

COMP 1409 Introduction to Software Development 1 Quiz #9 – Suggested Solution

Use the following Book class to fill in the missing parts of the Bookstore class below.

```
public class Book
{
    private String    title;
    private String    author;
    private int       yearWritten;

    public Book(String title,
                  String author,
                  int yearWritten){
        this.title      = title;
        this.author     = author;
        this.yearWritten = yearWritten;
    }

    public String getTitle(){
        return title;
    }

    public String getAuthor(){
        return author;
    }

    public int getYearWritten(){
        return yearWritten;
    }
} // end of Book class
```

```

// import statement ( 1 point )
import java.util.ArrayList;
public class BookStore
{

    // instance variable that is an ArrayList of Book ( 1 point )
    private ArrayList<Book> store;

    public BookStore()
    {
        // instance variable initialized ( 1 point )
        store = new ArrayList<Book>();
    }

    public void addBook(Book bookToAdd)
    {
        // add the book to the bookstore ( 1 point )
        store.add(bookToAdd);
    }

    public void showTitles()
    {
        // a for-each loop that displays all titles in the bookstore ( 3 points )
        for(Book eachBook : store) {
            System.out.println(eachBook.getTitle());
        }
    }

    public void showBookDetails()
    {
        // a while loop that displays details of all books in the bookstore ( 5 points)

        int index = 0;
        System.out.println("Books in this store");
        while(index < store.size()) {
            Book aBook = store.get(index);
            System.out.println("Title: " +aBook.getTitle());
            System.out.println("Author: " +aBook.getAuthor());
            System.out.println("Year: " +aBook.getYearWritten());
            index++;
        }
    }

} // end of Bookstore class

```