

INSTITIÚID TEICNEOLAÍOCHTA, SLIGEACH
INSTITUTE OF TECHNOLOGY, SLIGO



School of Business & Humanities

Head of School:

Mr Tony Donavan

Exam Series: Summer

Academic Year: 2011/2012

Course: BSc Computing- Software Development
BSc Computing-System & Networking
BSc Computing-Web Development
BSc Computing-Games Development

Stage: Semester 2

Subject: Introduction to Programming 2 with C#

Internal Examiner(s): Vivion Kinsella

External Examiners: Derek O Reilly

Instructions to Candidates

Time Allowed: 2.5 hours

Number of Questions on Paper: 1

Number of Questions to be attempted: 1

Compulsory Question: 1

Any Other Special Instructions: See Next Page

INSTRUCTIONS

Ensure you put your name and student number in your code.

Name your solution with your student number

For example: S0001234

When finished copy your complete solution folder to:

s:\student tests \vkinsella\exam

**ENSURE YOU HAVE COPIED ALL THE
REQUIRED CLASS FILES**

Question 1

A “Battle of the bands” contest records data about the total votes received for bands in a comma separated value (CSV) file **votes.txt** which contains records with the format:

Field Name	Type
bandID	Integer
bandName	String
totalvotesReceived	Integer

An example file may be found at `s:\classes\vkinsella\examdata`

It contains the following data:

```
1,dance magic,5
2,JoyFull,456
3,flying high ,256
```

You must write a **menu** driven program that will allow the user perform the following functions as often as they like. The menu shall provide an option to quit the application.

1. Generate Report

Output to the console a report with the details of all bands in the format outlined below. Note that a bands name shall always be in upper case in the report, regardless of how it is stored in the file.

Expected Report Format for sample data

Band Name	Total Votes	Star rating
DANCE MAGIC	5	*
JOYFULL	456	***
FLYING HIGH	256	**
Average Votes	239	
Top band	JOYFULL	

Note 1: Use a table with 3 columns to layout report

Note 2: Rating derived from the table 1 below

Note 3: Band with highest amount of votes (assume 1 only)

Table 1.

Votes	Star Rating
Less than 100	*
between 100 and 299	**
Between 300 and 499	***
Greater than 499	****

2. Search by band name

Enter the name of a band and output to the console their number of votes, if there is no match found for a band name output the message “band not found”

Example Dialogue:

Menu

1. Generate Report
2. Search by band name
3. Exit

Enter Choice :

Important

You may consult <http://msdn.microsoft.com/> for assistance with libraries/syntax but no other site shall be used or any examples beyond what you find here.

Use of material outside this site will be considered plagiarism.

Your program should use methods and at least two classes to implement functionality

Marking Scheme

Item	Mark available	Marks awarded
Main program loop to display Menu and handle menu selection	10	
Report		
Code to open file	3	
Code to read all records and split each into array	10	
Code to accumulate total votes	5	
Code to calculate average	5	
Code to write report heading	2	
Code to write report detail line	5	
Code to write report footing	3	
String handling- convert band name to uppercase	5	
Code to determine Star Rating	5	
Code to determine Top band	5	
Code to close file	2	
Search		
Code to read in target value	5	
Code to perform search	15	
Code to report search result	5	
Design/Use of methods	10	
Naming standards/ banner comment/ inline comments/white space/ indentation/ appropriate statement selection/constants	10	