Activity-Led Learning – Project Two

Level 1 – Computer Science

Virtual Robot Bargain Hunt (VRBH)

Assessment Specification

At the end of this project, you will be expected to complete a set of Activity Led Learning (ALL) project tasks and deliver an individual viva (oral exam). As part of the assessment, you will be required to submit the work, given in the following sections, which includes assessment items, submission requirements, deadlines and marking criteria.

1. Project Assessment Submission

A set of assessment items required by this project are as follows: (please see activity worksheets later for details)

Item/Description	Deadline
Individual viva (timetables to be made available prior to the viva)	14-24 March 2016
Evidence of work: Individual Project Portfolio (IPP) in an PDF file using the 'IPP submission - template* (please note this will not be marked but for the viva reference only)	13 March 2016 23:55

*Please download the IPP submission template from the Course Web (ECU178). Present your work in the template, save it as a PDF file and upload the file via 'IPP Submission' link on Course Web by the above deadline.

***Please note that if you fail to attend your viva (oral exam), a zero mark will be awarded. Please also note that you must be available in the period of 14-24 March 2016 for viva. A time slot will be allocated for you and cannot be changed.**

If you wish to apply for an extension or deferral due to mitigating circumstances, you need to submit the extensions application form (Examination/coursework deferral /extension application form, which can be downloaded via the link at: https://share.coventry.ac.uk/students/Registry/Documents/Deferral%20and%20Extension%20Form%202015-16%20FINAL.doc?Web=1) with third part evidence before your viva assessment deadline. The application is subject to the Registry's approval.

2. Marking Schemes

The marking criteria for the above assessment items are set up as follows:

ASSESSMENT CRITERIA				
Marks	75% of project marks (group part)			25% of project marks (individual part)
	Understanding and implementation of searching and sorting algorithms	**Understanding and application of a graphical user interface (GUI) design and UML modeling**	**Understanding and application of usability evaluation**	**Individual implementation of extra features**
7 – 10	An excellent understanding of search and sort algorithms. You must be able to describe the implementation of two search and two sort algorithms. One of the search algorithms should not be covered in the lab activities provided.	Excellent understanding of the approaches for developing GUI. This should include detailed storyboards with screen outputs that clearly outline the GUI along with excellent design concepts and principles applied. An excellent use of a UML activity diagram to design the virtual robot system. The design created using the UML activity diagram should reflect the final system and be produced with an excellent level of detail. There should be the inclusion of all the required activities, conditions and flow etc.	An excellent understanding and use of one of the recognized approaches to evaluate usability (such as heuristic analysis, usability tests and cognitive walkthroughs). The program is successfully evaluated using one of the usability methods. Different approaches should be considered and reasons given why the specific approach is selected. It should be clear from the application that the usability evaluation approach has been applied to improve the virtual robot simulator. End-users should be involved in the evaluation with their views have a large impact on the final system.	The development of one additional feature of the system. The feature should fit in with the overall ethos of the system and be evaluated by your tutor as being highly innovative and complex etc.

ASSESSMENT CRITERIA				
Marks	**70% of project marks (group part)**			**30% of project marks (individual part)**
	Understanding and implementation of searching and sorting algorithms	**Understanding and application of a graphical user interface (GUI) design and UML modeling**	**Understanding and application of usability evaluation**	**Individual implementation of extra features**
6	A very good understanding of search and sort algorithms. You should be able to describe the inclusion in the system of two of the search and two of the sort algorithms explored in the lab activities provided.	Very good understanding of the approaches for developing GUI. The design should include storyboards with screen outputs that outline the GUI along with sound design concepts and principles applied. A very good use of a UML activity diagram to design the virtual robot system. The design created using a UML activity diagram should in most cases reflect the final system and be produced to a very good level of detail. The activity diagram should include most of the appropriate activities, conditions and flow etc.	A very good understanding and use of one of the recognized approaches used to evaluate usability (such as heuristic analysis, usability tests and cognitive walkthroughs). There should be a very good level of support for choosing the approach. The findings of the usability evaluation approach should be applied to improve the virtual robot simulator. End-users should have some involved in the evaluation with their views included to some extent in the final system.	The development of one additional feature of the system. The feature should fit in with the overall ethos of the system and be evaluated by your tutor to go some way toward being innovative and complex.
5	A good degree of understanding of search and sort algorithms. You should be able to describe the inclusion in the system of one of the search and one sort algorithms explored in the lab activities provided.	Good understanding of the approaches for developing GUI. This should include storyboards with screen outputs that describe the main elements of the GUI along with some design concepts and principles applied. Good use of a UML activity to design the virtual robot system. The design created using the UML activity diagram should match the main elements of the final system and be produced with a good level of detail. The activity diagram should include the main activities, conditions and flow etc.	A good understanding and use of one of the recognized approaches used to evaluate usability (such as heuristic analysis, usability tests and cognitive walkthroughs). There should be limited support why the approach was selected. It should be clear from the application that some of the findings of the usability evaluation have been applied to improve the virtual robot simulator. End-users should have been involved in the evaluation of the system but this is only reflected a small amount in the final development.	The development of one additional feature of the system. The feature should fit in with the overall ethos of the system and offer a small degree of innovation.

ASSESSMENT CRITERIA				
Marks	**70% of project marks (group part)**			**30% of project marks (individual part)**
	Understanding and implementation of searching and sorting algorithms	**Understanding and application of a graphical user interface (GUI) design and UML modeling**	**Understanding and application of usability evaluation**	**Individual implementation of extra features**
4	A basic understanding of search and sort algorithms. You should be able to describe how they can be included in your system. There should be implementation of either a sort or search.	Basic understanding of the approaches for developing GUI. Basic storyboards with basic screen outputs should outline the GUI along with simple design concepts and principles applied. The design created using a UML activity diagram should match the main elements of the final system and be produced with a basic level of detail. The activity diagram should include the basic level in terms of activities, conditions and flow etc.	A basic understanding and use of an approach to evaluate usability (such as heuristic analysis, usability tests and cognitive walkthroughs). No support for the selection of the evaluation approach. One or two of the main elements of the application should have been updated based on the evaluation. End-users would be considered in the process but not given the opportunity to feedback their options.	The development of one additional feature of the system. The feature should fit in with the overall ethos of the system but not really be seen has innovative or complex.
<4	A poor understanding of the use of sort or search in the robot system. Little or no progress in developing of sort or search code.	A poor understanding of the approaches for developing GUI. No or limited storyboards and screen outputs provided. No design concepts and principles applied. Poor use of a UML activity diagram to design the virtual robot system. The design created using a UML activity diagram does not match the system. The activity diagram is extremely limited in terms of activities, conditions and flow etc.	A poor understanding and use of one of the recognized usability approaches to evaluate usability (such as heuristic analysis, usability tests and cognitive walkthroughs). This poor understanding is reflected in the system design. The application does not reflect the use of usability evaluation. End-users not consider or consulted in the development of the system.	The development of no additional features of the system. A little understand of what could be done might be shown.

*Please note the above is subject to change.