| Software Project | |
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| **CA 2** | |
| **Plan, design, implement, debug, test and document a responsive store web application** | **Weighting:**<br>50% |
| **CA launch date::** | 06.02.2020 |
| **CA: submission Date** | 26.03.2020 |
| **CA Presentation** | Tues 31. 3.2020<br>And Thurs |
| **Software Project Learning Outcomes Assessed** | • Design, implement, test, debug and document a software application using appropriate tools and techniques at an advanced level.<br>• Integrate the skills they have learnt in other modules to analyse and solve computing problems.<br>• Describe and apply the principles and practices of problem solving and creative thinking.<br>• Understand and apply the innovation and entrepreneurial skills required in the IT industry. |
| **Advanced Web Design and Development Learning Outcomes Assessed** | • Explain the principles of web design and development, and apply those principles in designing and developing websites.<br>• Implement web designs using current web design and development tools and techniques, including CSS and JavaScript frameworks.<br>• Implement the front-end and back-end of a website using appropriate programming/scripting languages and frameworks.<br>• Test and evaluate websites in relation to their design and development. |
| **Assignment Brief** | You will be given the skeleton code for a Bookstore Web Application designed for Desktop using Bootstrap. You are required to refactor the code for a store to sell an item of your choice. You are required to redesign the Bookstore Application to be responsive for Mobile Devices using Bootstrap. You are also required to extend the application's functionality. You are required to extend the ERD for a full system but you only must implement a sub-system which should include a further 1-to-Many relationship in addition to the relationships that exist in the Bookstore application you are provided with. You should include forms and views to provide CRUD functionality with data validation for both tables in the 1-to-Many relationship.<br><br>You may also include login/registration session management to provide additional functionality to logged in users based on their role and limited functionality to guest users. You may also add Shopping Cart functionality.<br><br>You are required to document each stage of the process for the Software Project module. Your documentation should include: |

- Project Plan including budget, Wireframe & Storyboard
- ERD Diagram, UML Diagrams (use case, sequence and class)
- Implementation issues, Testing & Debugging
- Plan for monetizing the web application
- Business Idea Feasibility
- Project Management: Use a github repository to archive and manage your project

**Deliverables:**

- **Presentation**: In-class presentation to Lecturers of working application and documentation.
- **Report**: submit documentation in Word format (name your file YourLastNameYourFirstName.doc) via Blackboard, it will be automatically checked for plagiarism using TurnItIn.
- **Code**: submit your code base to \\Sideshowbob1\lecturers\Louise Glynn\CC Year 2 Software Project\CA2 in a folder named YourLastNameYourFirstName. Also submit a link to the project's github repository [TBD]

**Assessments:**

- You will be assessed on the Project Management, Documentation and Skills Integration by Joachim Pietsch for the Software Project module. Please see Software Project grading rubric below.
- You will be assessed on the Design of the application by Stefan Paz Berrios for the Advanced Web Design and Development module.
- You will be assessed on the Development of the application by Louise Glynn for the Advanced Web Design and Development module.
- You will be assessed on the Database Connectivity & ERD by Mohammed Cherbatji for the RDMS module.

**Software Project Grading Rubric**

| | Does not meet expectations<br><br>0 marks | Meets expectations<br><br>3 marks | Exceeds expectations<br><br>5 marks |
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| **LO1: Design, implement, test, debug and document a software application using appropriate tools and techniques at an advanced level.** | No evidence of design, implementation, debugging and testing. | Average evidence of design, implementation, debugging and testing. | Excellent evidence of design, implementation, debugging and testing. |
| **L02: Integrate the skills they have learnt in other modules to analyse and solve computing problems.** | No evidence of integration of skills learnt in other modules. | Average evidence of integration of skills learnt in other modules. | Excellent evidence of integration of skills learnt in other modules. |
| **LO4: Describe and apply the principles and practices of problem solving and creative thinking.** | No evidence of describing and applying the principles and practices of problem solving and creative thinking. | Average evidence of describing and applying the principles and practices of problem solving and creative thinking. | Excellent evidence of describing and applying the principles and practices of problem solving and creative thinking. |
| **LO5: Understand and apply the innovation and entrepreneurial skills required in the IT industry.** | No evidence of understanding and applying innovation and entrepreneurial skills required in the IT industry. | Average evidence of understanding and applying innovation and entrepreneurial skills required in the IT industry. | Excellent evidence of understanding and applying innovation and entrepreneurial skills required in the IT industry. |