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| http://www.cooperstc.com/index_htm_files/25897.png | **Coopers**  Cambridge TEC (Certificate/Diploma) in IT  **Unit 15 - Computer Game Technologies and Platforms** | Student Name:­­­­ **Grade Awarded by:**  **Date Awarded: \_\_\_\_\_\_\_\_\_\_** Grade: PASS/MERIT/DISTINCTION |

##### Unit 15 - Assignment Checklist - DD-MM-2013

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| **TASKS & LEVEL** | **ACTIVITIES** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | **STUDENT** | **STAFF** |
| **LO1 - Understand Game Platform Types** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **P1.1 - Task 01** | | Introduce the history of the Gaming industry with examples from the various generations. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P1.2 - Task 02** | | Introduce the Arcade game market and different hardware requirements and describe the background for the industry using game examples. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **Background and History** | | | | | | | | | | | **Coin Operated** | | | | | | | | **Vector** | | | | | | | **Laser-disc** | | | | | | | |  |  |
| **M1.1 – Task 03** | | Describe how the Arcade platform type has developed over time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **D1.1 – Task 04** | | Research and explore the potential future of the Arcade Gaming platform | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P1.3 - Task 05** | | Introduce the Console market and different hardware requirements for 3 current technologies and describe the USP using game and hardware examples. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **Hardware** | | | **USP** | | | | | | | | | **Games** | | | | | | | | **Comparisons** | | | | | | | **Additional Features** | | | | | | |  |  |
| **M1.2 – Task 06** | | Describe how the Console Platform Type has developed over time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **D1.2 – Task 07** | | Research and explore the potential future of the Console Gaming platform | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P1.4 - Task 08** | | Introduce the PC game market and describe the 3 different USP points given to PC Gamers. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **Offline Capacity** | | | | | | | | | | **Online Capacity** | | | | | | | | | | | | | | | | | | | | | **Interactivity** | | |
| **M1.3 – Task 09** | | Describe how the PC Platform Type has developed over time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **D1.3 – Task 10** | | Research and explore the potential future of the PC Gaming platform | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P1.5 - Task 11** | | Introduce the Handheld and PDA Gaming market and different hardware requirements for 4 current technologies and describe the USP using game and hardware examples. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **Hardware** | **USP** | | | | | | **Games** | | | | | | **Comparisons** | | | | | | | | **Additional Features Hardware** | | | | | | | | | | | | |
| **M1.4 – Task 12** | | Describe how the Console Platform Type has developed over time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **D1.4 – Task 13** | | Research and explore the potential future of the Console Gaming platform | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P1.6 - Task 14** | | Introduce the Alternative Gaming Market and different hardware requirements and describe the USP using game and hardware examples. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **M1.5 – Task 15** | | Describe how the Alternative Gaming market has developed over time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **D1.4 – Task 16** | | Research and explore the potential future of the Alternative Gaming platform. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **LO2 - Understand hardware technologies for game platforms** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **P2.1 – Task 1** | | Using appropriate terminology and examples, describe hardware technologies for game platforms in terms of **Graphic capabilities** in terms of history, purpose and benefits to gaming. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P2.2 – Task 2** | | Using appropriate terminology and examples, describe hardware technologies for game platforms in terms of **Storage needs** in terms of history, purpose and benefits to gaming. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P2.3 – Task 3** | | Using appropriate terminology and examples, describe hardware technologies for game platforms in terms of **Sound and Audio** **needs** in terms of history, purpose and benefits to gaming. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P2.4 – Task 4** | | Using appropriate terminology and examples, describe hardware technologies for game platforms in terms of **Memory storage** **needs** in terms of history, purpose and benefits to gaming | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P2.5 – Task 5** | | Using appropriate terminology and examples, describe hardware technologies for game platforms in terms of **CPU** **needs** in terms of history, purpose and benefits to gaming. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P2.6 – Task 6** | | Using appropriate terminology and examples, describe hardware technologies for game platforms in terms of **Human Interface** **needs** in terms of history, purpose and benefits to gaming. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P2.7 – Task 7** | | Using appropriate terminology and examples, describe hardware technologies for game platforms in terms of **Visual Display** **needs** in terms of history, purpose and benefits to gaming. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P2.8 – Task 8** | | Using appropriate terminology and examples, describe hardware technologies for game platforms in terms of **Controller and Input** **needs** in terms of history, purpose and benefits to gaming. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P2.9 – Task 9** | | Using appropriate terminology and examples, describe hardware technologies for game platforms in terms of **Mobiles Devices** in terms of history, purpose and benefits to gaming. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P2.10 – Task 10** | | Using appropriate terminology and examples, describe hardware technologies for game platforms in terms of **Game Connectivity** in terms of history, purpose and benefits to gaming. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P2.11 – Task 11** | | Using appropriate terminology and examples, describe hardware technologies for game platforms in terms of **Power Supplies** **needs** in terms of history, purpose and benefits to gaming. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **M2.1 – Task 12** | | Describe and compare with examples three mobile devices in terms of specifications, OS’s, Suitability for gaming and their technical limitations. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **Specification** | | | | **OS’s** | | | | | | | | | | **Suitability for gaming** | | | | | | | | | | | **Technical Limitations.** | | | | | | | | |  |  |
| **M2.2 – Task 13** | | Using a comparison table, compare the technical features of each of the 3 selected devices to their direct rivals. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **D2.1 – Task 14** | | Evaluate the suitability of other mobile technologies including the **cross platform usage** of software or **repurposing** of the technology. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **D2.2 – Task 15** | | Evaluate the suitability of them for game play in different formats and give clear descriptions of the technologies involved, connectivity and costs. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **Suitability for adapting** | | | | | | | | | **Technical Description** | | | | | | | | | | | | | **Connectivity ability** | | | | | | | | | | | **Costs** |  |  |
| **LO3 - Understand software technologies for game platforms** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **P3.1 – Task 1** | | Research and Describe with examples how hardware dependency can have an impact on software technologies for game platforms using appropriate use of subject terminology. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **Internal Hardware dependence** | | | | | | | | | **Software compliance** | | | | | | | | **Code compatibility** | | | | | | | | | | | **External hardware issues** | | | | | |  |  |
| **P3.2 – Task 2** | | Research and Describe with shown examples of how **OS** dependency can have an impact on game creation and game compliance using appropriate use of subject terminology. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P3.3 – Task 3** | | Research and Describe with shown examples of how **Driver Issues** can have an impact on game creation and game installation using appropriate use of subject terminology. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **Graphics** | | | | | **Sound** | | | | | | | | | | **Networks** | | | | | | | | | | | | | **Interface** | | | | | |  |  |
| **P3.4 – Task 4** | | Research and Describe with shown examples of how **Programming Languages** and their choices can have an impact on game and App creation using appropriate use of subject terminology. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **C++** | | | | | **C#** | | | | | | | | | | **Java** | | | | | | | | | | | | | | **J2ME and J2SE** | | | | |  |  |
| **P3.5 – Task 5** | | Research and Describe with shown examples of how **Scripting Languages** are used and how they can have an impact on game and App creation using appropriate use of subject terminology. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **Unreal Scripting** | | | | | | **MEL Scripting** | | | | | | | | | | | | **Action Script** | | | | | | | | | | | | | | **Javascript** | |  |  |
| **P3.6 – Task 6** | | Research and Describe with shown examples of how **Sound and Graphic API’s** are used and how they can have an impact on game and App creation using appropriate use of subject terminology. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **OpenGL** | | | | | **OpenGL ES** | | | | | | | | | | **DirectX** | | | | | | | | | | | | | | **Java/Java SE** | | | | |  |  |
| **M3.1 – Task 7** | | Discuss the different software technologies for multiple platforms in terms of object and character creation. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **M3.2 – Task 8** | | Discuss the different software engines for multiple platforms in terms of ease of use, adaptability, game creation issues, production times and final output. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **Ease of use** | | **Adaptability** | | | | | | | | | | | **Game creation issues** | | | | | | | | | | **Production times** | | | | | | | **Final output** | | | |
| **D3.1 – Task 9** | | Using the Game Scenario [here](LO3%20-%20Task%209%20-%20Game%20Scenario.docx), justify the choices under each heading of platform on which to run an identified software technology. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **D3.2 – Task 10** | | Using the table, compare and contrast issues in game development in terms of platforms on which to run the produced game. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **LO4 - Be able to Connect and Configure platforms and Devices** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **P4.1 – Task 1** | | Using examples and terminology discuss and explain the technology around the connector cables used to connect a console to a display. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P4.2 – Task 2** | | Using examples and terminology discuss and explain the technology around the connector cables used to connect a console to a Console. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P4.3 – Task 3** | | Using examples and terminology discuss and explain the technology around the LAN and WAN network connections and how it is used in the gaming world. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P4.4 – Task 4** | | Using examples and terminology discuss and explain the technology around the Wireless and Wireless Devices and how it is used in the gaming world. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P4.5 – Task 5** | | Using examples and terminology discuss and explain the technology around the d controllers and how they are used in the gaming world. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **Mice and Keyboards** | | | | | | | | | **Joysticks and Paddles** | | | | | | | | | | | | | | | **Extras** | | | | | **Kinect and Rift** | | | | |  |  |
| **P4.6 – Task 6** | | Using examples and terminology discuss and explain the PC hardware games requirements and how they are used in the gaming world. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **Graphics Cards** | | | | | | | | **NIC Cards** | | | | | | | | **Sound Cards and Speakers** | | | | | | | | | | | | | | | | | |  |  |
| **P4.7 – Task 7** | | Using examples and terminology demonstrate configuring a PC for a game setup, setting up a game and configuring the game for optimal settings. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **M4.1 – Task 8** | | Explain the different ways in which you could connect for multiplayer gaming for PC Games | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **D4.1 – Task 9** | | Justify from the available **PC** connection types how each is appropriate for the different multiplayer gaming experiences in terms of costs, speed, number of users and user locations. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P4.8 – Task 10** | | Using examples and terminology demonstrate configuring a Console for a game setup, setting up a game and configuring the game for optimal settings. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **M4.2 – Task 11** | | Explain the different ways in which you could connect for multiplayer gaming for **Console** Games | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **D4.2 – Task 12** | | Justify from the available **Console** connection types how each is appropriate for the different multiplayer gaming experiences in terms of costs, speed, number of users and user locations. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P4.9 – Task 13** | | Using examples and terminology demonstrate configuring a **Mobile Phone** or **Tablet** for a game setup, setting up a game and configuring the game for optimal settings. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **M4.3 – Task 14** | | Explain the different ways in which you could connect for multiplayer gaming for **Mobile** Games. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **D4.3 – Task 15** | | Justify from the available Mobile connection types how each is appropriate for the different multiplayer gaming experiences in terms of costs, speed, number of users and user locations | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **P4.10 – Task 16** | | Using examples and terminology demonstrate configuring a **Handheld** for a game setup, setting up a game and configuring the game for optimal settings. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **M4.4– Task 17** | | Explain the different ways in which you could connect for multiplayer gaming for **Handheld** Games | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **D4.4 – Task 18** | | Justify from the available Handheld connection types how each is appropriate for the different multiplayer gaming experiences in terms of costs, speed, number of users and user locations. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |