# Information and Communication Technology 2019 v1.0

## Unit 2 assessment instrument

### Project – 8-Directional RPG Game

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| **Purpose** |
| This technique assesses a response to a single task, situation and/or scenario in a module of work that provides students with authentic and/or real-world opportunities to demonstrate their learning. The student response will consist of a collection of at least two assessable components, demonstrated in different circumstances, places and times, and may be presented to different audiences, and through differing modes. |
| **Dimensions to be assessed** |
| This assessment technique is to be used to determine student achievement in objectives from all of the following dimensions:   * Knowing and understanding * Analysing and applying * Producing and evaluating.   All objectives from each dimension must be assessed. |

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| **Subject** | Information and Communication Technology |
| **Technique** | Project – 8-Directional RPG Game |
| **Unit number** | 2 |
| **Module number and name** | Module 4: Game Development 1 |
| **Conditions** | |
| **Written Component** | 400-700 words |
| **Product Component** | Entire asset base and game source files |
| **Duration (including class time)** | 3 weeks |
| **Individual / group** | Individual |
| **Resources available** | * Laptop access |
| **Context** | |
| For this task you are an independent game developer with a license to publish on Steam via the Game Maker Studio 2 platform. You are an enthusiast gamer, and a hobbyist of RPG games such as Legend of Zelda: A Link to the Past, Undertale, and Stardew Valley. Steam Greenlight has been superseded by Steam Direct and as an avid producer of digital game applications, you are keen to test out this new platform. The game you publish will be on a desktop PC based platform, with access to keyboard and stand-alone mouse (i.e. independent of trackpad). It does not need to be web-based. | |
| **Task** | |
| Plan, produce and evaluate a top-down (8-directional movement) 2D dungeon crawler / RPG prototype title, that has measured elements of chance (such as random spawn elements).  The game you produce needs to incorporate the following mechanics:  1. a random element of chance  2. a score, health or timing variable  3. ability to move and sense collision with collectible, enemy or barricade objects  4. a theme that is:   * Appropriate for a viewing audience of teenagers (aged 13-17) * Fitting within the dungeon crawler / RPG “retro” genre   Note: The focus of the subject matter for this unit is *elective context 2: Application development* (ICT Syllabus page 18), and that nowhere is *elective context 5: Digital imaging and modelling* (ICT syllabus page 23) covered throughout this course. As such, students are welcome to use the pre-fabricated sprite-sheets and tile sets provided, or (alternatively) utilise, import and adapt existing royalty free web assets. Students are not expected to create their own sprites, sprite-strips / sprite-sheets, textures, background imagery or audio samples from “scratch”.  The task includes two components. Upon successful completion of these components, you should have evidence for each of the syllabus descriptors:   * Component 1: Written   Write a document containing:   * + your background research, rationale, game specifications and level designs   + an evaluation of the final product and project lifecycle (following component 2 below), which includes supporting recommendations. * Component 2: Product   + Generate a top-down (8-directional movement) 2D dungeon crawler / RPG prototype title. | |
| **To complete this task, you must:** | |
| * identify and explain the software and hardware requirements relevant to this task (K&U1) * identify and explain how this game may be received in society (K&U2)   + *identify and explain how your proposed game is unique to existing titles* * analyse the requirements, risks and problems with developing, deploying or maintaining this game, and identify potential solutions or alternatives (A&A1)   + *apply the suggested technique for analysis: mind-map* * synthesise concepts and ideas from your analysis to plan *game world designs and / or game mechanic diagrams* for your game (P&E1)   + *communicate important game mechanics in the planned game world using colours and annotations* * produce a game that systematically addresses the task requirements (P&E2)   + *produce the elements required in the task description above*   + *apply learnt GML techniques to develop game management frameworks, variables to track progression, as well as collision behaviour, aesthetics and other game flow mechanics*   + *apply asset, media and project management techniques to deliver your game in an accepted format via the appropriate digital submission platform* * evaluate the project outcomes and lifecycle, and make recommendations or offer advice for future directions where feasible (P&E3) * submit the above written and product components, ensuring throughout both you:   + communicate ICT information to an audience using a considered selection of visual representations and language conventions and features (A&A2)   + apply software and hardware concepts, ideas and skills to complete the set of tasks listed within the range of ICT contexts included in this project (A&A3) | |
| **Checkpoints** | |
| □ Term [X] Week [X]: Discuss ideas with teacher | |
| □ Term [X] Week [X]: Complete draft submission | |
| □ Term [X] Week [X]: Final submission | |
| **Authentication strategies** Your teacher will use ways to check that the work you are assessed on is your own work. | |
| * Discuss with your teacher or provide documentation of your progress. | |
| * Take part in interviews or consultations with your teacher as you develop your response. | |
| * Submit drafts and respond to teacher feedback. | |

Instrument-specific standards matrix

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|  | **Standard A** | **Standard B** | **Standard C** | **Standard D** | **Standard E** |
| **Knowing and understanding** | The student work has the following characteristics: | | | | |
| * **accurate** identification and **comprehensive** explanation of software and hardware requirements related to ICT problems * **accurate** identification and **comprehensive** explanation of the use of ICT in society | * **accurate** identification and **detailed** explanation of software and hardware requirements related to ICT problems * **accurate** identification and **detailed** explanation of the use of ICT in society | * identification and explanation of software and hardware requirements related to ICT problems * identification and explanation of the use of ICT in society | * **partial** identification and **simple** description of software and hardware requirements related to ICT problems * **partial** identification and **simple** description of the use of ICT in society | * **minimal** identification and **superficial** description of software and hardware requirements * **minimal** identification and **superficial** description of the use of ICT in society |
| **Analysing and applying** | The student work has the following characteristics: | | | | |
| * **logical** analysis of ICT problems to identify solutions * **coherent** communication of ICT information to an audience using **a considered selection of** visual representations and language conventions and features * **proficient** application of software and hardware concepts, ideas and skills to complete tasks in a range of ICT contexts | * **considered** analysis of ICT problems to identify solutions * **clear** communication of ICT information to an audience using **relevant** visual representations and language conventions and features * **competent** application of software and hardware concepts, ideas and skills to complete tasks in a range of ICT contexts | * analysis of ICT problems to identify solutions * communication of ICT information to an audience using visual representations and language conventions and features * application of software and hardware concepts, ideas and skills to complete tasks in ICT contexts | * **description** of aspects of ICT problems * **vague** communication of ICT information to an audience using visual representations and language conventions and features inconsistently * **basic** application of software and hardware concepts, ideas and skills to complete tasks in ICT contexts | * **partial description** of aspects of ICT problems * **unclear** statements of ICT information * **use** of software and hardware concepts, ideas and skills in ICT contexts |
| **Producing and evaluating** | The student work has the following characteristics: | | | | |
| * **logical** synthesis of ICT concepts and ideas to **proficiently** plan solutions to given ICT problems * production of solutions that **systematically** address ICT problems * **reasoned** evaluation of problem-solving processes and solutions, and **logical** recommendations made. | * **effective** synthesis of ICT concepts and ideas to **successfully** plan solutions to given ICT problems * production of solutions that **effectively** address ICT problems * **considered** evaluation of problem-solving processes and solutions, and **plausible** recommendations made. | * synthesis of ICT concepts and ideas to plan solutions to given ICT problems * production of solutions that address ICT problems * evaluation of problem-solving processes and solutions, and recommendations made. | * listing of related ICT concepts and ideas to **partially** plan solutions to given ICT problems * production of responses that engage with ICT problems * description of problem-solving processes and solutions, and **basic** recommendations made. | * collection of information related to planning solutions to given ICT problems * production of partial responses that engage with aspects of ICT problems * fragmented description of problem-solving processes and solutions, and statements of opinion made. |

### Comments: