

Coursework Title: eAuction System OOP

Module Name: Object Oriented Software Development

Module Code: 5046COMP

Level: 5

Credit Rating: 24

Weighting: 50%

Maximum Mark Available: 100

Lecturer: Mr. Glyn Hughes

Contact: If you have any issues with this coursework you may contact your lecturer whose contact details are:

eMail: g.d.hughes@ljmu.ac.uk

Room: **604B**

Hand-Out Date: 27th Jan 2017

Hand-In Date: 24th Mar 2017
Hand-In Method: BlackBoard

FeedBack Date: 14th Apr 2017

FeedBack Method: eMail

Programme(s): CS, CSc, SE, CF, CGD

Introduction:

Using the model **OOAD** (**O**bject **O**riented **A**nalysis & **D**esign) solution for the eAuction system as a basis, employ an **OOP** (**O**bject **O**riented **P**rogramming) process to develop a working prototype.

Working in **groups** of **two** or **three**, your prototype should be developed as a **Console Application**, using either **Eclipse** (Neon) and written in **Java** or **Visual Studio 2013** and written in **C#**.

You will be required to demonstrate your working prototype.

Learning Outcome(s) Being Assessed:

- 1. Describe the key features and purpose of a modern API.
- 2. <not assessed in this coursework>
- 3. <not assessed in this coursework>
- 4. Write OO program code using both visual designers and programming language features.
- 5. Develop data driven, ORM employing applications.

Details of Task:

Every UML diagram in the model solution is important as each one models some aspect of the eAuction system. However, the most important diagram is the Class diagram as it forms not only the starting point of your prototype's implementation but also models the majority of the eAuction system's structure.

Ensure that your prototype is able to execute the tasks that are isolated in the Use Case diagram. The specific steps involved in executing these tasks are described either in the requirements document or the model solution. Where steps are poorly described you must use common sense / assumptions to implement those steps.

The eAuction system will require a menu system that should be implemented in the *System* class. You are not required to store data (i.e. a Database or Comma Separated Value .csv file). You can as an alternative, hard code test data for *Users*, *Auctions* etc.

What you should hand in:

The working prototype in a ZIP file. Specifically, a single Eclipse (Neon) project directory complete with all Java (.java) source code or a single Microsoft Visual Studio 2013 project directory complete with all C# (.cs) source code.

Include in the ZIP file, a statement of group membership and the relative contribution (out of 100%) of each group member to the coursework. This statement must be signed by each student.

Demo sessions will be run during labs sessions on the 24th March 2017.

Marking Scheme/Assessment Criteria:

Assessment	Assessment Criteria	% weighting for part
1	Accurate Implementation of Class Structure.	30

2	Functionality of Class Members (especially Methods).	30
3	Demo of Working Prototype (Console Application).	30
4	Suitable / Descriptive Commenting / Documenting.	10

Guidelines:

- Correctly reference resources that you use.
- You must annotate your source code with suitable / descriptive comments that describe functionality and any assumptions.
- Periodically and during lecture time, workshop sessions will run to help guide you during your OOP of the eAuction system.

Resources Required:

You may use the computing laboratories on the 6th & 7th floors.

You should make use of these specific tools & resources:

- Eclipse (Neon).
- Java Language Tutorials.
 - http://docs.oracle.com/javase/tutorial/
- Microsoft Visual Studio 2013.

for CGT students.

for none CGT (Computer Games Tech.) students.

- C# Programming Guide.
 - http://msdn.microsoft.com/en-us/library/67ef8sbd.aspx
- Lecture Materials.
- The Internet.

Extenuating Circumstances:

If something serious happens that means that you will not be able to complete this assignment, you need to contact the module leader as soon as possible. There are a number of things that can be done to help, such as extensions, waivers and alternative assessments, but we can only arrange this if you tell us. To ensure that the system is not abused, you will need to provide some evidence of the problem.

More guidance is available at:

https://www.ljmu.ac.uk/about-us/public-information/student-regulations/guidance-policy-and-process

Any coursework submitted late without the prior agreement of the module leader will receive o marks.

Academic Misconduct:

The University defines Academic Misconduct as 'any case of deliberate, premeditated cheating, collusion, plagiarism or falsification of information, in an attempt to deceive and gain an unfair advantage in assessment'.

This includes attempting to gain marks as part of a team without making a contribution. The Faculty takes

Academic Misconduct very seriously and any suspected cases will be investigated through the University's standard policy (https://www.ljmu.ac.uk/about-us/public-information/student-regulations/appeals-and-complaints).

If you are found guilty, you may be expelled from the University with no award.

It is your responsibility to ensure that you understand what constitutes Academic Misconduct and to ensure that you do not break the rules. If you are unclear about what is required, please ask.

For more information you are directed to following the University web pages:

- Information regarding academic misconduct:
 - https://www.ljmu.ac.uk/about-us/public-information/student-regulations/appeals-and-complaints
- Information on study skills:
 - https://www2.ljmu.ac.uk/studysupport/
- Information regarding referencing:
 - https://www2.ljmu.ac.uk/studysupport/69049.htm