**NEW YORK CITY COLLEGE OF TECHNOLOGY**

THE CITY UNIVERSITY OF NEW YORK

**Department of Computer Engineering Technology**

*300 Jay Street, Brooklyn, NY 11201-1909*

**CET 3640 – Software for Computer Control**

**MIDTERM EXTRA CREDIT**

**Instructions:**

You are give the following interface Movable():

**public** **interface** Movable {

 **public** **void** moveForward();

 **public** **void** moveBackward();

 **public** **void** stop();

 **public** **void** moveLeft();

 **public** **void** moveRight();

}

Based on the Movable interface create three classes: Car(), Plane(), and Ship() that implement it. After that, create a program that will polymorphically process an array of Movable by calling each of the interface methods, after creating an object for each one of the classes. Implement the classes in an Android Project and display on the phone main screen the following output:

Plane flying forward

Plane taxiing backward

Plane landed

Plane flying left

Plane flying right

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Car drives forward

Car drives backward

Car parked

Car turns left

Car turns right

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Ship navigates forward

Ship navigates backward

Ship docked

Ship navigates left

Ship navigates right

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**Lab Report:**

On your OpenLab portfolio create a new page and post the following items:

1. Description of the lab in your own words (1 point).
2. Source Code (2 points).
3. Screenshots of you program running and results (2 points).
4. Show to the professor your app running (10 points).

NOTE: These 15 points will be applied to your midterm score.

**Deadline: April 19, 2013 @ 2:15 PM.**