



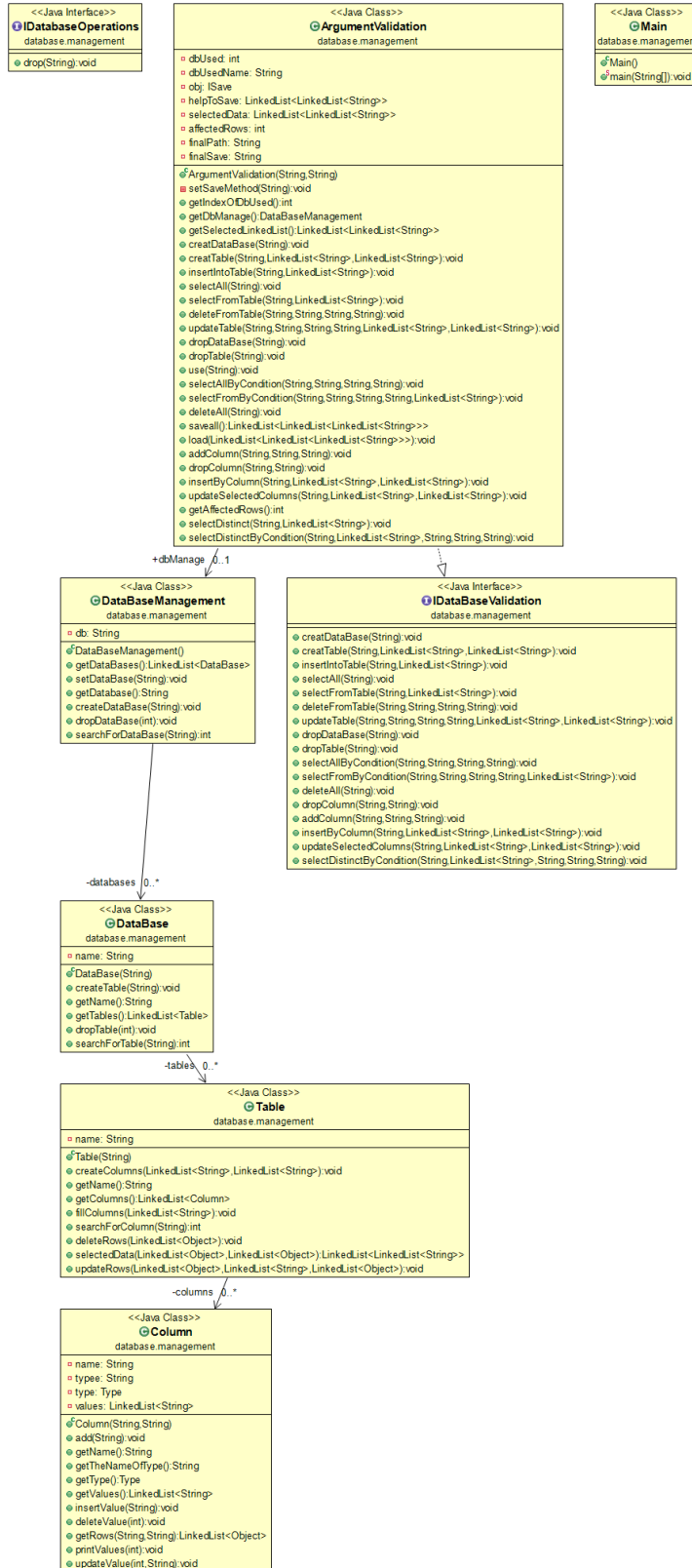
Faculty of Engineering, Alexandria University
Computers and Systems Engineering Department

JDBC Report

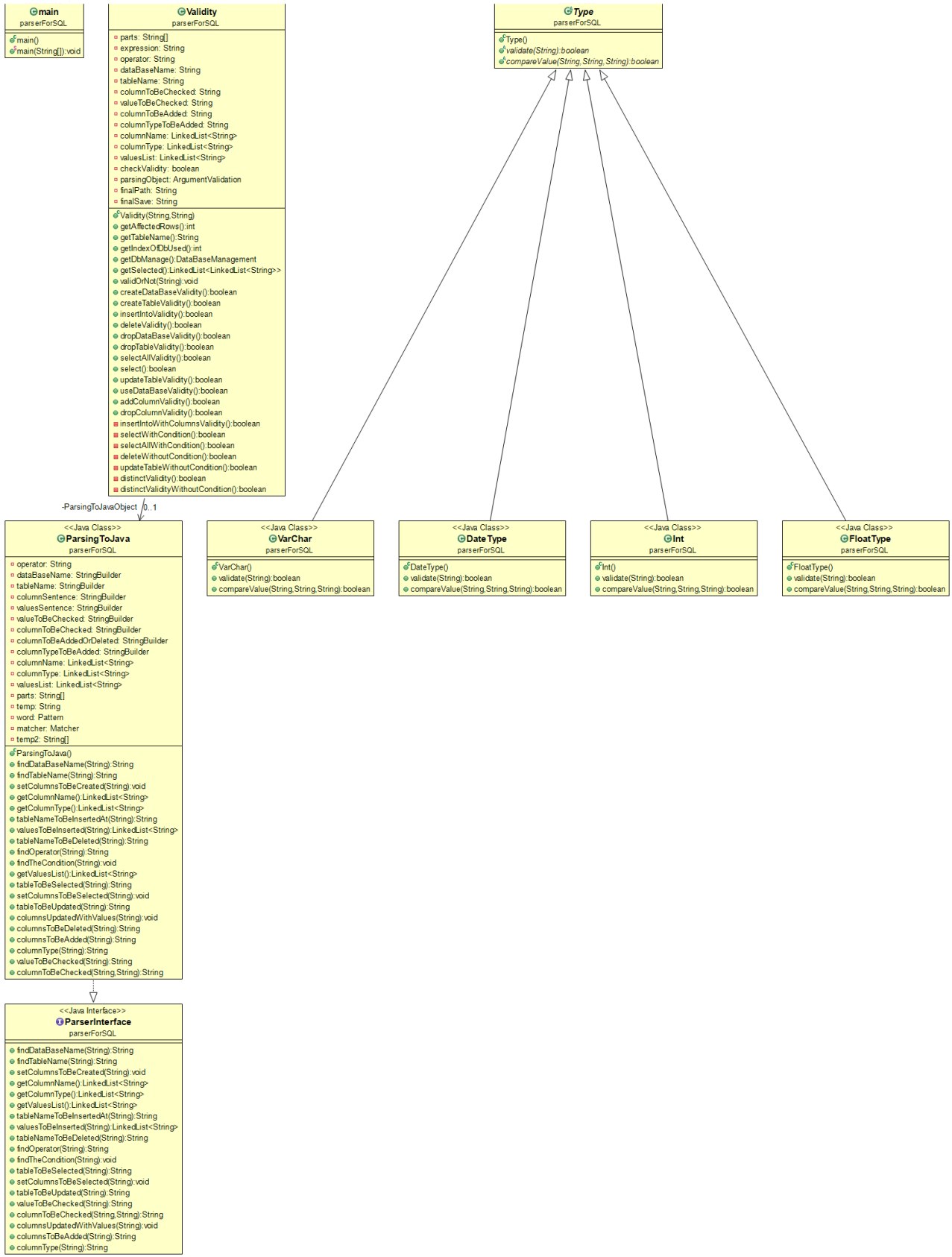
Team Members:

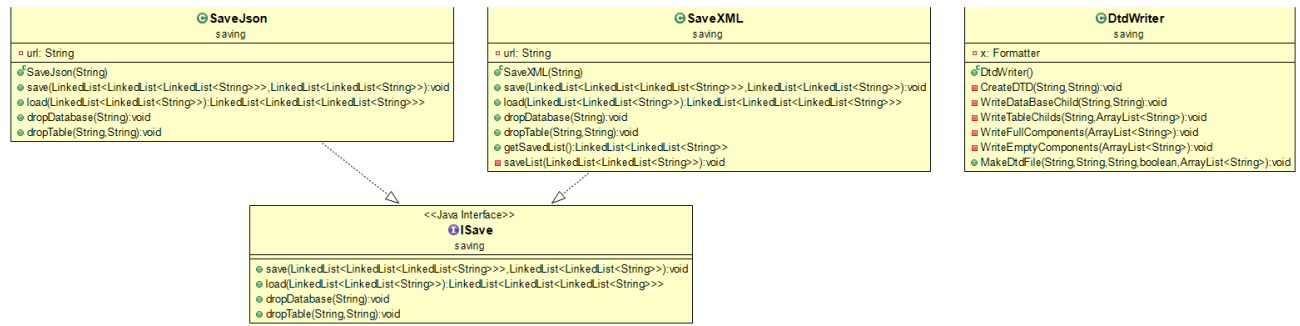
- 1- Ahmed Adel
- 2- Fady Ashraf Filip
- 3- Fady George
- 4- Karim Gerges Karas
- 5- Mohamed Gaber

Uml Diagram:









Design Decision:

- The Result set Constructor contain (LinkedList<LinkedList<String>>, Table Name) This linked List of Linked List contain the column Names, the column types and the values of the rows and the columns And then we create a linked List of string contain the table names , LinkedList of string contain the table types ,linked List of linked List Contain the values of the rows and the columns.
- The Result Set class send to the result set meta data linked List of columns names , linked list of columns types and the table name
- Type Super Class that Defines Column type , this class contains Two Methods:
 Validate: check that the value the use entered is the same type like the column.
 Compare Value: compare the type of the value the use entered in the where clause and the type of the column
- There is four classes inherit from the super class "Type"
 Date type: create type of column "java.sql.Date"
 Float type: create type of column "Float"

Int type: create type of column "Int"

Varchar type: create type of column "Varchar"

- The interface ISave

This interface contain four methods:

Save : save the data of the table to file.

Load: load the data from file to the table.

Drop table: delete the file that the data of the table are saved in it

drop Database: delete the folder and all the files in it containing all the data for all tables in this data base

there is two classes implementing this interface

saveJson : save the data as a json file.

saveXml : save the data as a xml file

and the class xml call dtdwriter class that create dtd file to describe the xml file attached to it.

- The modification For The Dbms Design:

Database Management: this class have Linked List of databases

Database class : this class have Linked List of Tables and have attribute Of this database name.

Table class : this class have Linked List of Columns and have attribute Of this table name.

Column Class : this class have Linked List of values and Have attributes

Of Column Name and Column Type.