

Project Report

Summary Of the Project


We have 5 java classes Created.

1. GUI.java
2. Author.java
3. Publication.java
4. Main.java
5. EntityResolution.java

EntityResolution.java

Here, SAX parser has been used. Parsing is being done in 4 ways :

1. Initially we do parsing only on <WWW> . and retrieve all the authorNames of the same Author.
2. Here we add all the publications of the authorNames and Group them incase they are the names of the same Author. Now we map AuthorName to the AuthorObject which contains the AuthorNames and his numberOfPublications.
3. This parsing is done at the time of the Query, when we need to print Publications by AuthorName.



4. This is again done at the time of the Query, when we are asked to print Publications by TitleName.

EntityResolution has been performed in Parsing 1 and 2.

PATTERNS USED :

FactoryPattern. : for SAXHandler

Singleton Pattern : for EntityResolution.

MVC pattern : The whole project

Publication.java

This contains all the attributes of the Publications. Its functions consist of the Setters, Getters, and toString()

Author.Java

This contains functions for Incrementing NumberOfPublications, get NumberOfPublications, retrieving the AuthorNames from a set of strings, adding AuthorNames to the set. Also, a CompareTo function has been implemented to sort the author by their NumberOfPublications in decreasing order.

GUI.java

This java class has the User Interface implementation which is being done by GroupLayout, the ActionListeners and ActionHandlers for the events.

Main.java

This is basically the controller class where we call the required function for the queries and accordingly sort them according to year or relevance.



Task Distribution

Initially we divided the task into two parts. Akarsha worked on GUI implementation and Kushagra worked on XML Parsing.

We did the integration part together.