

## Assignment front sheet

Learner Name		Assessor Name	
		<b>Dr Derek Peacock</b>	
Date issued	Completion date	Submitted on	
<b>12/15<sup>th</sup> January 2015</b>	<b>26/28<sup>th</sup> January 2015</b>		
Qualification		Unit number and title	
<b>BTEC Level 3 Extended Diploma in IT</b>		<b>Unit 22: Developing Computer Games</b>	
Assignment title	<b>Assignment 2 – Computer Game Design</b>		
In this assessment you will have opportunities to provide evidence against the following criteria.			

Criteria reference	To achieve the criteria the evidence must show that the student is able to:	Task no.
<b>P3</b>	produce a <b>design</b> for a computer game for a given specification	<b>Task 1</b>
<b>M1</b>	Determine appropriate <b>data types</b> for a computer game and show how they are declared.	<b>Task 1</b>
<b>D2</b>	<b>Explain</b> how the structure and design of a game can assist in maintenance and the capacity for extension.	<b>Task 2</b>

<b>Learner declaration</b>			
I certify that the work submitted for this assignment is my own and research sources are fully acknowledged. I am happy with the grade awarded.			
Learner signature:		Date:	
<b>Final Grade (if appropriate)</b>		<b>Points</b>	

	Assessment Criteria Achieved (indicate with ✓ and initial )										
	P3	M1	D2								
1 <sup>st</sup> attempt Date											
Final attempt Date											

## Assessor's comments

<b>Qualification</b>	BTEC Level 3 Extended Diploma in IT	<b>Assessor name</b>	Dr Derek Peacock
<b>Unit number and title</b>	Unit 22: Developing Computer Games	<b>Learner name</b>	

Grading criteria		Assessor Feedback
<b>P3</b>	produce a <b>design</b> for a computer game for a given specification.	
<b>M1</b>	Determine appropriate <b>data types</b> for a computer game and show how they are declared.	
<b>D2</b>	<b>Explain</b> how the structure and design of a game can assist in maintenance and the capacity for extension.	

Additional Assessor Feedback (including feedback for upgrade) and Action Plan	Action completed by date

Learner Feedback	

<b>Learner</b>		<b>Signature</b>		<b>Date</b>	
<b>Assessor</b>		<b>Signature</b>		<b>Date</b>	
<b>Internal Verifier</b>		<b>Signature</b>		<b>Date</b>	
<b>Lead Internal Verifier</b>		<b>Signature</b>		<b>Date</b>	

## Assignment brief

Qualification	<b>BTEC Level 3 Extended Diploma in IT</b>
Unit number and title	<b>Unit 22: Developing Computer Games</b>
Start date	
Deadline	
Assessor name	<b>Dr Derek Peacock</b>

Assignment title	<b>Assignment 2 – Computer Game Design</b>
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### The purpose of this assignment is to:

1. Be able to design and develop computer games
2. Be able to test and document computer games.

### Scenario

You are working as a junior games developer for an IT Software company called IntelliGames. You have been asked by your supervisor to complete a number of tasks to brief a new client so that they better understand the gaming industry. You have been offered a co-worker to share the work load.

## TASK 1 [P3, M1] DESIGNING A GAME

Following your presentation, your client has decided that she would like to see a game designed; she said that she would like to have a 2D labyrinth game with a birds-eye view called "Zombies escape". The game should be playable on 7-10" tablets.

The game needs to include:

- a menu at the beginning with simple instructions explaining the controls
- At least 3 levels of game play.
- Energy capsules which increase the abilities of the hero of the game in some way.
- At least three different zombies who will appear in the game who the hero needs to either avoid or eliminate after eating an energy capsule.

The rest of the game design is up to you, but you need to ensure that your design is realistic and achievable.

The client is also prepared to be surprised and said that another game can be created if it is designed well with detailed client requirements.

**2.1 Create a design document of your game for the client.** You will need to make sure that you plan the whole game and decide exactly how to play it. You will need to make decisions about the health, power ups and scoring. These will help you to plan any necessary variables and constants that you need. **[P3]**

**In your design document you will need to following;**

1. A description of the game and how it works
2. Use Case Diagram
3. Use Case Specifications
4. Storyboards or Use Case Specifications with screen layouts
5. Class Diagram(s) with return types and parameters defined
6. Sequence and Activity Diagram(s) illustrating algorithms used.

**2.2 Hold a review meeting** to evaluate the design and identify improvements, omissions and inconsistencies **[P3]**

**2.3 For each class explain the choice of data types for the attributes [M1]**

**EVIDENCE:** DESIGN DOCUMENT

## **TASK 2 [D2] DESIGNING A GAME**

**2.4 Create a detailed report** explaining to the client how the structure and the design of the game would allow for easy maintenance if any problems are found and how the client can expand the game if it was decided that extra features are needed. **[D2]**

**EVIDENCE:** DETAILED REPORT WITH UPDATED DIAGRAMS IF REQUIRED.