

CC3 – Object Oriented Programming

Laboratory Exercise #10
Event Handling: ActionEvent

Name: Date:
Code/Schedule: Terminal #:

Topic(s) Covered: Event Handling, Collision Detection Algorithm
Estimated Completion Time: 2 meetings

Objectives:

1. To implement event handling in graphics
2. To accurately implement collision detection algorithm between two objects

Activity:

Modify Demo Activity for Pacman to incorporate the following:

- a) Implement collision detection algorithm by providing food object for the pacman object.
- b) There should be one food displayed at the start of the game, when pacman eats the food, score should be incremented and displayed.
- c) Another food will be displayed located randomly inside the panel.
- d) You may provide a maximum of 10 foods to be eaten; each food shall be displayed one at a time. Once all foods have been eaten then the game is over.

Laboratory Exercise Score Sheet

Trait	Exceptional (4)	Acceptable (3)	Amateur (2)	Unsatisfactory (1)
Specifications	The program works and meets all of the specifications.	The program works and produces the correct results and displays them correctly. It also meets most of the other specifications.	The program produces correct results but does not display them correctly.	The program is producing incorrect results.
Readability	The code is exceptionally well organized and very easy to follow.	The code is fairly easy to read.	The code is readable only by someone who knows what it is supposed to be doing.	The code is poorly organized and very difficult to read.
Reusability	The code could be reused as a whole or each routine could be reused.	Most of the code could be reused in other programs.	Some parts of the code could be reused in other programs.	The code is not organized for reusability.
Documentation	The documentation is well written and clearly explains what the code is accomplishing and how.	The documentation consists of embedded comment and some simple header documentation that is somewhat useful in understanding the code.	The documentation is simply comments embedded in the code with some simple header comments separating routines.	The documentation is simply comments embedded in the code and does not help the reader understand the code.
Delivery	The program was delivered on time.	The program was delivered within a week of the due date.	The code was within 2 weeks of the due date.	The code was more than 2 weeks overdue.
Efficiency	The code is extremely efficient without sacrificing readability and understanding.	The code is fairly efficient without sacrificing readability and understanding.	The code is brute force and unnecessarily long.	The code is huge and appears to be patched together.