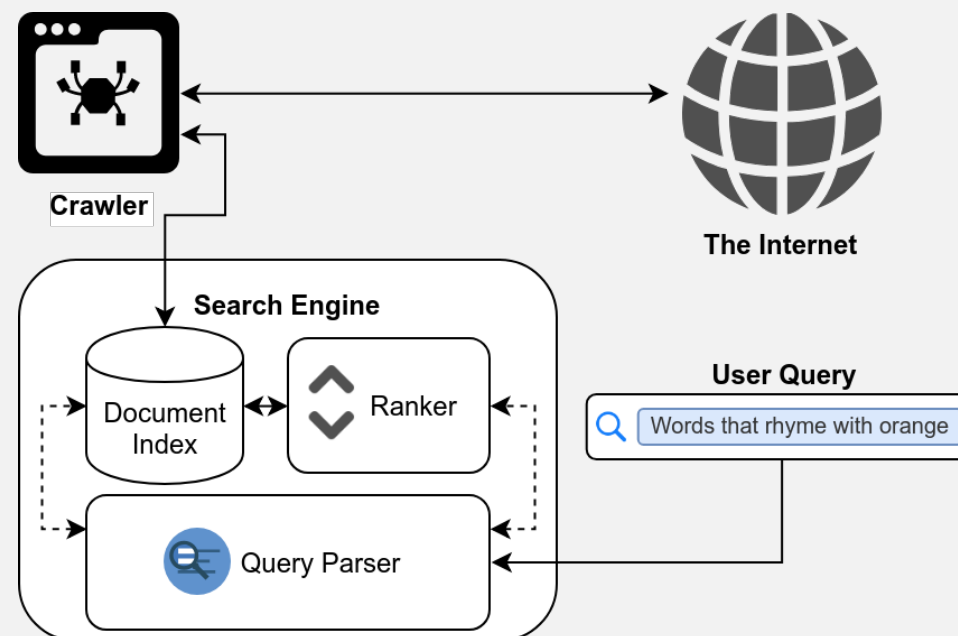
The PWS schemes of this category privately retrieve information from search engines through anonymous web browsing using proxy servers or dynamic IP addressing.

Collaborative Peer-To-Peer PWS

The PWS schemes of this category achieve WSP through users' collaboration. Search queries are issued to WSE through users' collaboration, and information is retrieved from WSE through user collaboration

PROPOSED SYSTEM & ITS ARCHITECTURE

An IR system indexes the files in a set so that queries can be processed quickly. Green indexing frequently employs a reversed index. The dictionary and the posting lists are two additives that make up the inverted index. A dictionary is a collection of all words and phrases that appear in a series at least once. The phrase appearances within the series are included in the posting lists. and the dictionary keeps the head tips of posting lists and integrates connected terms.



REQUIREMENTS OF THE PROJECT

HARDWARE REQUIREMENT:

Computer with ARM64 or x64 processor

SOFTWARE REQUIREMENT:

1. Front end : HTML
2. Web application : Visual Studio, Lucene open source
3. Back end : C#, .NET

MODULES OF THE PROJECT

Module description:

Dataset Preprocessing:

In this module, choose input dataset. Chosen dataset has been loaded into the database. After loading the dataset into the database, we can view the dataset.

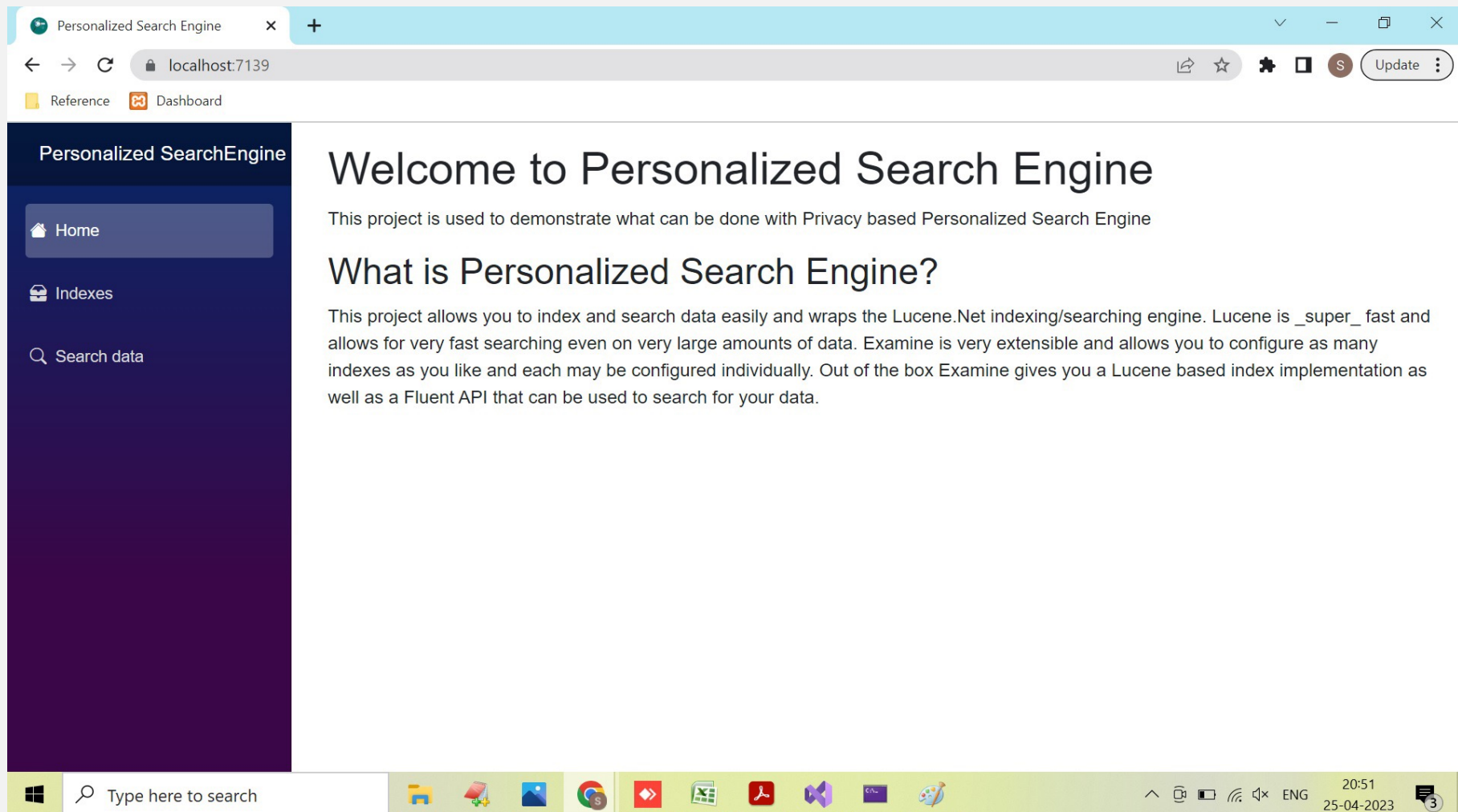
Query Submission and Query Retrieval:

Based on User In this module, user submits query. Based on the query, some relevant results has been displayed and also based on the submitted query some history results are displayed.

Retrieve User Profile in Privacy Manner:

In this module, some adversaries to mine the history results means, only query time has been displayed. In this, other information's such as query, query results, username are not displayed by using the background knowledge

RESULT DISCUSSION



Personalized Search Engine

localhost:7139

Reference Dashboard

Welcome to Personalized Search Engine

This project is used to demonstrate what can be done with Privacy based Personalized Search Engine

What is Personalized Search Engine?

This project allows you to index and search data easily and wraps the Lucene.Net indexing/searching engine. Lucene is super fast and allows for very fast searching even on very large amounts of data. Examine is very extensible and allows you to configure as many indexes as you like and each may be configured individually. Out of the box Examine gives you a Lucene based index implementation as well as a Fluent API that can be used to search for your data.

Type here to search

20:51 25-04-2023

Personalized SearchEngine

localhost:7139/search

ReferenceDashboard

Armstrong1/275

Update

Personalized SearchEngine

HomeIndexesSearch data

Get first 100 items in index

Index to search

MyIndex

Lucene query

Armstrong

Search

201 Results found (Showing 201) - Found in: 467 Milliseconds (0:00:00.4674879)

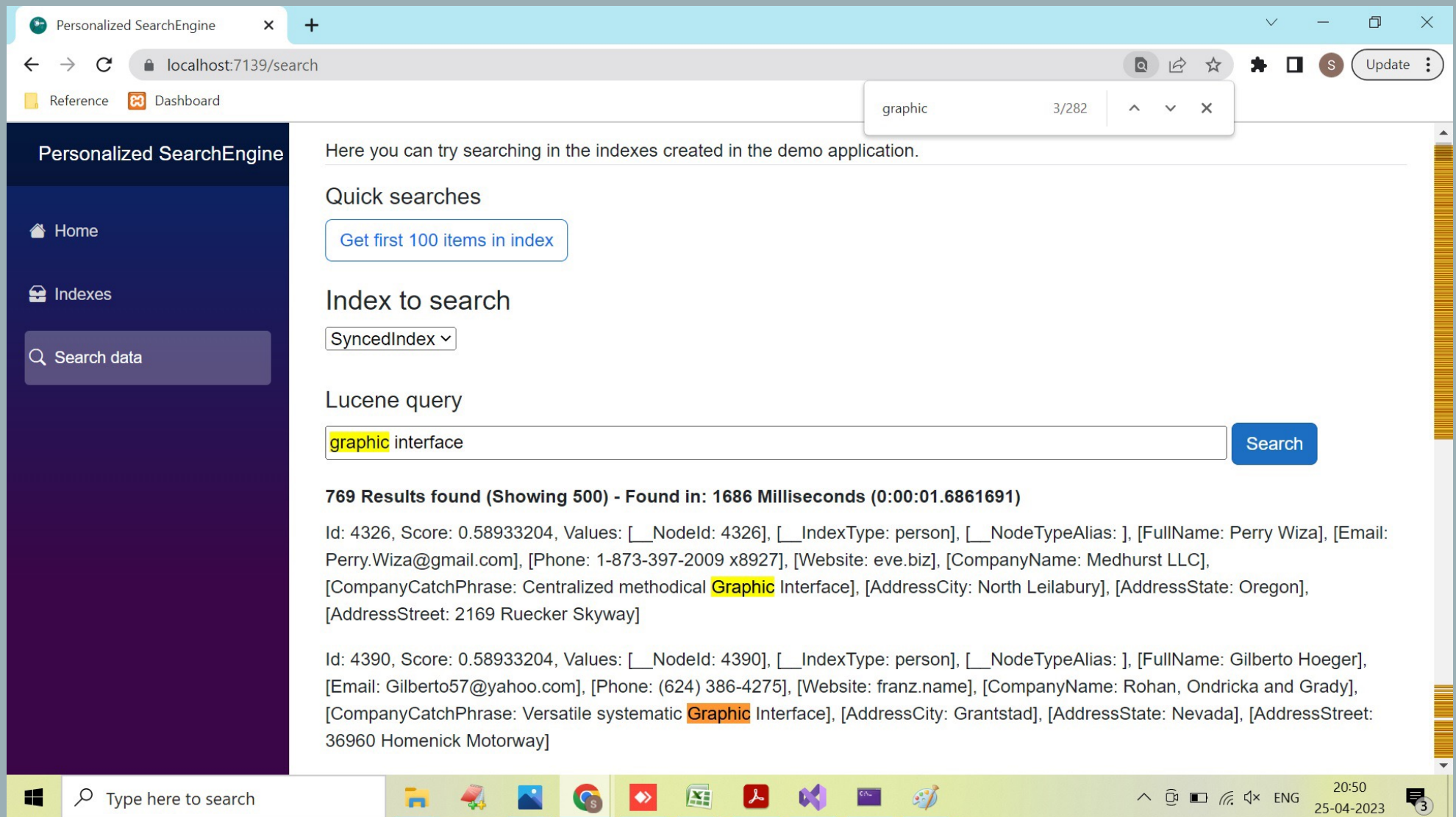
Id: 1141, Score: 1.0597858, Values: [__NodeId: 1141], [__IndexType: person], [__NodeTypeAlias:], [FullName: Melanie Armstrong], [Email: Melanie.Armstrong@gmail.com], [phone: 1-656-942-4201], [Website: dalton.info], [CompanyName: McClure Group], [CompanyCatchPhrase: Devolved non-volatile infrastructure], [AddressCity: Priceside], [AddressState: Texas], [AddressStreet: 779 Kihn Lane]

Id: 1162, Score: 1.0597858, Values: [__NodeId: 1162], [__IndexType: person], [__NodeTypeAlias:], [FullName: Brendan Armstrong], [Email: Brendan.Armstrong41@gmail.com], [phone: 979.469.2223 x2237], [Website: augustine.biz], [CompanyName: Medhurst - O'Reilly], [CompanyCatchPhrase: Reactive interactive hardware], [AddressCity: East Elissaborough], [AddressState: Wyoming], [AddressStreet: 5653 Clotilde Lane]

Id: 2301, Score: 1.0597858, Values: [__NodeId: 2301], [__IndexType: person], [__NodeTypeAlias:], [FullName: Sonja Armstrong], [Email: Sonja_Armstrong14@gmail.com], [phone: 985-305-1971 x171], [Website: cody.biz], [CompanyName: Stoltenberg, Schowalter and Hane], [CompanyCatchPhrase: Adaptive human-resource architecture], [AddressCity: Ellisfurt], [AddressState: Georgia], [AddressStreet: 3068 Conroy Bridge]

Type here to search

20:4625-04-2023



Personalized SearchEngine

localhost:7139/search

Update

ReferenceDashboard

Personalized SearchEngine

HomeIndexesSearch data

Get first 100 items in index

Index to search

MyIndex

Lucene query

Dwayne

Search

33 Results found (Showing 33) - Found in: 737 Milliseconds (0:00:00.737042)

Id: 68, Score: 1.1297998, Values: [__NodeId: 68], [__IndexType: person], [__NodeTypeAlias:], [FullName: Dwayne White], [Email: Dwayne_White31@gmail.com], [phone: 1-855-352-6245 x97870], [Website: royal.net], [CompanyName: O'Hara, Muller and Murazik], [CompanyCatchPhrase: Centralized background forecast], [AddressCity: Leuschkeport], [AddressState: Washington], [AddressStreet: 6320 Cielo Village]

Id: 147, Score: 1.1297998, Values: [__NodeId: 147], [__IndexType: person], [__NodeTypeAlias:], [FullName: Dwayne Kassulke], [Email: Dwayne12@gmail.com], [phone: 396.615.7900 x1221], [Website: tanya.name], [CompanyName: Jacobson, Blick and Lind], [CompanyCatchPhrase: Configurable 24 hour circuit], [AddressCity: East Gail], [AddressState: Oregon], [AddressStreet: 39759 Gisselle Ranch]

Id: 1403, Score: 1.1297998, Values: [__NodeId: 1403], [__IndexType: person], [__NodeTypeAlias:], [FullName: Dwayne Mann], [Email: Dwayne36@hotmail.com], [phone: 1-915-763-7750 x97094], [Website: annabel.biz], [CompanyName: Funk and Sons], [CompanyCatchPhrase: Optional systematic ability], [AddressCity: North Kattie], [AddressState: New Mexico], [AddressStreet: 56408 Raynor Buros]

Type here to search

20:4725-04-2023

REFERENCES

- R. Khan, A. Ahmad, A. O. Alsayed, M. Binsawad, M. A. Islam, and M. Ullah, “Qupid attack: device gaining knowledge of-based privateness quantification mechanism for PIR protocols in fitness-associated net seek,” *Sci. software.*, vol. 2020, Jul. 2020, art. no. 8868686
- I. Weber, V. R. okay. Garimella, and E. Borra, “Political seek traits,” in *Proc. 35th Int. ACM SIGIR Conf. Res. develop. Inf. Retr. (SIGIR)*, 2012, p. 1012.
- I. Weber, A. Popescu, and M. Pennacchiotti, “PLEAD 2012: Politics, elections and facts,” in *Proc. twenty first ACM Int. Conf. Inf. Knowl. control.*, 2012, pp. 2768–2769.
- M. Eirinaki and M. Vazirgiannis, “internet mining for web personalization,” *ACM Trans. internet Technol.*, vol. three, pp. 1–27, Feb. 2003.
- F. M. Facca and P. L. Lanzi, “Mining exciting information from weblogs: A survey,” *statistics Knowl. Eng.*, vol. fifty three, no. three, pp. 225– 241, Jun. 2005.

THANK YOU