

DBLP Query Engine

Initial Understanding

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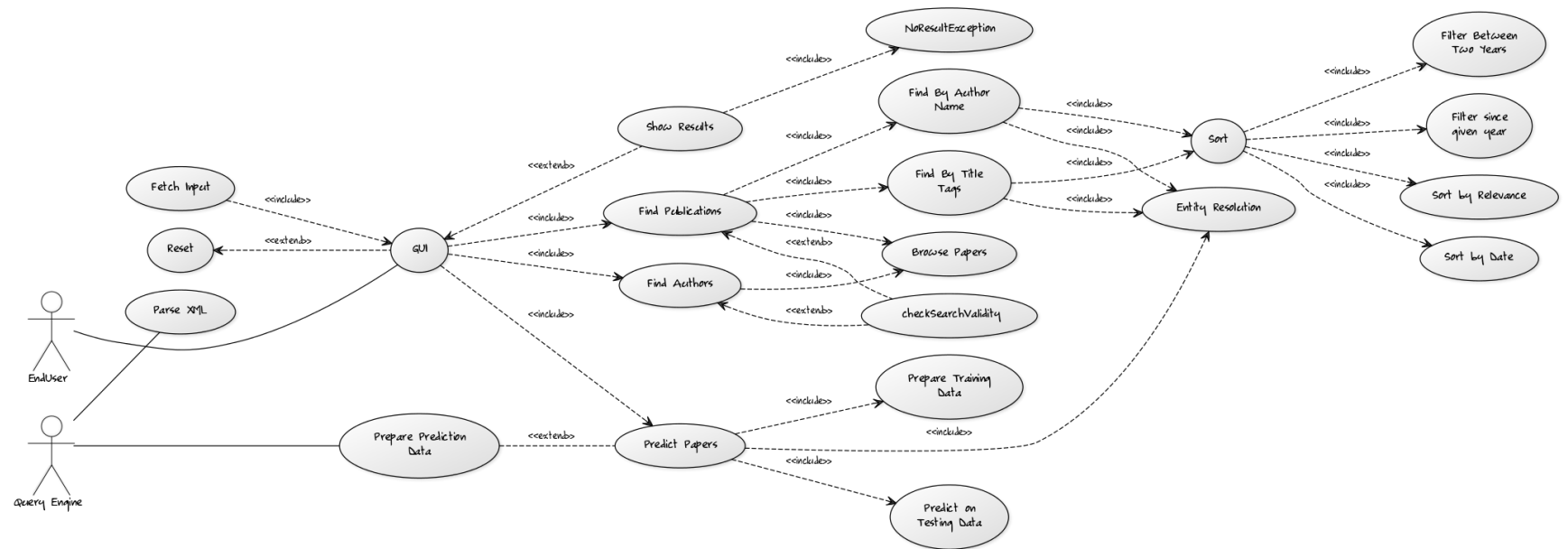
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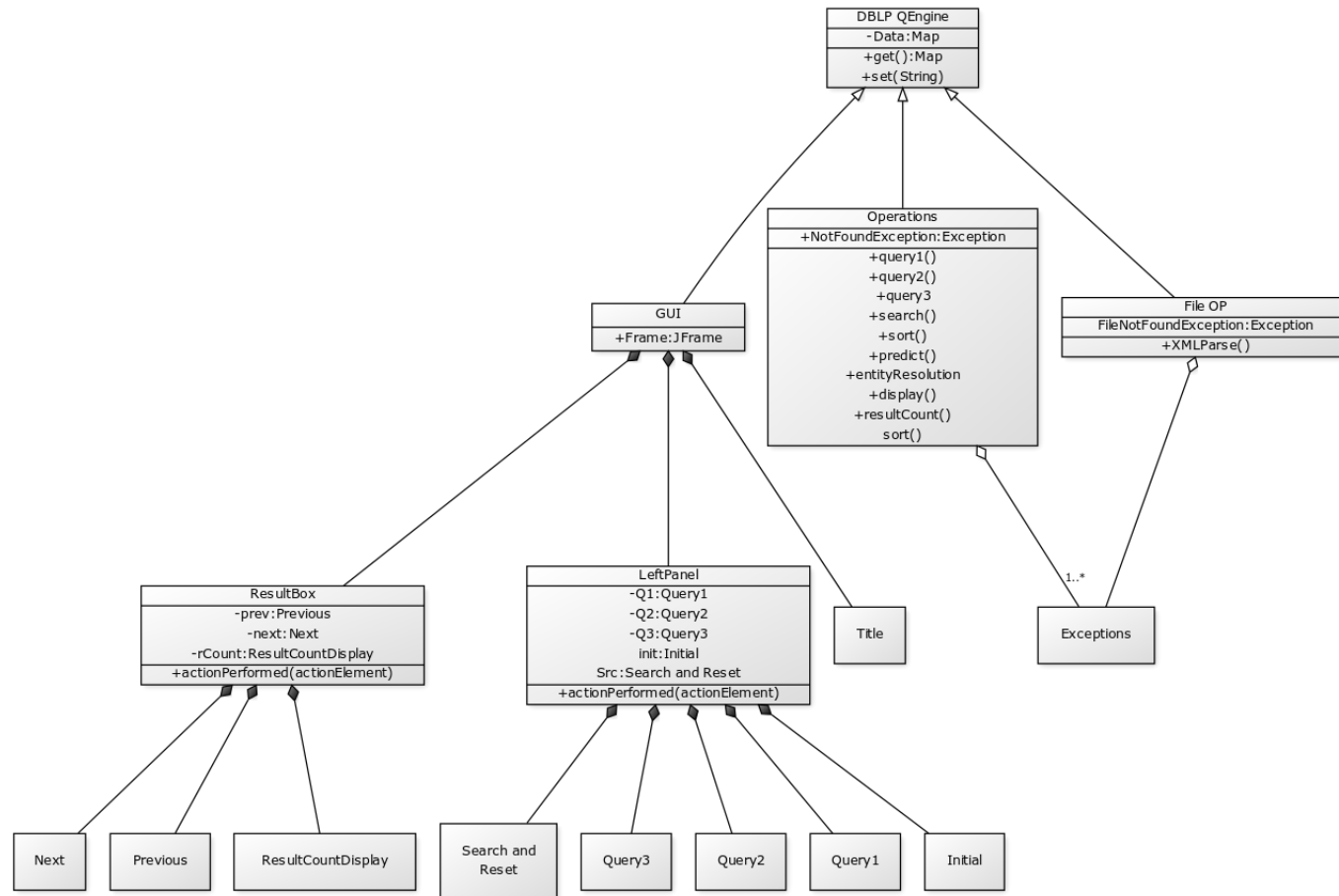
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1 Use Case Diagram



2 Class Diagram



3 Variable/Method Description

3.1 Variable Description

1. `Data:Map` - Map returned by Parser
2. `Frame:JFrame` - is a frame
3. `NotFoundException:Exception` - throws exception when necessary
4. `FileNotFoundException:Exception` - throws exception when necessary
5. `prev:Previous` - Button to show previous 20 results
6. `next:Next` - Button to show next 20 results
7. `rCount:ResultCountDisplay` - Dialog to display the number of results
8. `Q1:Query1` - Panel which contains GUI Elements for Query 1
9. `Q2:Query2` - Panel which contains GUI Elements for Query 2
10. `Q3:Query3` - Panel which contains GUI Elements for Query 3
11. `init:Initial` - Contains initial dropdown menu to choose query from
12. `Src:Search and Reset` - Panel which contains the buttons Search and Reset.

3.2 Method Description

1. `get():Map` - returns Data
2. `set(String)` - Takes XML Filename as input parameter. Called when XMLParser changes data.
3. `query1()` - Performs necessary operations to run Query 1
4. `query2()` - Performs necessary operations to run Query 2
5. `query3()` - Performs necessary operations to run Query 3
6. `search()` - performs the search operation
7. `sort()` - performs the sort operation
8. `predict()` - predicts next year's publication for a particular author with testdata as input
9. `entityResolution` - performs entity resolution for the given name of the author to map it correctly
10. `resultCount()` - counts the number of results fulfilling a certain criteria
11. `XMLParse()` - Parses the XML file using DOM Parser
12. `actionPerformed()` - performs a specific action based on the button pressed/query chosen