Lab4\_\_RE

Open examples\_re:

.\* (important!!)

import java.io.InputStreamReader;

import java.lang.System;

%%

%char

%public

%standalone

%full

LETTER=([a-zA-Z])

DIGIT=([0-9])

COMMENT=("#"[^;:\n#-]\*)

%%

{COMMENT} {System.out.println("SCANNER:: COMMENT("+yytext()+")");}

(\t|\n|" ") {}

.\* {System.out.println("SCANNER:: LEXICAL ERROR("+yytext()+")");}

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C:\Users\UO294067\Downloads\RE>generateScanner.bat

C:\Users\UO294067\Downloads\RE>java -jar jflex-full-1.7.0.jar examples\_re.lex

Reading "examples\_re.lex"

Warning : Macro "LETTER" has been declared but never used.

Warning : Macro "DIGIT" has been declared but never used.

Warning in file "examples\_re.lex" (line 23):

Expression matches the empty string, which may lead to non-termination.

.\* {System.out.println("SCANNER:: LEXICAL ERROR("+yytext()+")");}

Constructing NFA : 20 states in NFA

Converting NFA to DFA :

.........

11 states before minimization, 7 states in minimized DFA

Writing code to "Yylex.java"

C:\Users\UO294067\Downloads\RE>javac Yylex.java

C:\Users\UO294067\Downloads\RE>java -classpath ; Yylex test\_re

SCANNER:: LEXICAL ERROR(#Let's go for it #We start with correct UOs)

SCANNER:: LEXICAL ERROR(Uo1234)

SCANNER:: LEXICAL ERROR(uo123456)

SCANNER:: COMMENT(#Incorrect UOs)

SCANNER:: LEXICAL ERROR(UO123)

SCANNER:: LEXICAL ERROR(UO-1234)

SCANNER:: COMMENT(# Correct email adresses)

SCANNER:: LEXICAL ERROR(a@uniovi.es)

SCANNER:: LEXICAL ERROR(a.1.2@uniovi.com)

SCANNER:: COMMENT(# Incorrect email adresses)

SCANNER:: LEXICAL ERROR(2a@uniovi.es)

SCANNER:: LEXICAL ERROR(a..b@uniovi.com)

SCANNER:: LEXICAL ERROR(a.@uniovi.es)

SCANNER:: COMMENT(# Correct codes)

SCANNER:: LEXICAL ERROR(AEIOU-12345-abcWa)

SCANNER:: LEXICAL ERROR(UOI-987-Ww)

SCANNER:: LEXICAL ERROR(OOOO-137-WW)

SCANNER:: COMMENT(# Incorrect codes)

SCANNER:: LEXICAL ERROR(AA-123-Wa)

SCANNER:: LEXICAL ERROR(ABC-98-Wz)

SCANNER:: LEXICAL ERROR(ABC-98-zzzW)

SCANNER:: LEXICAL ERROR(UOI 987 Ww)

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import java.io.InputStreamReader;

import java.lang.System;

%%

%char

%public

%standalone

%full

LETTER=([a-zA-Z])

DIGIT=([0-9])

COMMENT=("#"[^;:\n#-]\*)

UO=([Uu][Oo]{DIGIT}{DIGIT}{DIGIT}{DIGIT}{DIGIT}?{DIGIT}?)

%%

{COMMENT} {System.out.println("SCANNER:: COMMENT("+yytext()+")");}

{UO} {System.out.println("SCANNER:: UO("+yytext()+")");}

(\t|\n|" ") {}

.\* {System.out.println("SCANNER:: LEXICAL ERROR("+yytext()+")");}

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C:\Users\UO294067\Downloads\RE>generateScanner.bat

C:\Users\UO294067\Downloads\RE>java -jar jflex-full-1.7.0.jar examples\_re.lex

Reading "examples\_re.lex"

Warning : Macro "LETTER" has been declared but never used.

Warning in file "examples\_re.lex" (line 25):

Expression matches the empty string, which may lead to non-termination.

.\* {System.out.println("SCANNER:: LEXICAL ERROR("+yytext()+")");}

Constructing NFA : 36 states in NFA

Converting NFA to DFA :

.................

19 states before minimization, 15 states in minimized DFA

Old file "Yylex.java" saved as "Yylex.java~"

Writing code to "Yylex.java"

C:\Users\UO294067\Downloads\RE>javac Yylex.java

C:\Users\UO294067\Downloads\RE>java -classpath ; Yylex test\_re

SCANNER:: LEXICAL ERROR(#Let's go for it #We start with correct UOs)

SCANNER:: UO(Uo1234)

SCANNER:: UO(uo123456)

SCANNER:: COMMENT(#Incorrect UOs)

SCANNER:: LEXICAL ERROR(UO123)

SCANNER:: LEXICAL ERROR(UO-1234)

SCANNER:: COMMENT(# Correct email adresses)

SCANNER:: LEXICAL ERROR(a@uniovi.es)

SCANNER:: LEXICAL ERROR(a.1.2@uniovi.com)

SCANNER:: COMMENT(# Incorrect email adresses)

SCANNER:: LEXICAL ERROR(2a@uniovi.es)

SCANNER:: LEXICAL ERROR(a..b@uniovi.com)

SCANNER:: LEXICAL ERROR(a.@uniovi.es)

SCANNER:: COMMENT(# Correct codes)

SCANNER:: LEXICAL ERROR(AEIOU-12345-abcWa)

SCANNER:: LEXICAL ERROR(UOI-987-Ww)

SCANNER:: LEXICAL ERROR(OOOO-137-WW)

SCANNER:: COMMENT(# Incorrect codes)

SCANNER:: LEXICAL ERROR(AA-123-Wa)

SCANNER:: LEXICAL ERROR(ABC-98-Wz)

SCANNER:: LEXICAL ERROR(ABC-98-zzzW)

SCANNER:: LEXICAL ERROR(UOI 987 Ww)

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import java.io.InputStreamReader;

import java.lang.System;

%%

%char

%public

%standalone

%full

LETTER=([a-zA-Z])

DIGIT=([0-9])

COMMENT=("#"[^;:\n#-]\*)

UO=([Uu][Oo]{DIGIT}{DIGIT}{DIGIT}{DIGIT}{DIGIT}?{DIGIT}?)

USERNAME=({LETTER}(("."({DIGIT}|{LETTER}))|({DIGIT}|{LETTER}))\*)

DOMAIN=(uniovi"."((com)|(es)))

EMAIL=({USERNAME}"@"{DOMAIN})

%%

{COMMENT} {System.out.println("SCANNER:: COMMENT("+yytext()+")");}

{UO} {System.out.println("SCANNER:: UO("+yytext()+")");}

{EMAIL} {System.out.println("SCANNER:: EMAIL("+yytext()+")");}

(\t|\n|" ") {}

.\* {System.out.println("SCANNER:: LEXICAL ERROR("+yytext()+")");}

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C:\Users\UO294067\Downloads\RE>generateScanner.bat

C:\Users\UO294067\Downloads\RE>java -jar jflex-full-1.7.0.jar examples\_re.lex

Reading "examples\_re.lex"

Warning in file "examples\_re.lex" (line 31):

Expression matches the empty string, which may lead to non-termination.

.\* {System.out.println("SCANNER:: LEXICAL ERROR("+yytext()+")");}

Constructing NFA : 76 states in NFA

Converting NFA to DFA :

..................................

36 states before minimization, 29 states in minimized DFA

Old file "Yylex.java" saved as "Yylex.java~"

Writing code to "Yylex.java"

C:\Users\UO294067\Downloads\RE>javac Yylex.java

C:\Users\UO294067\Downloads\RE>java -classpath ; Yylex test\_re

SCANNER:: LEXICAL ERROR(#Let's go for it #We start with correct UOs)

SCANNER:: UO(Uo1234)

SCANNER:: UO(uo123456)

SCANNER:: COMMENT(#Incorrect UOs)

SCANNER:: LEXICAL ERROR(UO123)

SCANNER:: LEXICAL ERROR(UO-1234)

SCANNER:: COMMENT(# Correct email adresses)

SCANNER:: EMAIL(a@uniovi.es)

SCANNER:: EMAIL(a.1.2@uniovi.com)

SCANNER:: COMMENT(# Incorrect email adresses)

SCANNER:: LEXICAL ERROR(2a@uniovi.es)

SCANNER:: LEXICAL ERROR(a..b@uniovi.com)

SCANNER:: LEXICAL ERROR(a.@uniovi.es)

SCANNER:: COMMENT(# Correct codes)

SCANNER:: LEXICAL ERROR(AEIOU-12345-abcWa)

SCANNER:: LEXICAL ERROR(UOI-987-Ww)

SCANNER:: LEXICAL ERROR(OOOO-137-WW)

SCANNER:: COMMENT(# Incorrect codes)

SCANNER:: LEXICAL ERROR(AA-123-Wa)

SCANNER:: LEXICAL ERROR(ABC-98-Wz)

SCANNER:: LEXICAL ERROR(ABC-98-zzzW)

SCANNER:: LEXICAL ERROR(UOI 987 Ww)

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import java.io.InputStreamReader;

import java.lang.System;

%%

%char

%public

%standalone

%full

LETTER=([a-zA-Z])

DIGIT=([0-9])

COMMENT=("#"[^;:\n#-]\*)

UO=([Uu][Oo]{DIGIT}{DIGIT}{DIGIT}{DIGIT}{DIGIT}?{DIGIT}?)

USERNAME=({LETTER}(("."({DIGIT}|{LETTER}))|({DIGIT}|{LETTER}))\*)

DOMAIN=(uniovi"."((com)|(es)))

EMAIL=({USERNAME}"@"{DOMAIN})

CODE=([AEIOU][AEIOU][AEIOU]+"-"{DIGIT}({DIGIT}{DIGIT})\*"-"{LETTER}\*[W]{LETTER})

%%

{COMMENT} {System.out.println("SCANNER:: COMMENT("+yytext()+")");}

{UO} {System.out.println("SCANNER:: UO("+yytext()+")");}

{EMAIL} {System.out.println("SCANNER:: EMAIL("+yytext()+")");}

{CODE} {System.out.println("SCANNER:: CODE("+yytext()+")");}

(\t|\n|" ") {}

.\* {System.out.println("SCANNER:: LEXICAL ERROR("+yytext()+")");}

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C:\Users\UO294067\Downloads\RE>generateScanner.bat

C:\Users\UO294067\Downloads\RE>java -jar jflex-full-1.7.0.jar examples\_re.lex

Reading "examples\_re.lex"

Warning in file "examples\_re.lex" (line 34):

Expression matches the empty string, which may lead to non-termination.

.\* {System.out.println("SCANNER:: LEXICAL ERROR("+yytext()+")");}

Constructing NFA : 104 states in NFA

Converting NFA to DFA :

................................................

50 states before minimization, 40 states in minimized DFA

Old file "Yylex.java" saved as "Yylex.java~"

Writing code to "Yylex.java"

C:\Users\UO294067\Downloads\RE>javac Yylex.java

C:\Users\UO294067\Downloads\RE>java -classpath ; Yylex test\_re

SCANNER:: LEXICAL ERROR(#Let's go for it #We start with correct UOs)

SCANNER:: UO(Uo1234)

SCANNER:: UO(uo123456)

SCANNER:: COMMENT(#Incorrect UOs)

SCANNER:: LEXICAL ERROR(UO123)

SCANNER:: LEXICAL ERROR(UO-1234)

SCANNER:: COMMENT(# Correct email adresses)

SCANNER:: EMAIL(a@uniovi.es)

SCANNER:: EMAIL(a.1.2@uniovi.com)

SCANNER:: COMMENT(# Incorrect email adresses)

SCANNER:: LEXICAL ERROR(2a@uniovi.es)

SCANNER:: LEXICAL ERROR(a..b@uniovi.com)

SCANNER:: LEXICAL ERROR(a.@uniovi.es)

SCANNER:: COMMENT(# Correct codes)

SCANNER:: CODE(AEIOU-12345-abcWa)

SCANNER:: CODE(UOI-987-Ww)

SCANNER:: CODE(OOOO-137-WW)

SCANNER:: COMMENT(# Incorrect codes)

SCANNER:: LEXICAL ERROR(AA-123-Wa)

SCANNER:: LEXICAL ERROR(ABC-98-Wz)

SCANNER:: LEXICAL ERROR(ABC-98-zzzW)

SCANNER:: LEXICAL ERROR(UOI 987 Ww)