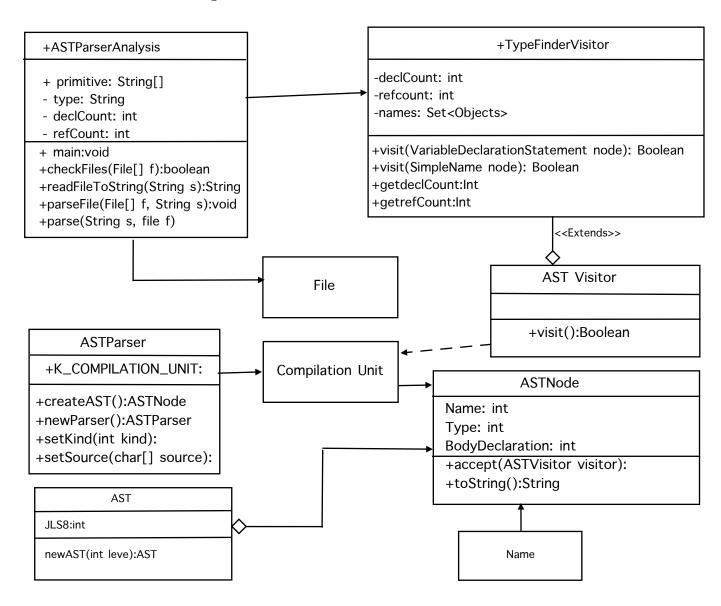Shayne Mujuru, Simran Bhattarai, Jason Li
Software Engineering 300   CPSC 413   Winter 2018
Department of Computer Science
University of Calgary
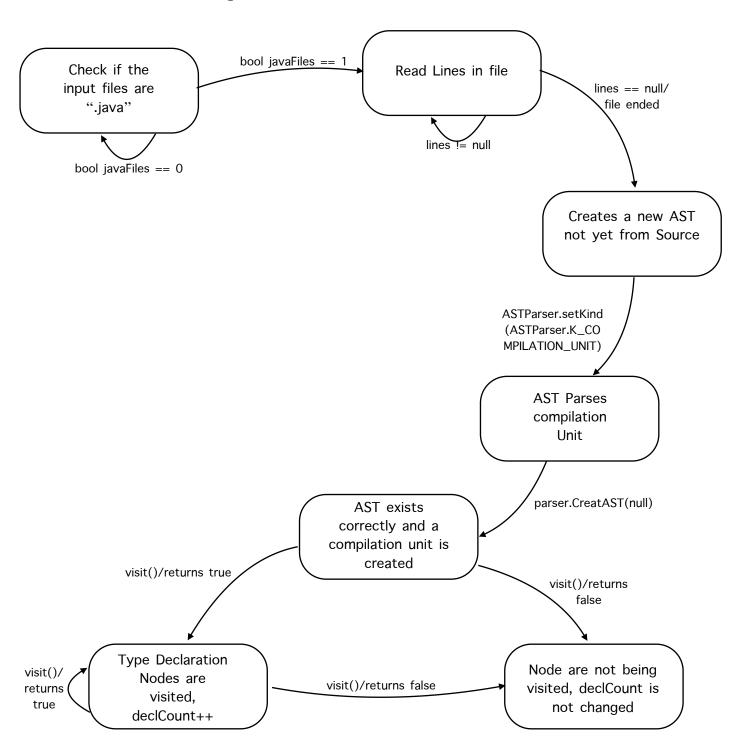
March 13, 2018

GROUP ASSIGNMENT#[1]
Structural Diagram


```
+ASTParserAnalysis
-------------------------
+ primitive: String[]
- type: String
- declCount: int
- refCount: int
-------------------------
+ main:void
+checkFiles(File[] f):boolean
+readFileToString(String s):String
+parseFile(File[] f, String s):void
+parse(String s, file f)
```

```
+TypeFinderVisitor
-------------------------
-declCount: int
-refcount: int
-names: Set<Objects>
-------------------------
+visit(VariableDeclarationStatement node): Boolean
+visit(SimpleName node): Boolean
+getdeclCount:Int
+getrefCount:Int
```

<<Extends>>

```
File
```

```
AST Visitor
-------------------------
+visit():Boolean
```

```
ASTParser
-------------------------
+K_COMPILATION_UNIT:
-------------------------
+createAST():ASTNode
+newParser():ASTParser
+setKind(int kind):
+setSource(char[] source):
```

```
Compilation Unit
```

```
ASTNode
-------------------------
Name: int
Type: int
BodyDeclaration: int
-------------------------
+accept(ASTVisitor visitor):
+toString():String
```

```
AST
-------------------------
JLS8:int
-------------------------
newAST(int leve):AST
```

```
Name
```

Sequential Diagram

State Diagram

Submitted by Shayne Mujuru, Simran Bhattarai, Jason Li on March 13, 2018.