

Querying and Browsing the Resources in Internet

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Outline

- **Introduction**
- **System Architecture**
- **Resource Query System**
- **Guided Browsing System**
- **Enhanced IQBS**
- **Conclusion**

Introduction

- **Motivation**

- ☞ internet resource discovery

- ➔ WAIS, Archie, Gopher, Yahoo, YamWeb, GAIS

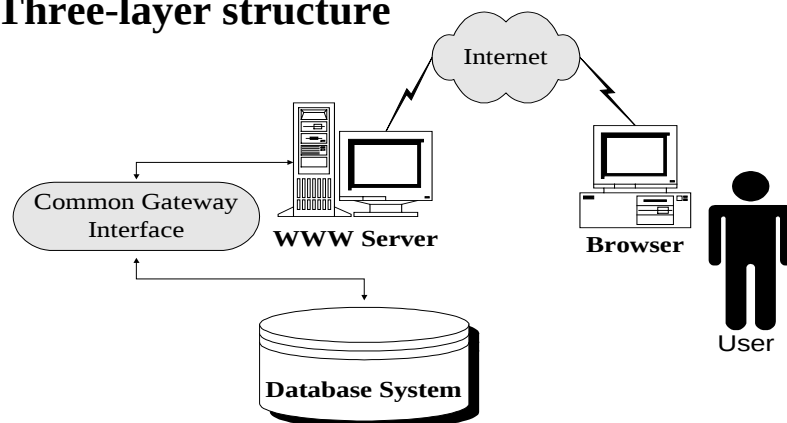
- ☞ web mining

- **Goal**

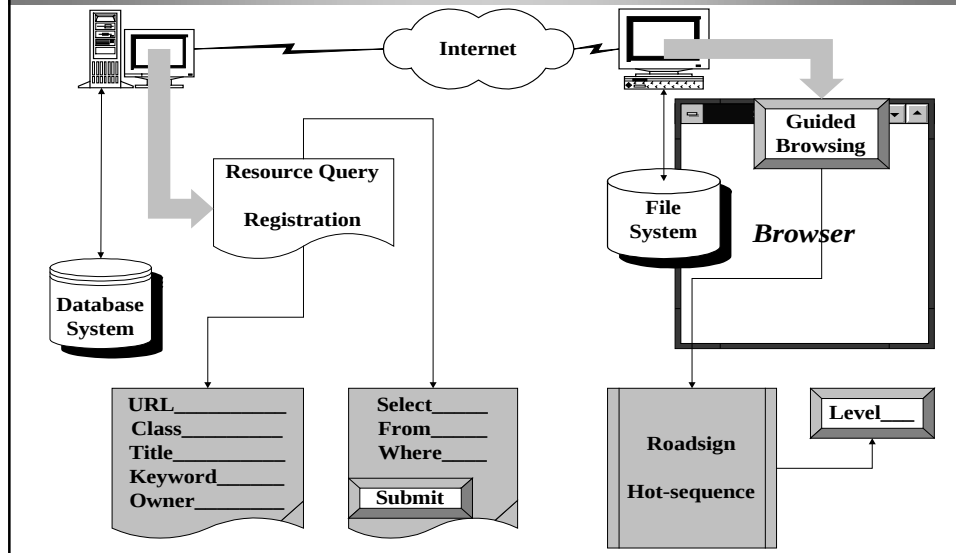
- ☞ provide an *integrated resource query and guided browsing system*

Introduction

- **Three-layer structure**



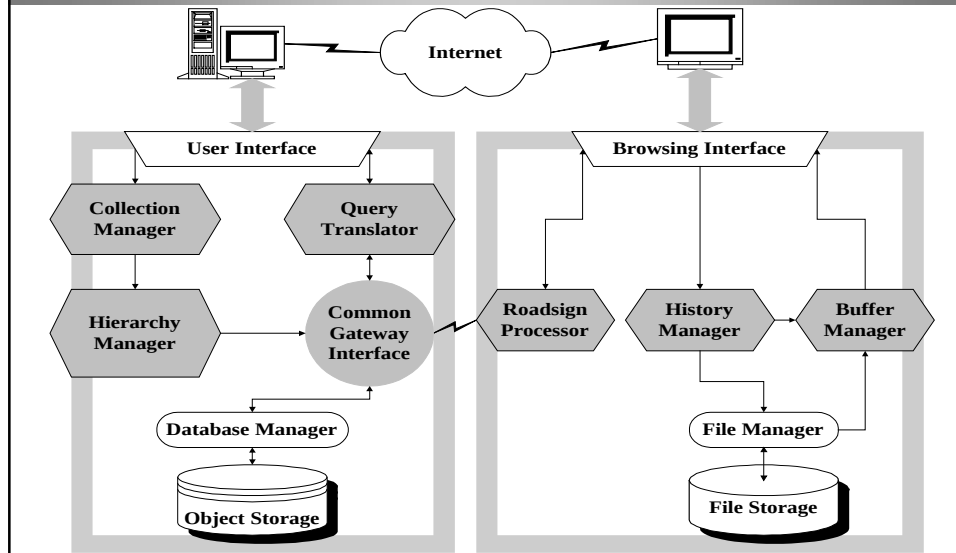
Introduction



System Architecture

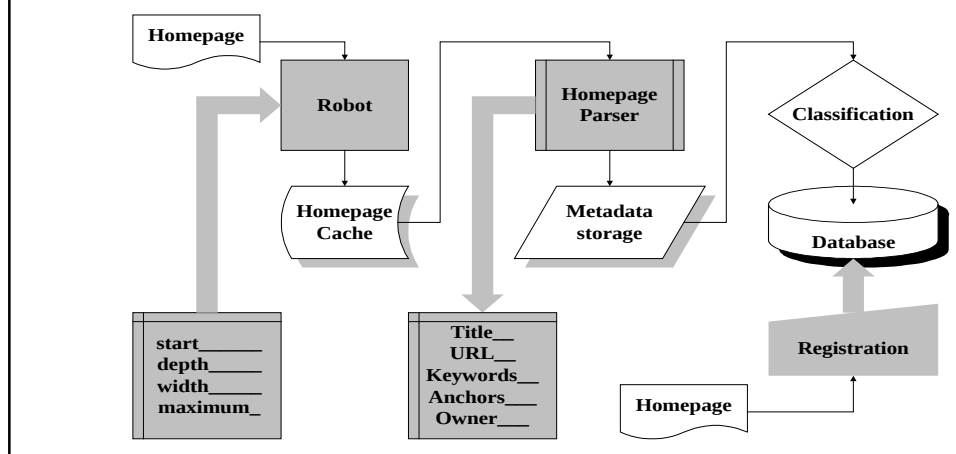
- **Resource discovery query subsystem**
 - ☞ resource collection
 - ☞ resource classification
 - ☞ resource query
- **Guided browsing service subsystem**
 - ☞ roadsign
 - ☞ footmark
 - ☞ hot sequence

System Architecture



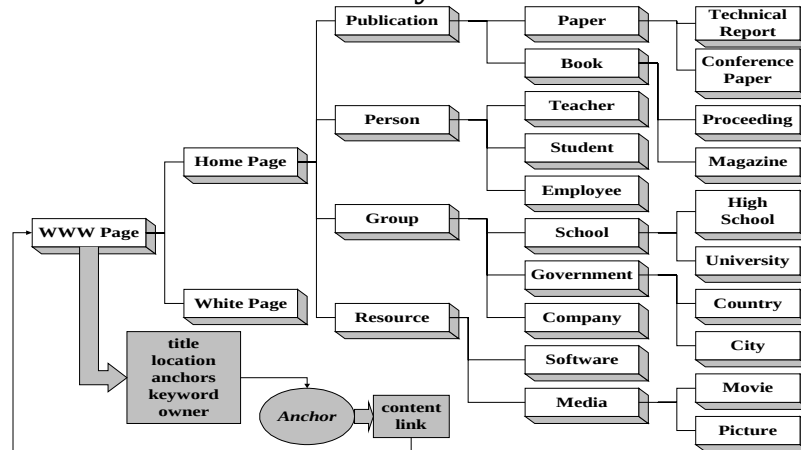
Resource Query System

• Resource collection



Resource Query System

• Classification hierarchy



Resource Query System

• Resource classification

☞ anchor semantics analysis

➔ learning stage

⇒ compact rule induction

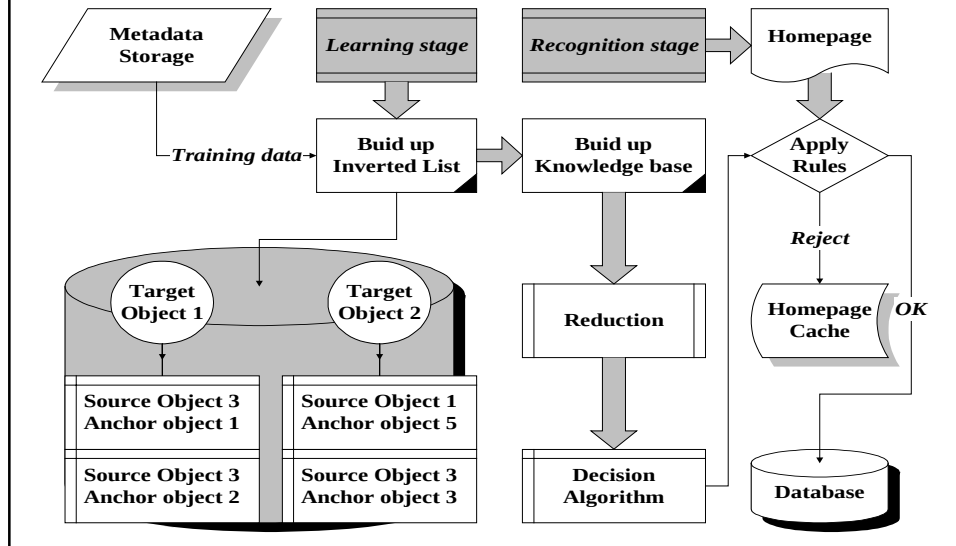
➔ recognition stage

⇒ nearest neighborhood search

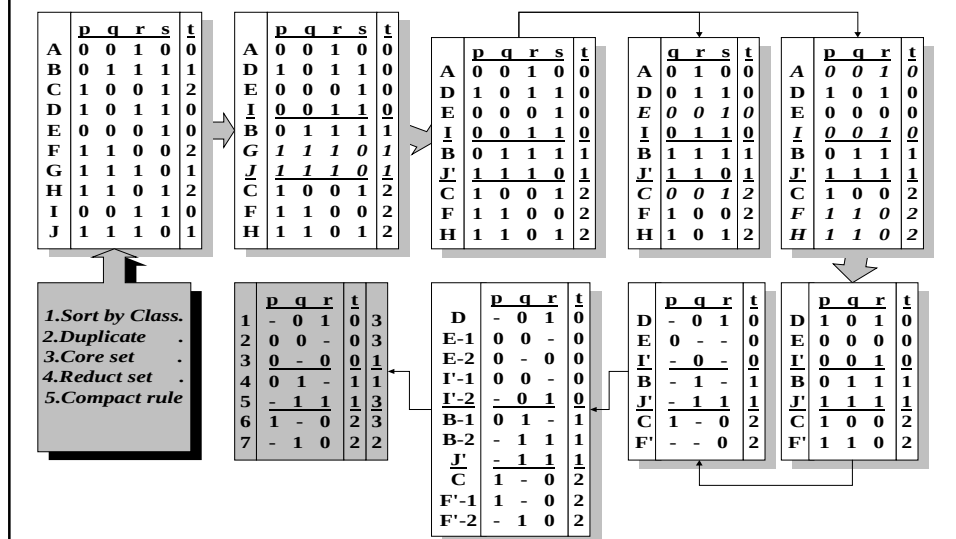
☞ syntactic analysis

➔ feature selection

Resource Query System

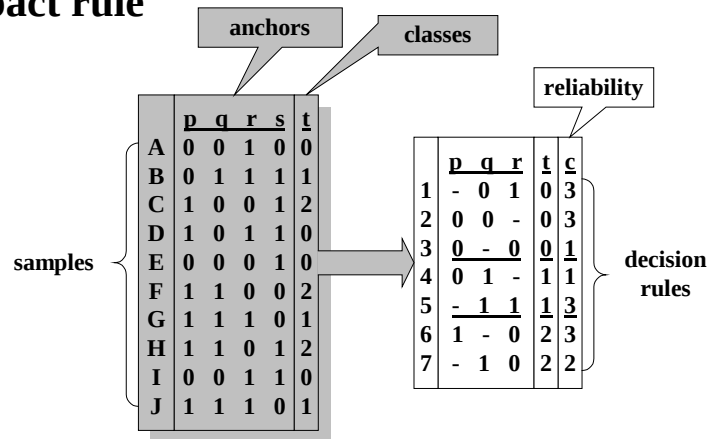


Resource Query System



Resource Query System

- Compact rule



Resource Query System

- Query Example

☞ **SELECT ***

FROM (Paper + Journal) X

WHERE X.keywords HAS {www, database}

☞ **SELECT X[title, anchors]**

FROM Company X, Software Y

WHERE X[LEVEL 1:5.anchors.link] HAS Y

Guided Browsing System

• Roadsign

