

AI ASSIGNMENT

CONTRIBUTORS & ROLES

Maninder kaur (2018CSC1059) :

I made the lex and yacc parser for the XML file and the prolog program which reads the text file(contains only data without any tags) generated by the parser.

Munish Sharma(2018CSC1014) :

I made the XML file and the XML schema definition (XSD) for writing XML database. The tags which I used are :-

1. javadoc
2. javaclass
3. javaclassname

FILES INCLUDED

1. Parsers : AI.lex and AI.y
2. data.xml
3. data.xsd
4. Read.pl
5. tags.txt
6. a.out
7. Screenshots of output and commands

SCREENSHOTS OF OUTPUT

```
munish@munish-HP-ProBook-445-G1: ~/Documents/al_assignment_1
File Edit View Search Terminal Help
munish@munish-HP-ProBook-445-G1:~$ cd Documents
munish@munish-HP-ProBook-445-G1:~/Documents$ cd al_assignment_1
munish@munish-HP-ProBook-445-G1:~/Documents/al_assignment_1$ lex AI.lex
munish@munish-HP-ProBook-445-G1:~/Documents/al_assignment_1$ yacc -d AI.y
munish@munish-HP-ProBook-445-G1:~/Documents/al_assignment_1$ g++ y.tab.c lex.yy.c -ll
munish@munish-HP-ProBook-445-G1:~/Documents/al_assignment_1$ ./a.out data.xml
munish@munish-HP-ProBook-445-G1:~/Documents/al_assignment_1$ swipl -s HEAD.pl
Welcome to SWI-Prolog (threaded, 64 bits, version 8.2.4)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.

For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).

?- readfacts.
AbstractAction.
AbstractBorder.
AbstractButton.
AbstractCollectionEditor.
AbstractCollection.
AbstractDocument.
AbstractList.
AbstractMap.
AbstractQueue.
AbstractSet.
AbstractWriter.
AccessMode.
ActionEvent.
ActionListener.
Applet.
ArrayBlockingQueue.
```

```
munish@munish-HP-ProBook-445-G1: ~/Documents/al_assignment_1
File Edit View Search Terminal Help
ArrayBlockingQueue.
Array.
AtomicBoolean.
AtomicInteger.
AtomicLong.
AttributeException.
ButtonGroup.
ChangeEvent.
CharsetDecoder.
ClassValue.
CodingErrorAction.
DataBuffer.
DataTimeSyntax.
FileSystemView.
IntegerSyntax.
MathContext.
MBeanInfo.
MenuKeyEvent.
AbstractAction.
AbstractBorder.
AbstractButton.
AbstractCollectionEditor.
AbstractCollection.
AbstractDocument.
AbstractList.
AbstractMap.
AbstractQueue.
AbstractSet.
AbstractWriter.
AccessMode.
ActionEvent.
```

```
munish@munish-HP-ProBook-445-G1: ~/Documents/al_assignment_1
File Edit View Search Terminal Help
AbstractMap.
AbstractQueue.
AbstractSet.
AbstractWriter.
AccessMode.
ActionEvent.
ActionListener.
Applet.
ArrayBlockingQueue.
Array.
AtomicBoolean.
AtomicInteger.
AtomicLong.
AttributeException.
ButtonGroup.
ChangeEvent.
CharsetDecoder.
ClassValue.
CodingErrorAction.
DataBuffer.
DataTimeSyntax.
FileSystemView.
IntegerSyntax.
MathContext.
MBeanInfo.
MenuKeyEvent.
end_of_file

true.
?-
```

CHALLENGES THAT WE FACED

1. It was difficult to know how the prolog code will read the XML data so we generated a text file reading all the data from XML (without tags) and that text file will be handled by prolog.
2. The prolog code didn't really print the particular answer for the query but it is printing the whole text file . We have worked on that thing for a long time but we didn't get any solution .