Issues

Case1

I found an error when exporting microbat as a plugin. The three packages `src / evaluation` `src / behavior` and `src / main` do not see each other when compiled as a plugin export. But they can compile normally when run as an eclipse application. This question is very similar to a question in stackoverflow(https://stackoverflow.com/questions/13983819/errors-in-exporting-eclipse-deployable-plug-ins-and-fragments).

```
1660. ERROR in /Users/knightsong/Documents/project/microbat/microbat/src/main/microbat/views/
TraceView.java (at line 57)
    import microbat.behavior.BehaviorReporter;
           ^^^^^^^^^^^^^^^^^^
The import microbat.behavior cannot be resolved
----------
1661  ERROR in /Users/knightsong/Documents/project/microbat/microbat/src/main/microbat/views/
```

```
6  ERROR in /Users/knightsong/Documents/project/microbat/microbat/src/main/microbat/
codeanalysis/runtime/ExecutionStatementCollector.java (at line 25)
    import microbat.evaluation.junit.TestCaseAnalyzer;
           ^^^^^^^^^^^^^^^^^^^^
The import microbat.evaluation cannot be resolved
----------
```

Solve:

As follow,I solved this problem by adding src / evaluation and src / behavior to the Bundle-ClassPath._**Although the error does not occur, I do not know the correctness of this approach, because the function is still unresponsive after the plugin is installed**_

```
25 Bundle-ClassPath: .,
26  src/evaluation,
27  src/behavior,
28  lib/com.ibm.wala.core-1.3.9-SNAPSHOT.jar,
29  lib/com.ibm.wala.shrike-1.3.9-SNAPSHOT.jar,
30  lib/com.ibm.wala.util-1.3.9-SNAPSHOT.jar,
31  lib/poi-3.11-20141221.jar,
32  lib/poi-ooxml-3.11-20141221.jar,
33  lib/poi-ooxml-schemas-3.11-20141221.jar,
34  lib/xmlbeans-2.6.0.jar,
35  lib/soot-trunk.jar,
36  lib/bcel-6.0.jar,
37  lib/asm-6.0.jar,
```

`erview | Dependencies | Runtime | Extensions | Extension Points | Build | MANIFEST.MF | p`

Case2

Also an error when exporting microbat as a plugin

```
----------
92. ERROR in /Users/knightsong/Documents/project/microbat/mutation/src/test/java/testdata/
FastMath.java (at line 263)
    if (d > -MathUtils.SAFE_MIN && d < MathUtils.SAFE_MIN){
              ^^^^^^^^^
MathUtils cannot be resolved to a variable
----------
93. ERROR in /Users/knightsong/Documents/project/microbat/mutation/src/test/java/testdata/
FastMath.java (at line 263)
    if (d > -MathUtils.SAFE_MIN && d < MathUtils.SAFE_MIN){
                                          ^^^^^^^^^
MathUtils cannot be resolved to a variable
----------
```
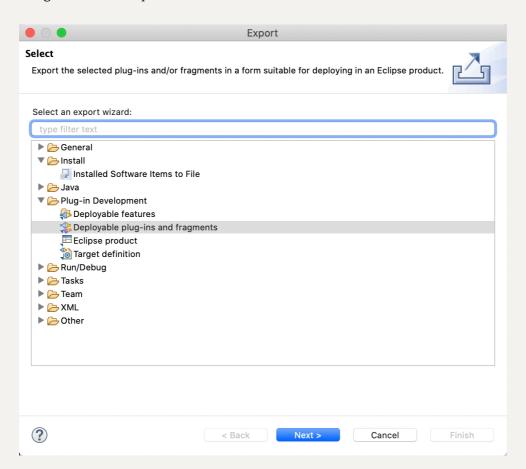
Slove：

Because it is under the test package, I just commented the file
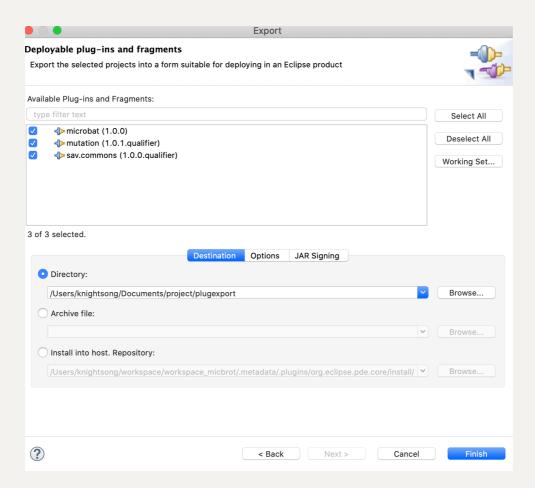
extra information：

To facilitate testing, I exported the plugin in the following relatively simple way.Steps is following:
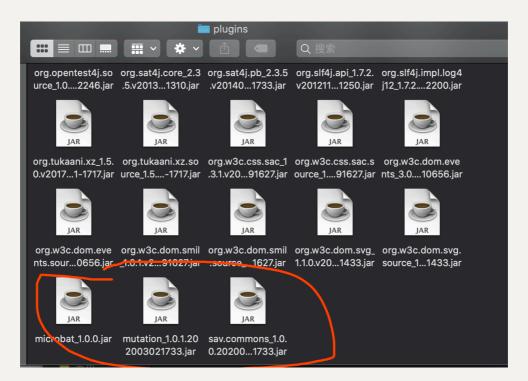
1.Right click file>export...

2.Deployable plugin->next

3.then finish,and copy the three jar packages to the plugins directory of eclipse

4.All views are normal, but nothing happens when the function is clicked.All configurations are the same as when running as an eclipse applacation, but the latter is all functional.**I can't see the error message, do we add logging to Microbat? Or where can I see the failure message**

Microbat Debugging

Target Project bubble

Settings

Java Home Path: /Library/Java/JavaVirtualMachines/jdk1.8.jdk/Contents/Home

Step Limit: 10000

Variable Layer: 2

☐ Record snapshot

☑ Apply advanced detail inspection

☐ Apply trace recording optimization for interested library code

☐ Enable method splitting function

Seed statement

☐ is to run JUnit test?

Lanuch Class: demo.BubbleSortMain

Test Method:

Restore Defaults   Apply

Cancel

---

news - bubble/src/demo/BubbleSortMain.java - Eclipse

Quick Access

BubbleSortMain.java

```
1  package demo;
2
3  import java.util.Arrays;
4
5  public class BubbleSortMain {
6      public static void sort(int[] arr) {
7          int len = arr.length;
8          int tmp;
9          System.out.println("原始顺序:  "+ Arrays.toString(arr));
10         //i表示第几趟排序
11         for (int i = 1; i < len; i++) {
12             //每次都从最后一个开始,知道第len-1趟排序
13             for (int j = len - 1; j > i-1; j--) {
14                 //如果后面的比前面的小, 就像泡泡一样冒上去
15                 if (arr[j] < arr[j - 1]) {
16                     tmp = arr[j];
17                     arr[j] = arr[j - 1];
18                     arr[j - 1] = tmp;
19                 }
20             }
21             System.out.println("第"+i+"趟排序: "+ Arrays.toString(arr));
22         }
23     }
24
25     public static void main(String[] args) {
26         int[] arr = new int[10];
27         //初始化数组
28         for (int i = 0; i < 10; i++) {
29             arr[i] = (int) (Math.random() * (100 + 1));
30         }
```

Debug Feedback

Are all variables in this step correct?

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Options and Explanation

☑ Enable Loop Inference

Written Variables:

Variable Type	Variable Name	Variable V

Read Variables:

Variable Type	Variable Name	Variable V

Recommending Reason

Explanation

Reason:

** NA