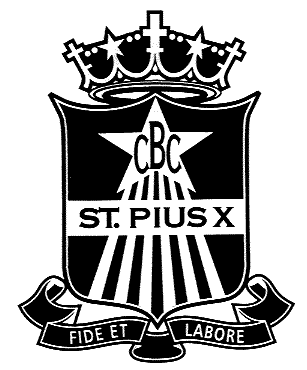
Assessment Notification

**Course: 11 Software Design and Development**

**Task Topic: Task 1 Programming and Ethics Year: 2018**

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| **Task Details:** |
| **Assessment Task No.1 Due Date: T1 W9 30/03/18 Weighting: 25%** |
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| **Submission Instructions** |
| * Students must a digital copy of their work in their respective Assessment Submission Folder (see teacher for specifics) * The School Assessment policy will be followed for students handing in late work, or missing, assessment tasks. * All work must be submitted, despite how late it may be. |
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| **Outcomes being assessed** |
| P2.2 explains the effects of historical developments on current practices  P3.1 identifies the issues relating to the use of software solutions  P6.1 describes the role of personnel involved in software development.  P1.1 describes the functions of hardware and software  P1.3 describes the interactions between the elements of a computer system  P4.1 analyses a given problem in order to generate a computer-based solution  P4.2 investigates a structured approach in the design and implementation of a software solution |
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| **Task Description** |
| Overview: Students need to combine their knowledge about social, ethical and software development to describe an ergonomically and ethically responsible program. Parts 2 and 3 require programming code to match required specifications. |
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| **In order to undertake this task you need to** : |
| Tasks:  Part 1: Research  Select a current software program and analyse and discuss how it meets the following criteria in approximately 800 words   1. Inclusivity 2. Ergonomics    1. Design issues    2. User friendly criteria   Part 2 Javascript Design   1. Design and code a javascript program using the specifications and flowchart given below.   Problem:   * To design a currency / metric / imperial converter that will convert between a minimum of 5 measurements. * Your converter must be able to take a user's input relating to the amount / type to convert to and process these displaying the appropriate output. * The program must also allow for several measurements to be converted in a single program session.     **Part 3** Design a program to solve the following:  **Chat Bot**  **Introduction – What! Computes think ??**  Can computers think? This was a question posed by computer pioneer and artificial intelligence (AI) theorist, Alan Turing. Turing proposed that, given time, a computer with sufficient computational power would acquire the abilities to rival human intelligence. In order to test his theory, Turing devised a test.  The Turing Test was based on a Victorian parlour game in which a judge (or interrogator) asks a series of questions to a man and a woman in a separate room. By reading a series of typed answers, the judge must determine which replies were from the man and which were from the woman.  Turing adapted the test by replacing the woman with a computer - the aim being to decide whether the answers were from a man or computer thus determining if a computer was able to think for itself.  To find out more about Alan Turing and the Turing Test, click on the links below:  http://www.turing.org.uk - Online biography about Alan Turing  http://en.wikipedia.org/wiki/Alan\_Turing - Alan Turing wikipedia page  http://www.bbc.co.uk/history/people/alan\_turing - BBC History: Alan Turing  http://en.wikipedia.org/wiki/Turing\_test - The Turing Test wikipedia page  http://www.turing.org.uk/scrapbook/test.html - Alan Turing Scrapbook: The Turing Test  **What is a Chat Bot?**  Review one of the online chat bots listed below. Ask the chat bots a series questions and note down any unusual or unexpected answers.  Note: Some online chat-bots learn from previous conversations. As a result, there may be some cases where what the chat bot says may be deemed as inappropriate. Use these sites at your own risk. St Pius X College is not responsible for the content of external Internet sites.  Online chat bots:  Evie (recommended!) - http://www.existor.com  Jabberwacky - http://www.jabberwacky.com  Brain Bot - http://www.botlibre.com/chat.jsp  SkyNet Ai - http://home.comcast.net/~chatterbot/bots/AI/SkynetV5/  Clever Bot - http://www.cleverbot.com  **Task – Challenge ! Creating Chat Bot**  It's simple. Create your very own bot!  The aim here is to have a functioning bot written in Python.  **The requirements are as follows:-**   * You are to create a Restaurant Online Take Away Ordering Service Chat Bot named by the type of food your restaurant serves   + E.g. Vietnamese Food – call yours VietnamBot      * Your chat bot Conversation Flow must be as follows:-   + Introduce itself and describe succinctly what you do.   + Ask user what they want…     - they must answer       * "I want food" or "I want to order food"     - If they don't answer correctly, then say you don't understand and then repeat asking until they do   + Ask their name –     - you must expect someone to enter –       * "My name is …"     - If they simply enter their name, this is ambiguous – so ask them again     - If they enter it correctly,       * confirm their name back to them and ask if you got it right – proceed if OK,       * otherwise repeat this process and ask their name again.   + Get their orders     - Ask them what they would like to order or if they want to see the menu       * If they want to see the menu, then display a list of menu items they may choose from     - Ask them to enter their choice of order –       * Checking the order is on the menu       * Repeat if it is not     - Confirm their order and tell them we are saving their order     - If less than 3 orders       * Notify the user that there are not enough orders for delivery and go and get their order again     - If 3 or more orders,       * Ask them whether want to order more       * Repeat Getting Orders   + Final Confirmation     - Display Name and Order choices   Extension:   * Save Orders with Name and store to File * When Name is entered when ordering ,check if the Name is on File – if so   + welcome them back   + display their previous orders |
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| **Task Rubrics** |
| Assessment Task 1 SDD - Marking Criteria /40   |  |  |  | | --- | --- | --- | | Question | **Item** | Mark Allocation | | Part 1 | Research | **10** Analyze and discuss all the relevant issues in design  **7-9**  Analyze and discuss most issues  **4- 6** Description and some discussion of several issues  **1–3** Brief description or overview of a single issue  **0** Poor attempt not looking at any relevant issues | | Part 2 | Programming  Task | **10** Program syntax correct, logic correct and free of errors  **7-9** Program logically correct and free of errors  **4-6** Code mostly correct still in working order  **1-3** Critical errors and flaws in program logic  **0** Failure to submit | | Part 3 | Programming Task – Chat Bot | **20-25** Extension features added and all program working correctly  **19-20** Base Program syntax correct, logic correct and free of errors  **14-18** Program logically correct and free of errors  **8-12** Code mostly correct still in working order  **1-7** Critical errors and flaws in program logic  **0** Failure to submit | |  |  |  | |