

# Working Prototype and Known Problems Report

Product Name: ONI Code Visualization

Team Name: GraalVM UCSC

Date: April 11 2020

## Functions Not Working Correctly:

- On line numbers 285 and 286 in CallTreePrinter.java:

```
currentMethod.put("arguments", m.getParameters());  
currentMethod.put("return", m.getSignature().getReturnType(null).toJavaName());
```

**Issue:** The parameters function and return type function doesn't return concise and specific information like it was intended to. (i.e our plugin returns "int var2" when it should just return "int" for the parameters).

**Solution:** look into Oracle's getSignature() function to accurately display just the needed information. This function has both a getParameterType and a getReturnType method that should be used instead of the functions we used.

## Problems with Software:

- Must run the code first in order to generate the json static analysis report
  - **Source:** CallTreePrinter.java
  - **Solution:** Develop the static analysis report in real time, possibly at every save
- Users must specify file path by editing a file path variable in the source code.
  - **Source:** MethodCheck.java
  - **Solution:** Allow user to select a report JSON file through file navigation.
- Source code is not displayed within a side panel within the IntelliJ IDE.
  - **Source:** MethodCheck.java
  - **Solution:** Implement functionality that retrieves the source code filepath and displays that text content within the side panel.
- When running GraalVM, you must set point JAVA\_HOME to a JVMCI-enabled JDK 8 and set mx path every time you open a new terminal
  - **Source:** Environment Variables on terminal/cmd
  - **Solution:** Store the variable on your .bash\_profile in the top GraalVM directory and then use "source .bash\_profile"