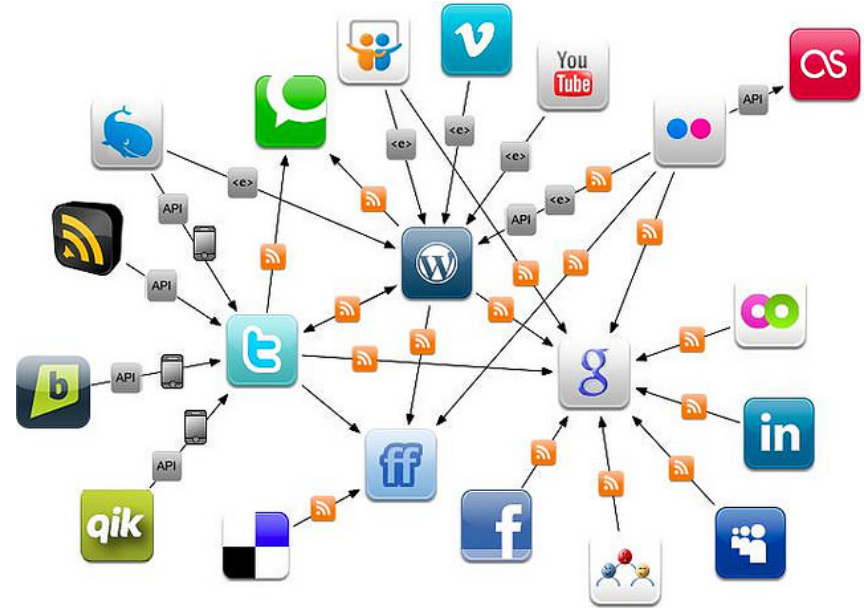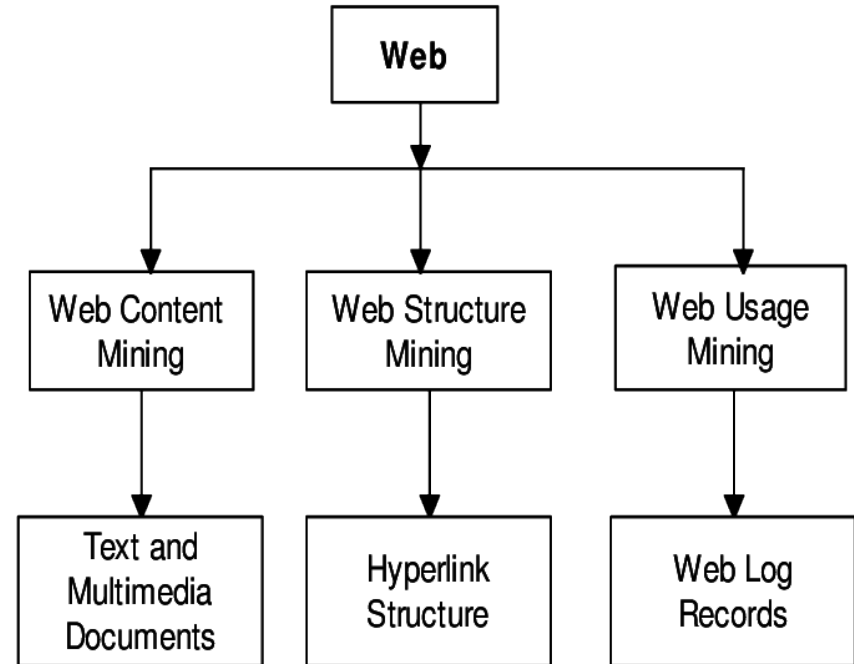# Web Mining

-Likhil Sharma (FR89936)

Introduction

- Mining means extracting something useful or valuable from a baser substance, such as mining gold from the earth.

- Web mining is the process of using data mining techniques and algorithms to extract information directly from the Web.

Types of Web mining

- Three types of Web mining:
  - Web Content Mining
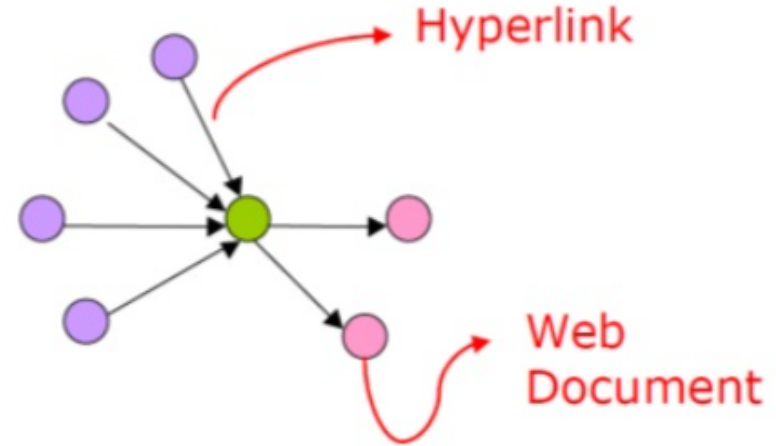 - Web Structure Mining
  - Web Usage mining

Web Content Mining

- To extract the useful information from any web document, this type of web mining is used

- Provides effective and interesting patterns about the user needs and behavior

- Also known as text mining and it performs scanning and mining of the text, images, etc.
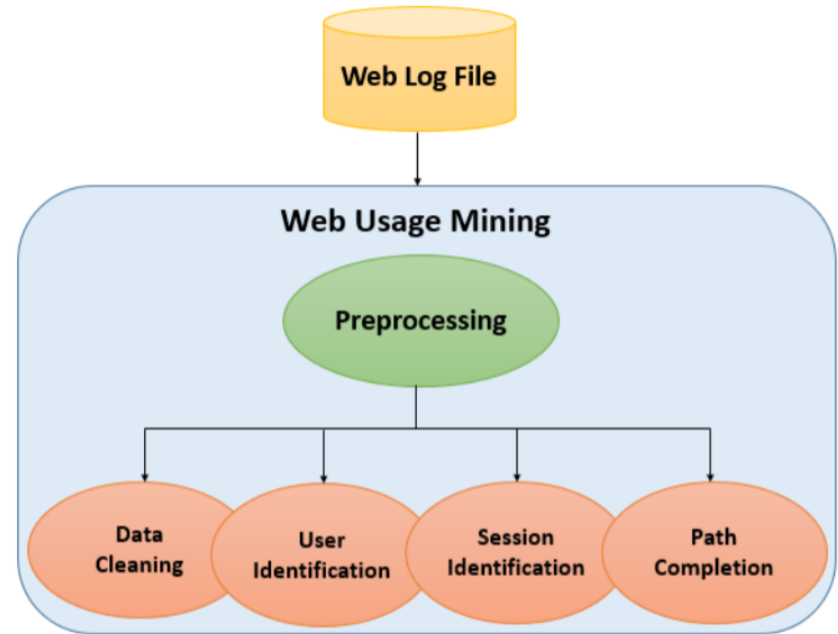
Web Structure Mining

- Basically, shows the structure of any website
- The structure of a typical Web graph consists of Web pages as nodes, and hyperlinks as edges connecting between two related pages
- Two types of web structural data:
  - extracting the patterns from hyperlinks in the web
  - mining the document structure

Web Usage Mining

- Identifying or discovering interesting usage patterns from large data

- Also called log mining

- Classification based on usage data:
  - Web-server data
  - Application-server data
  - Application-level data

Applications

1. Web search engines use web mining to classify the web documents and identify the web pages.

2. It is used for web searching and vertical searching.

3. It is also used to predict user's behavior

4. Landing page optimization is also done by web mining

Conclusion

- To understand the behavior of users and to understand the working of machines and humans, web mining can be used.

- The future of data mining is cloud mining

References

- Web Mining: Past, Present and Future, https://link.springer.com/chapter/10.1007/978-3-540-45219-5_3

- Web Mining: Today and Tomorrow, https://tarjomefa.com/wp-content/uploads/2018/10/9325-English-TarjomeFa.pdf

- The History and Future of Web Mining, by Rochelle Terman, https://townsendcenter.berkeley.edu/blog/history-and-future-web-mining

- Web Mining Research Issues and Future Directions – A Survey, hyperlink

Thank you!