

DBLP QUERY ENGINE

Team Members:

Divansh Arora 2015027

Shyam Agrawal 2015099

Design Patterns to be used:

Adapter Pattern

Decorator Pattern

Facade Pattern

Observer Pattern(GUI)

Singleton (Query Engine)

Working:

The database class uses the raw data specified to it to make a new database object with fast access and retrieval.

The command is handled to the user and user actions are managed by the GUI manager class.

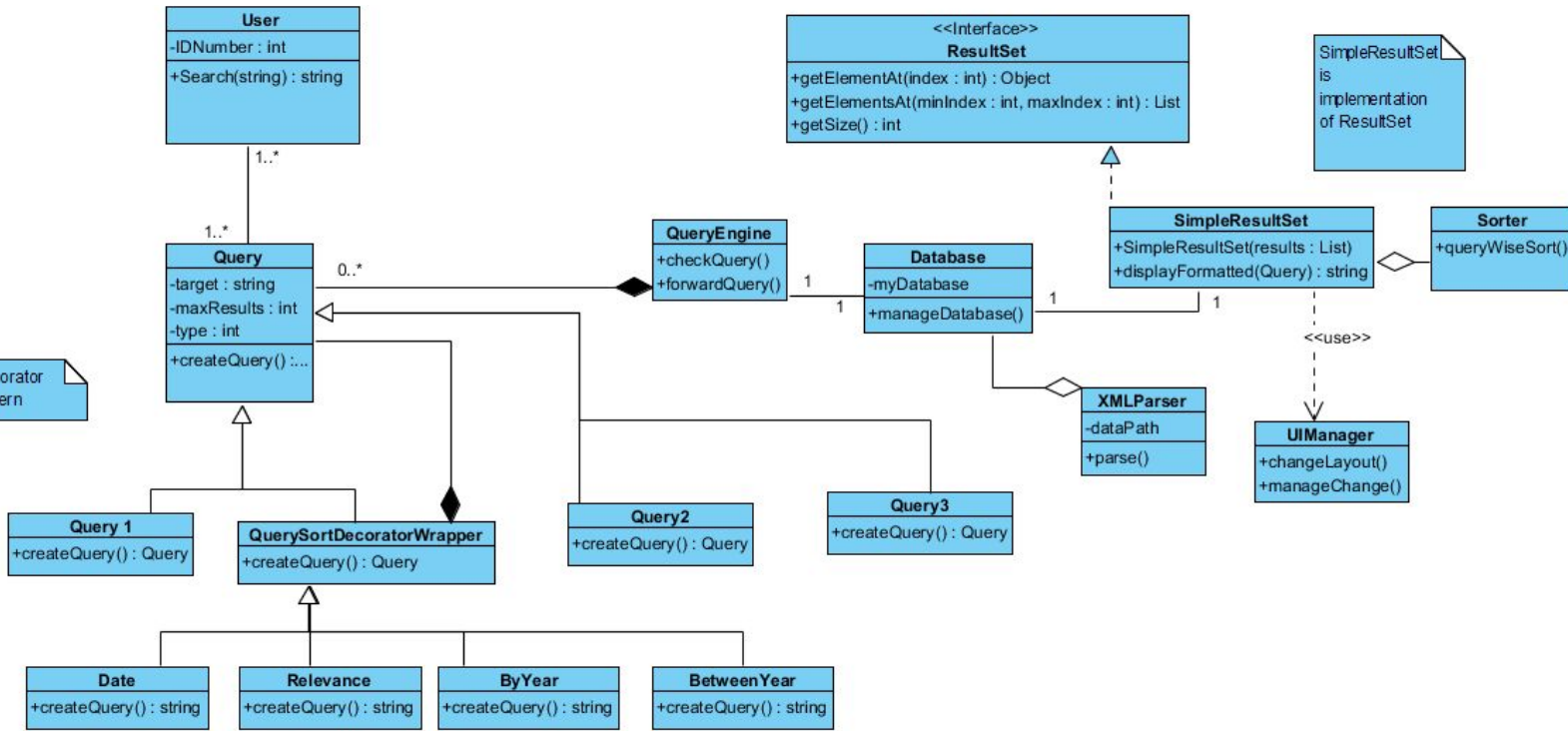
The user enters raw data which then passing through the GUI manager is sent to the query class to prepare a query.

There are many different query combinations possible hence we have used the Decorator pattern to make a new Query object.

This query objects is then sent to the QueryEngine which then analyses the query and uses the database object to get a new SimpleResultSet. This is implemented as an interface to improve flexibility.

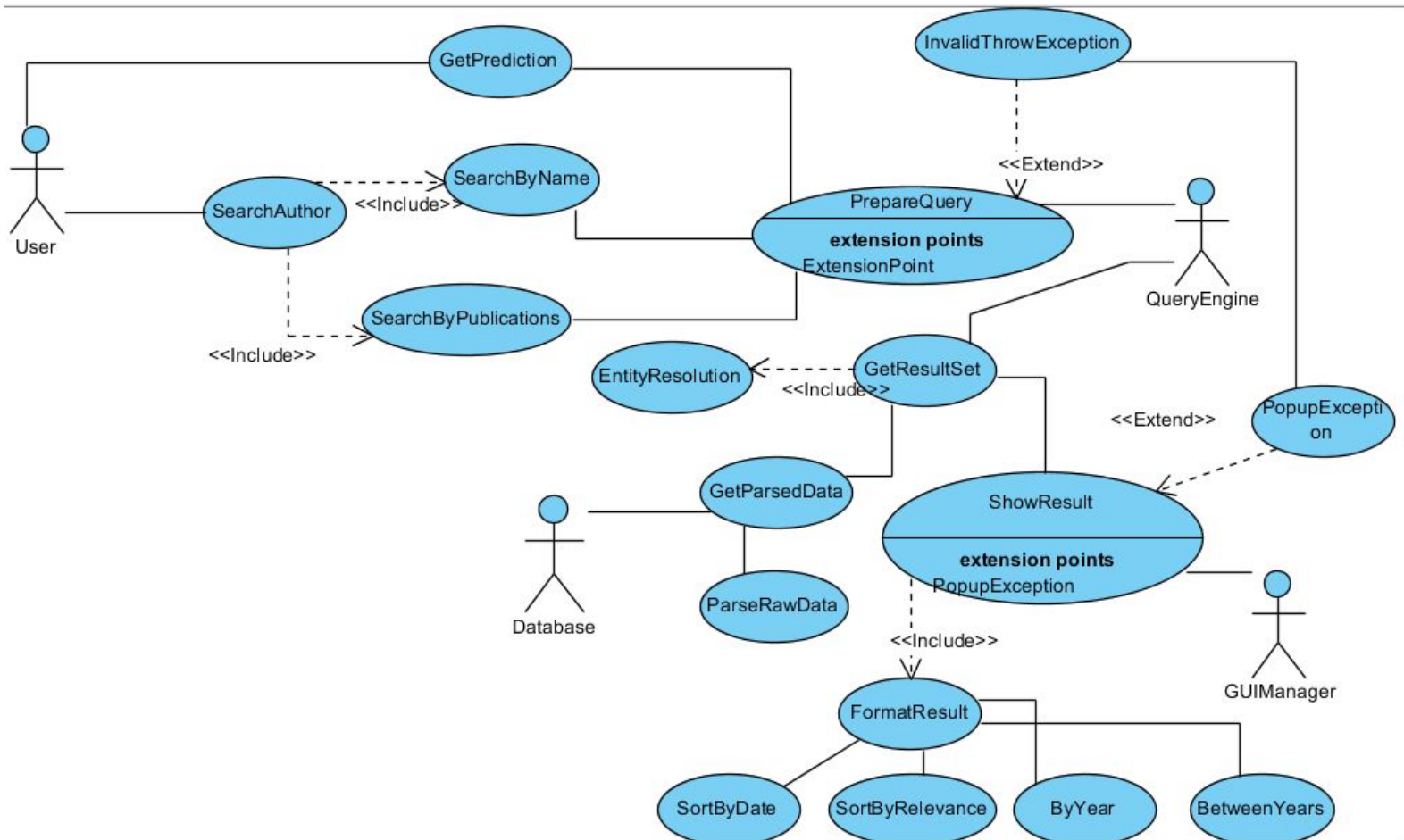
This SimpleResutSet is then formatted as needed by the query and sent to the GUI manager which then processes it and displays the result to user, changing the GUI as necessary.

CLASS DIAGRAM DBLP QUERY ENGINE



Use case diagram on next page

USE CASE DIAGRAM



References: GoF, Internet

Software Used: Visual Paradigm Professional