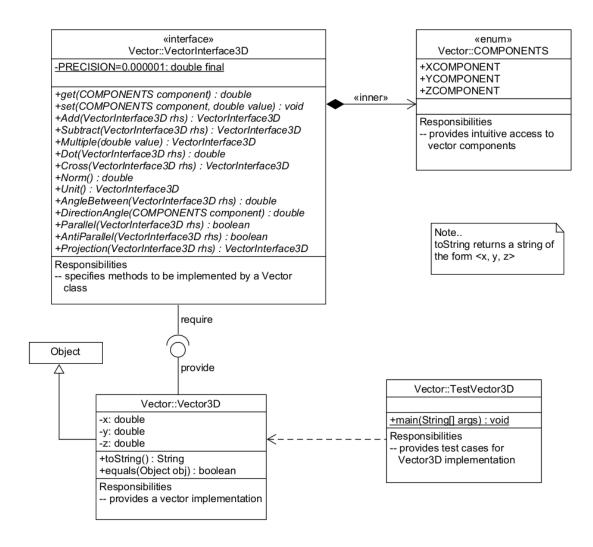
## 3D Vector

A *vector* is a quanty that has a magnitude and a direction. [Wikipedia] Their most common usage is to represent forces in physics although many other uses exist.

## The Problem

Write a Java program represent a vector in a class called **Vector3D**. The class should implement the following UML class diagram.



The VectorInterface3D interface, COMPONENTS enum, and TestVector3D class will be provided. Refer to comments in the VectorInterface3D.java file for operational details.

Demonstrate your code with the main method provided in the **TestVector3D.java class**.

## **Deliverables**

- 1. Source code attached to assignment in Canvas
  - a. One .java file
- 2. A text that contains
  - a. A reflective essay on your successes, difficulties, and how you tested your code to ensure correctness
  - b. Screen shot of the running programs (included in the document)