

CSC 122: Errors and Debugging

Finding Solutions

1 Introduction

In this lab you will learn about Errors and how to identify them. You will locate and fix Compiler, Linker, and Runtime Errors introduced into the PlayATune lab from previously.

Compiler Errors are syntactical errors in code. The most common cause of this is a typo.

Linker Errors are caused when a file or package referenced in one class cannot be located by the compiler.

Runtime Errors occur when there is a logical error in a program. This can be as simple as forgetting to break a loop, resulting in an infinite loop, or as complex as accessing a memory location beyond that allocated to the program.

2 Objective

To illustrate the effects of Compiler, Linker, and Runtime Errors within an application, and facilitate the use of a debugger.

3 Activity

You have been provided an Eclipse project named Error Management.

To complete this lab successfully you will need to:

- Identify and remove all Compiler Errors
- Identify and remove all Linker Errors
- Identify and remove all Runtime Errors

For each task, you must record the line number, erroneous code fragment, error type, an explanation of why it is in error, and the fixed code fragment. For runtime errors you are required to submit the steps you took to debug the problem.

4 Conclusion

After successful completion of this lab, the student will be able to identify Compiler, Linker, and Runtime errors. The student will also understand and be able to use the debugger.

5 Deliverables

The student is required to deliver:

A report containing all the errors identified in the manner described in the Activity section of this document. Files should be submitted in the format: YOURNAME_Lab_LabNumber

1. Android Developers Package Index. Internet: <http://developer.android.com/reference/packages.html>, Jan. 20, 2012 [Jan. 21, 2012].