American University of Science & Technology

Department of Computer Science

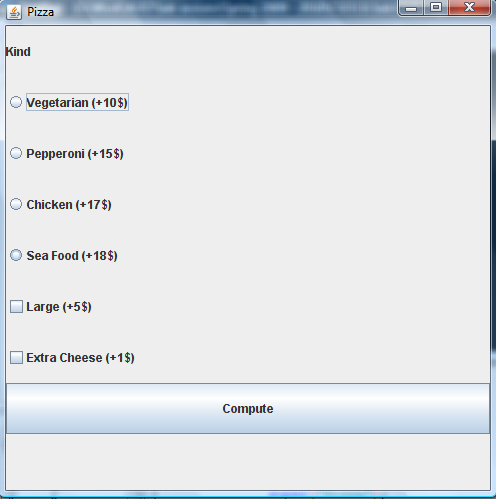
**CSI 311L – Java Programming Lab**

**Spring 2011/2012**

**Lab Work 12**

**Problem1:**

Write a java application to enable a user to choose his pizza using the following GUI. The program should display the pizza price when the user clicks the compute button.



**Problem2:**

Use polymorphism to maintain a course roster whose enrolled **students** include both **Undergraduate** and **Graduate** students.

For a **student**  we record his/her name and the three test scores.

Provide an abstract method **get\_course\_grade()** .

Provide a **constructor.**

**Provide**  **set** and **get** methods for the name and the three tests attribute.

For an **Undergraduate** the **get\_course\_grade()** returns

“Pass” if (0.25\*test1+0.25\*test2+0.5\*test3)>=70, “fail” otherwise.

For an **Graduate** the **get\_course\_grade()** returns

“Pass” if (0.25\*test1+0.25\*test2+0.5\*test3)>=80, “fail” otherwise.

I- Provide the implementation of the classes **Student**, **Undergraduate** and **Graduate**.

II- Write a java application to allow the user to create a student object and compute his course grade. The user is allowed to enter only 1 or 2 for the student type; other values should not be acceptable.

