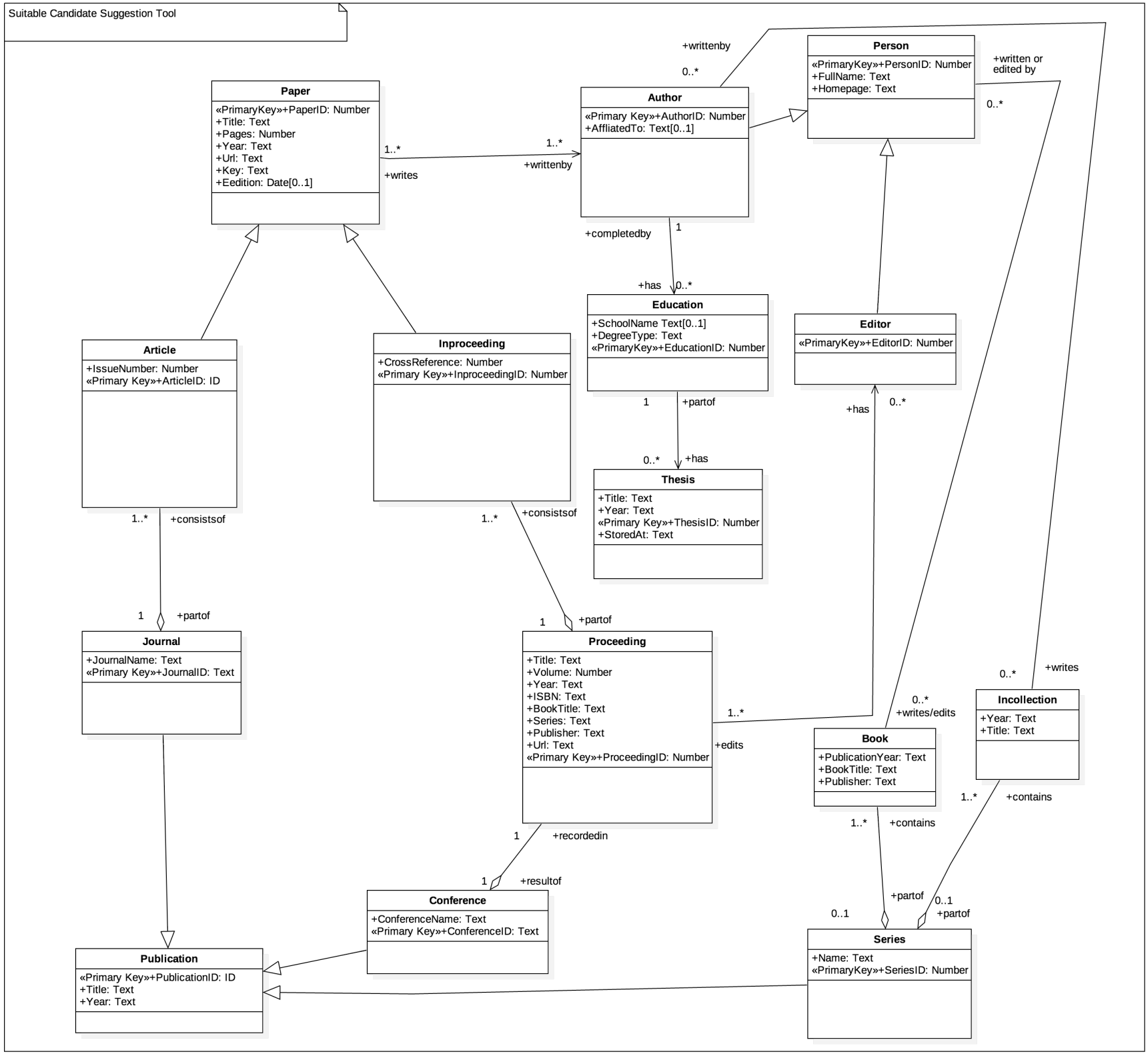

Suitable Candidate Suggestion Tool
Paper
«PrimaryKey»+PaperID: Number
+Title: Text
+Pages: Number
+Year: Text
+Url: Text
+Key: Text
+Eedition: Date[0..1]
Author
«Primary Key»+AuthorID: Number
+AffliatedTo: Text[0..1]
Person
«PrimaryKey»+PersonID: Number
+FullName: Text
+Homepage: Text
+writtenby
0..*
+written or edited by
0..*
1..*
+writes
1..*
+writtenby
+completedby
1
+has
0..*
Education
+SchoolName Text[0..1]
+DegreeType: Text
«PrimaryKey»+EducationID: Number
Editor
«PrimaryKey»+EditorID: Number
Article
+IssueNumber: Number
«Primary Key»+ArticleID: ID
Inproceeding
+CrossReference: Number
«Primary Key»+InproceedingID: Number
1
+partof
+has
0..*
0..*
+has
Thesis
+Title: Text
+Year: Text
«Primary Key»+ThesisID: Number
+StoredAt: Text
1..*
+consistsof
1..*
+consistsof
1
+partof
1
+partof
Journal
+JournalName: Text
«Primary Key»+JournalID: Text
Proceeding
+Title: Text
+Volume: Number
+Year: Text
+ISBN: Text
+BookTitle: Text
+Series: Text
+Publisher: Text
+Url: Text
«Primary Key»+ProceedingID: Number
1..*
+edits
0..*
+writes/edits
Book
+PublicationYear: Text
+BookTitle: Text
+Publisher: Text
0..*
+writes
Incollection
+Year: Text
+Title: Text
1..*
+contains
1..*
+contains
1
+recordedin
1
+resultof
Conference
+ConferenceName: Text
«Primary Key»+ConferenceID: Text
+partof
0..1
0..1
+partof
Series
+Name: Text
«PrimaryKey»+SeriesID: Number
Publication
«Primary Key»+PublicationID: ID
+Title: Text
+Year: Text

modifyData() –> analyzes the DBLP data

processData() –> converts the DBLP data into a format that query engine can work on

doSearch() –> enters search constraints into different search boxes

enterSearchCriteria() –> Passes the values for different search constraints(as mentioned in the use cases) to the query engine

doesQuery() –> perform a query on Analyzed data as per the search constraints given to it

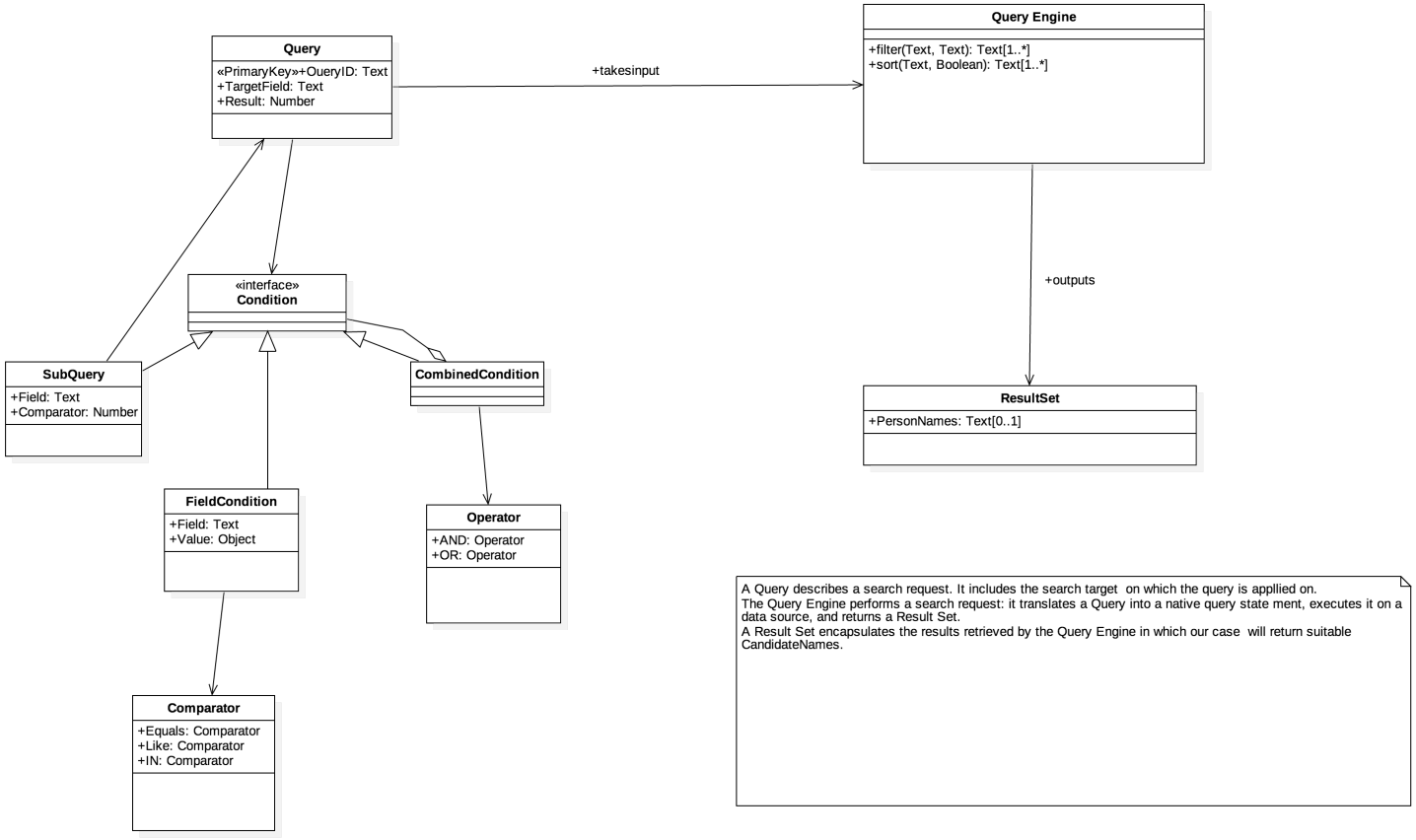
provideResults() –> return the query results for the query engine to work on

passOnResults() –> the results are returned to the user interface for it to display

resultsPage() –> display the results of the query into a proper format as per user's search

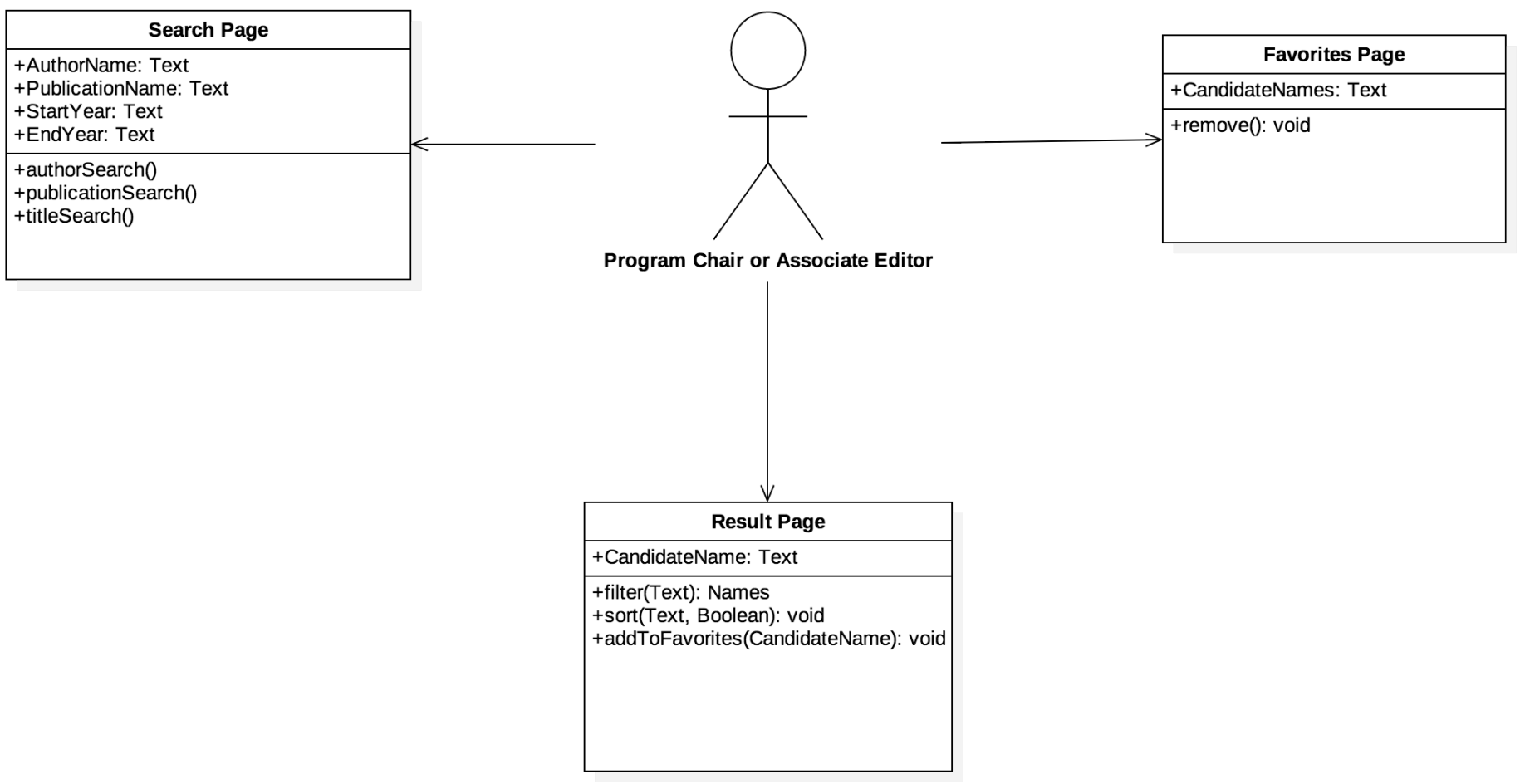
doAdditionalSearch() –> the user can constrain queries or filter results

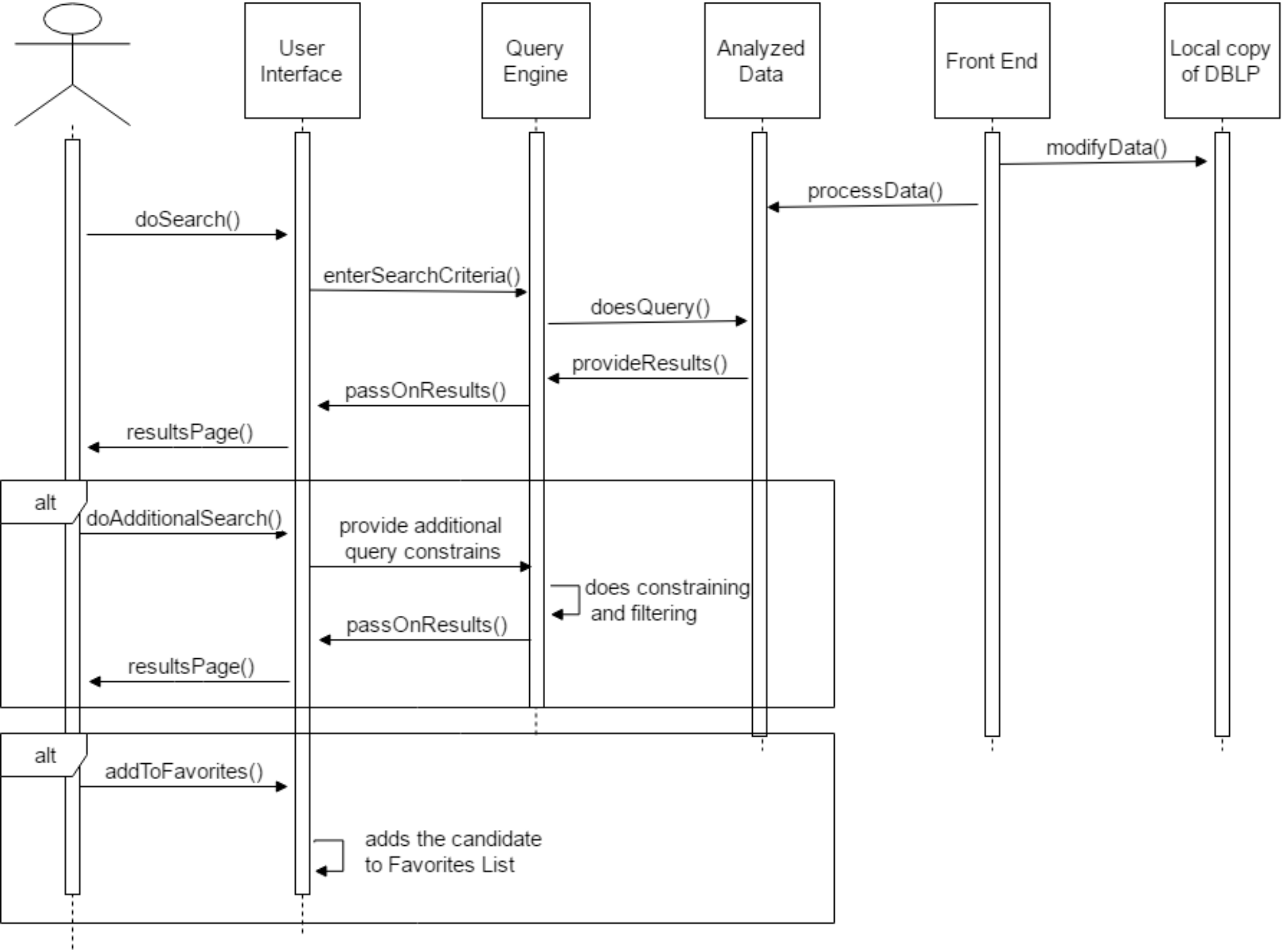
Query Engine



A Query describes a search request. It includes the search target on which the query is appllied on.
The Query Engine performs a search request: it translates a Query into a native query state ment, executes it on a data source, and returns a Result Set.
A Result Set encapsulates the results retrieved by the Query Engine in which our case will return suitable CandidateNames.

User Interface UML Diagram




User Interface
Query Engine
Analyzed Data
Front End
Local copy of DBLP
modifyData()
processData()
doSearch()
enterSearchCriteria()
doesQuery()
provideResults()
passOnResults()
resultsPage()
alt
doAdditionalSearch()
provide additional query constrains
does constraining and filtering
passOnResults()
resultsPage()
alt
addToFavorites()
adds the candidate to Favorites List

modifyData() –> analyzes the DBLP data

processData() –> converts the DBLP data into a format that query engine can work on

doSearch() –> enters search constraints into different search boxes

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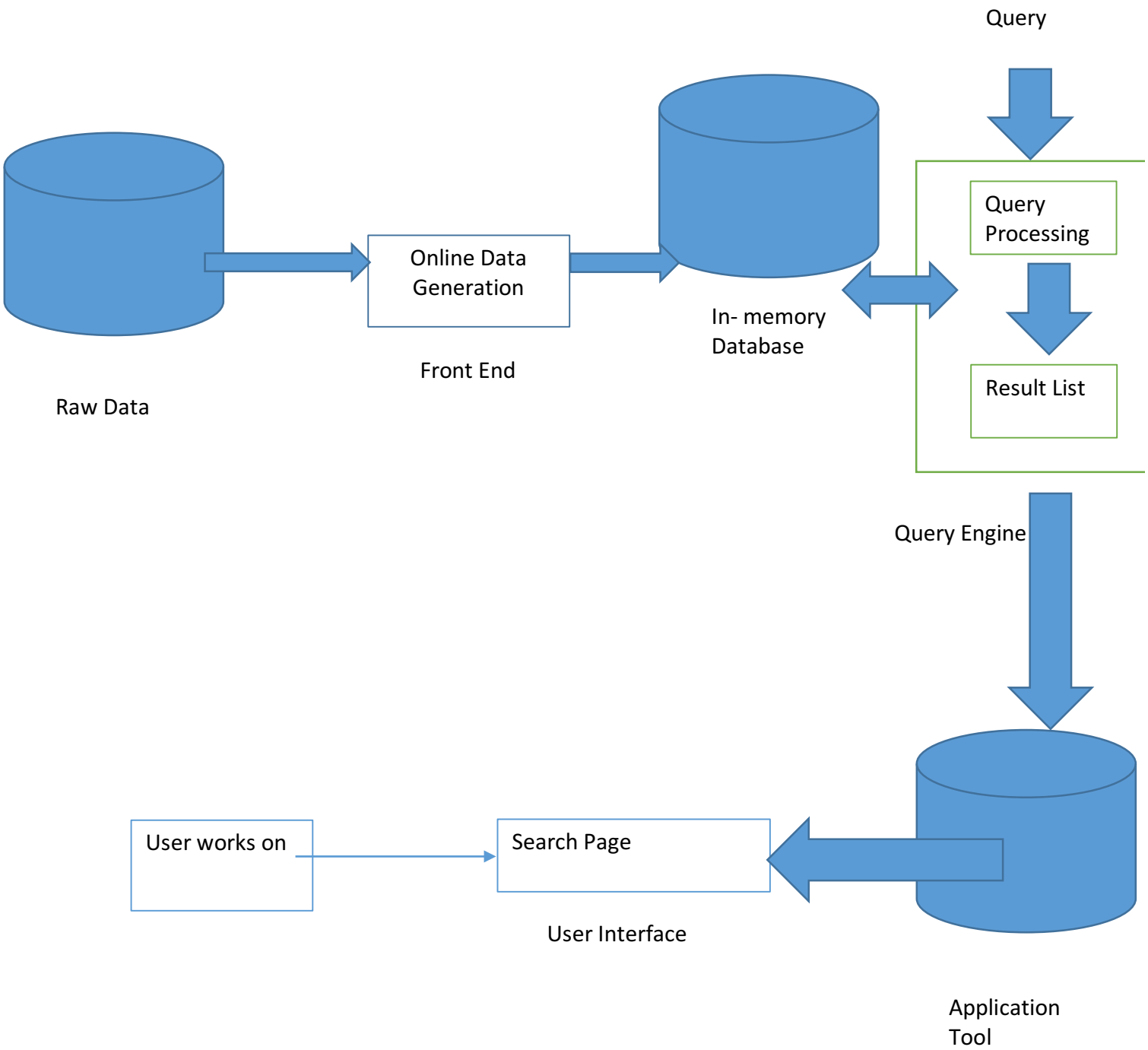
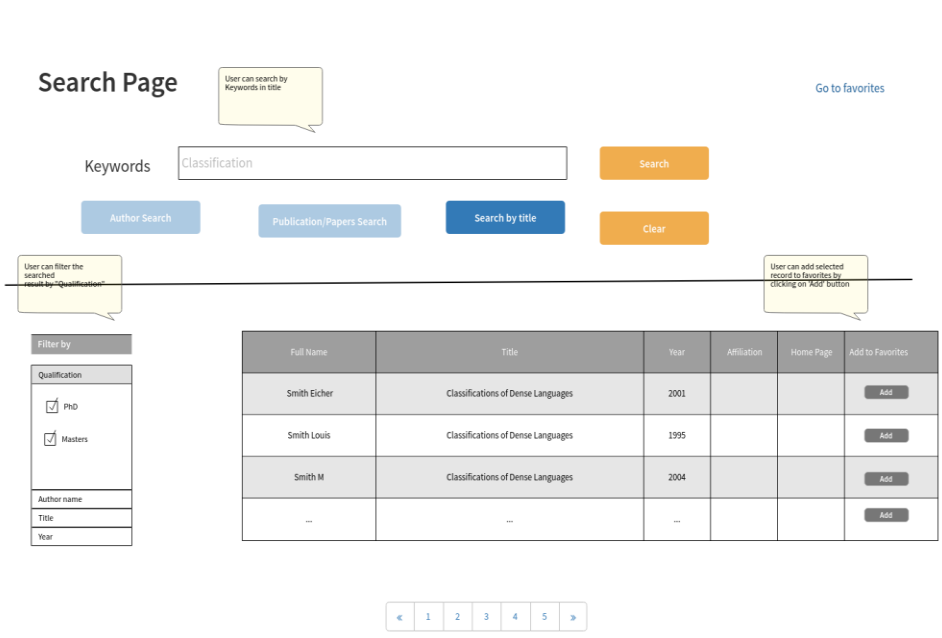

Query
Query Processing
Result List
Online Data Generation
Front End
In- memory Database
Raw Data
Query Engine
User works on
Search Page
User Interface
Application Tool

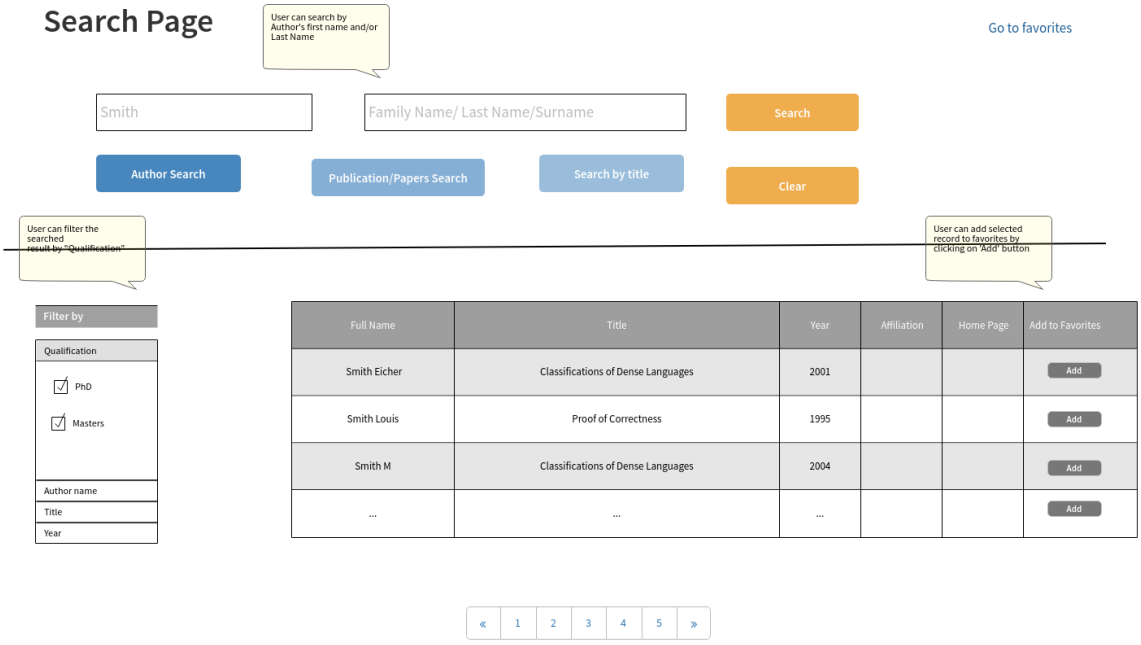
Moqups

1) First Page

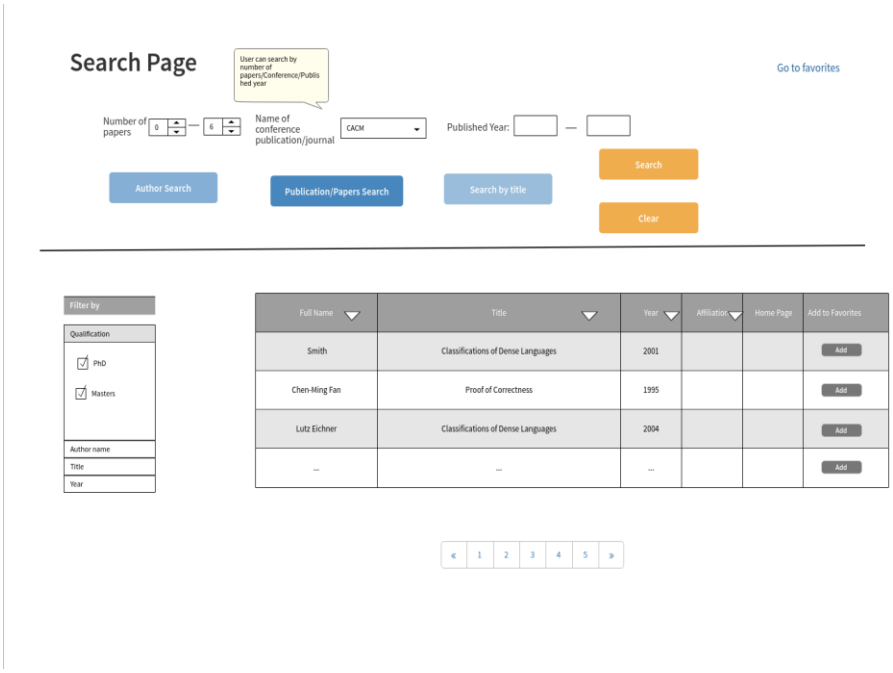
2) Search by title



3) Search by Author



4) Search by Publication/ Journal



5) Favorites Page

Favorites Page

Go to Search Page

User can view the list of favorites and remove them

Full Name	Title	Year	Affiliation	Home Page	Remove
Smith Eicher	Classifications of Dense Languages	2001			Remove
Smith Louis	Proof of Correctness	1995			Remove
Smith M	Classifications of Dense Languages	2004			Remove
...	...	...			Remove

« 1 2 3 4 5 »