## **Polymorphism Trigger:**

Your development team has been asked to develop a quiz app for students to use in their study. The app should enable lecturers to add questions relating to course content in a number of different formats. You have been tasked with developing the necessary question object(s). So that the lecturer can view the questions as a whole the application requires a getDetails() method which will print the values stored in each of the relevant data members.

**Task 1:** Building on the class diagram from last weeks problem, modify the diagram to include the get details method(s).

**Task 2:** Write the code for each of the objects outlined in the class diagram including the getDetails() method(s) where necessary. You can use the code developed in last weeks session as a starting point.

Basic questions will have the following attributes:

- questionText
- correctAnswer
- mark (representing the mark awarded for a correct answer)
- Answer (representing the answer entered by the user)

Multiple choice questions will have the following attributes:

- questionText
- correctAnswer
- mark (representing the mark awarded for a correct answer)
- option a, option b and option c (representing each of the possible answers)
- answer(representing the answer chosen by the user)

Essay Questions will have the following attributes:

- questionText
- correctAnswer
- mark (representing the mark awarded for a correct answer)
- answer (representing the text entered by the user)
- maxWordCount (representing the maximum word count for the essay)

Picture Questions will have the following attributes:

- questionText
- correctAnswer
- mark (representing the mark awarded for a correct answer)
- answer (representing the answer entered by the user)
- imageName (representing the image to be displayed with the question)