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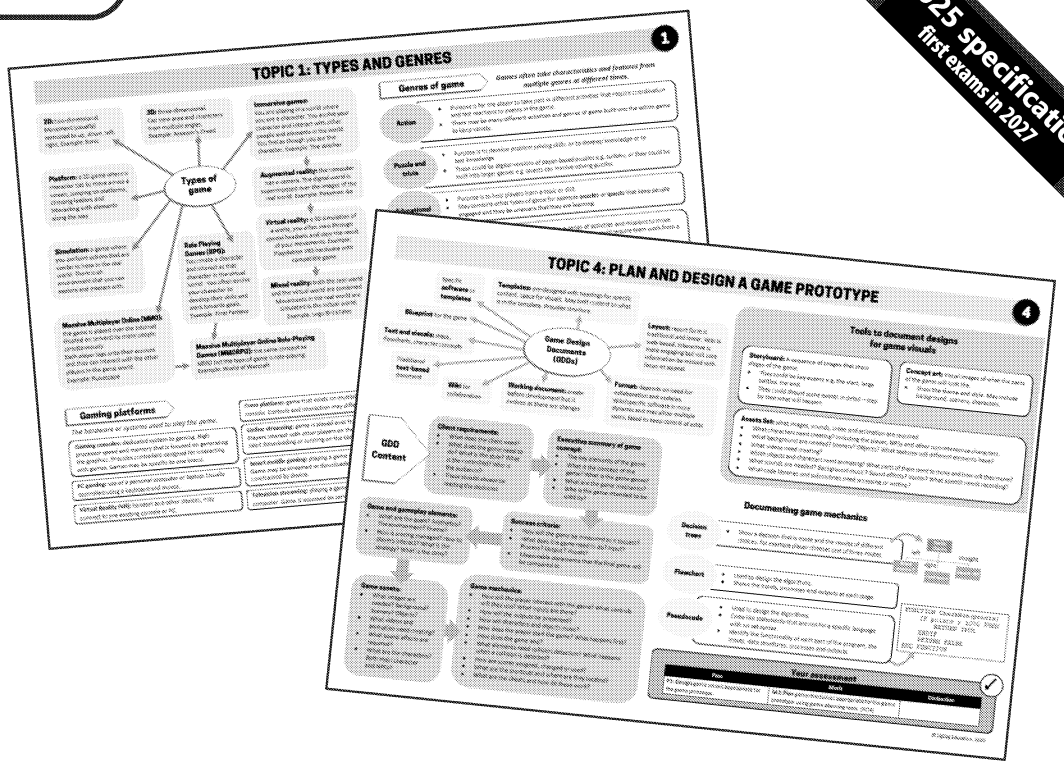

Topic on a Page

for Unit F163: Game Development

Cambridge Advanced National (Extended Certificate)

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Contents

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Teacher's Introduction

This resource is intended for use by students studying the **OCR Level 3 Alternative Academic Qualification: Cambridge Advanced National in Computing: Application Development: Unit F163: Game development**, first teaching 2025. This is an optional external unit for this qualification and is assessed by an assignment.

It is important to always check the exam board website for any new information, including changes to the specification and sample assessment material.

The intention of this resource is to provide a condensed 'Topic on a Page' which provides an overview of the content of each topic area, which will enable students to review their learning and apply it to the supplied activity sheets.

How to use this resource

The resource consists of:

- 7 A3 posters covering the topics as listed below, labelled: 1 — 7
- 7 A3 activity posters which are partially completed and provide opportunities for students to fill in gaps to show their understanding of the topics and key terms, or as a planning tool to make notes for what they will do in their assessment task. These are labelled: 1 — 7

Opportunities for use:

- Printed out and displayed on classroom walls
- Individual copies to be given to students as the topic area is delivered
- Activity sheets can be given out at the end of topic delivery to check understanding
- Used as a planning or note-making tool for the assessment task

Topic Area 1: Game design

1

1.1 Types and genres of digital games
- 1.1.1 Types of game
- 1.1.2 Genres of game
- 1.1.3 Gaming platforms
- 1.1.4 Pan European Game Information (PEGI) Certificates

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1.2 Principles of game design
- 1.2.1 Game concept
- 1.2.2 Game and gameplay elements

3

- 1.2.3 Game assets
- 1.2.4 Game mechanics

Topic Area 2: Plan and design high-fidelity game prototypes

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2.2 Game planning and design tools

Topic Area 3: Create high-fidelity game prototypes

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3.1 Tools and techniques to source and prepare assets

3.2 Technical skills to create game environments and game functionality

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4.1 Game prototype testing

Topic Area 5: Review and improve high-fidelity game prototypes

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5.1 Techniques to review the fitness for purpose of game prototypes

5.2 Improvements to, and further developments for, game prototypes
- 5.2.1 Improvements
- 5.2.2 Further development opportunities

June 2025

TYPES AND GENRES

2D: two-dimensional. Movement (usually) restricted to up, down, left, right. Example: *Sonic*

3D: three-dimensional. Can view area and characters from multiple angles. Example: *Assassin's Creed*

Immersive games: you are playing in a world where you are a character. You evolve your character and interact with other people and elements in the world. You feel as though you are the character. Example: *The Witcher*

Platform: a 2D game where a character has to move across a screen, jumping on platforms, climbing ladders and interacting with elements along the way.

Types of ...

Augmented reality: the computer has a camera. The digital world is superimposed over the images of the real world. Example: *Pokémon GO*

Simulation: a game where you perform actions that are similar to those in the real world. There is an environment that you can explore and interact with.

Role-Playing Games (RPG): you create a character and interact as that character in the virtual world. You often evolve your character to develop their skills and work towards goals. Example: *Final Fantasy*

Virtual reality: a 3D simulation of a world, you often view through special headsets and view the result of your movements. Example: PlayStation VR2 hardware with compatible game

Mixed reality: both the real world and the virtual world are combined. Movements in the real world are simulated in the virtual world. Example: *Lego Bricktales*

Massive Multiplayer Online (MMO): the game is played over the Internet (hosted on servers) by many people simultaneously. Each player logs onto their account and they can interact with the other players in the game world. Example: *RuneScape*

Massive Multiplayer Online Role-Playing Games (MMORPG): the same concept as MMO but the type of game is role-playing. Example: *World of Warcraft*

Genre

- Action
- Puzzle and trivia
- Educational
- Quest
- Sports
- Strategy

Gaming platforms

The hardware or systems used to play ... games.

Cross-platform: game that exists on multiple platforms, e.g. PC and console. Controls and interaction may differ depending on platform.

Gaming console: de... with high processor speed and ... is focused on generating the graphics. Provide... designed for interacting with games. Games ma... specific to one brand.

Online streaming: game is played over the Internet hosted on servers. Players interact with other players on the same server. Game does not need downloading or running on the computer where it is played.

PC gaming: use of a personal computer or laptop. Usually controlled using a keyboard and mouse.

Smart mobile gaming: playing a game using a smartphone (or tablet). Game may be streamed or downloaded. Processing power and memory are constrained by device.

Virtual reality (VR): headset and other devices, may connect to pre-existing console or PC.

Television streaming: playing a game through a television as the computer. Game is accessed on a server through the Internet.

PRINCIPLES OF GAME DES

Game concept

Purpose
Is the game to be educational? Exciting? Problem-solving? Engaging? Collaborative?

Audience
Is the audience a set age? All ages? Over 7? Over 15? Adults only?
Is it aimed at a specific demographic? People who like specific genres or activities?

Story
What is the story of the game? Who are the characters? What is going to happen? How does the game progress the story? A book has a start, a middle and an end – a game needs the same planning.

Uni[illegible]
W[illegible] game have tha[illegible] games don't? What will set it apart from other games? Why will people want this game and not others?

Game elements

Decisions need to be made on your game elem[illegible] these all interact; a decision in one element wi[illegible] decisions in other elements.

Goals and objectives

- What is the game setting out to achieve? W[illegible] is the player trying to do in the gam[illegible] the end and along the way?
- What should the pla[illegible]rs b[illegible]oing t[illegible] with the game? How [illegible] the [illegible]e interacting?
- All [illegible] gam[illegible] [illegible]eplay elements should [illegible]s [illegible]eet [illegible]e goals and objectives.

Aesthetics and visuals

- What is the game going to like? Is it going to be 2D o[illegible]
- Is there a visual style? Is it cartoon-style image? Is it [illegible] or vector? Or a 3D real-life simulation? How does thi[illegible] from or into the theme?

Theme and story

- What is the focus of the game? What type and genre of game is it? Is it a que[illegible] Strategy? Educational? Or is it a combination?
- What is the storyline of the game? What world is it set in? Who are the characters? What is the backstory (what has happened before this game)?
- How do the theme and story influence how the game works? The controls? [illegible] **goals and objectives.** The tactics that the user needs to employ, e.g. a them[illegible] assassins will have the need for stealth built into all aspects of the game desi[illegible]

Gameplay elements

Decisions need to be made on how the game will be played by the user. These [illegible] from your concept and elements, but you may need to amend some previous d[illegible] based on new ideas in the gameplay elements.

Player interaction

- How will the player and the game communicate? How will the player input commands and directions? What movements and actions can they make? These may come from the **goals and objectives**.
- How will the results be given to the player?
- What hardware will the player use, and how will this dictate the methods of interaction?
- How does player interaction support the **immersion**, and how does the **story** change the interaction required?

Player immersion

- How is the player going to be made to feel as though they are 'in' the game? How wi[illegible] they feel like they are the character they are playing and forget about the real world[illegible]
- How does this feed from the **story**? How will you keep the player engaged and enthusiastic about continuing with the game? How do the **aesthetics** support the pla[illegible] immersion? Which elements increase the immersion?

Reward and accomplishment

- What rewards will be given to the player? Will they be able to move forward in the game? Add skills to their characters? Build new aspects in the world? Explore new areas? Does the **story** require players to visit new areas or to collect items?
- How will a player be able to measure and check their accomplishments? Are there goals to meet? Are there quests that are completed? Are there levels to move through?

Competition

- Is the game overall a co[illegible] or [illegible]re smaller competitive elements?
- How will pla[illegible]rs [illegible]mpe[illegible] and [illegible]t? What will happen if a player wins or loses?
- How [illegible] thei[illegible]ement through the game? This will come from the go[illegible] [illegible]ject[illegible] [illegible]h goals involve or require competition?

Scoring

- How are the player's success[illegible] ilure[illegible] [illegible] **goals** are met through the scoring? What does scoring provi[illegible] this [illegible] bu[illegible] to the **story**?
- Are players awarded poi[illegible] [illegible]ed ta[illegible]s? Are they given new skills? Money? Objects?
- How will the user access a[illegible] [illegible]cores/points, etc.? How will they know what to do with them?
- Does the scoring affect hov[illegible] [illegible]progress in the game?

Outcome and feedback

- How will the player know the outcome of their decisions? Will they see these visually? Will it change what they can do next in the game?
- How will the result of player actions and decision given to the player? How will they know what th[illegible] have achieved and the outcomes of their decisio[illegible]

Strategy and chance

Strategy requires making decisions. What decisions will the player need to make? What are the alternatives? How do each of these decisions impact the future of the game for that player? How does it determine what happens next?

Which parts of the game are a combination of strategy and chance? How are the different outcomes calculated from the two? How does the strategy chosen affect the chance?

succeed[illegible] that imp[illegible] the differ[illegible]

100% Strategy

PRINCIPLES OF GAME DES

Game assets

Main characters
Who or what are the main characters? This could be the character(s) the user controls as well as other characters (both on your side and against you). How are the characters going to interact? What is their role in the game and the story?

Non-player characters (NPC
Characters in the game not controlled by the p These could be characte you interact with during t story. They may only be interacted with once, or they could appear multiple times. They could provide help to you or you may need to fight them.

Scenery
Where is the game set, and how does this affect the scenery? What is needed to make the game immersive? Are there trees and plants? Mountains? Are there planets in space? Is there a city with buildings and cars? Which of these are interactive? Can the player move through the scenery, or does it stop them going into areas that they are not supposed to?

Video
What part of the game video that cannot be interacted with? Are there cutscenes that introduce parts of the story? How do the videos continue the story? How do they add to the game?

Backgrounds
Background designs can engage and distract players. Backgrounds can be 2D or 3D. They may need to change as the player moves through the game.

Objects
What individual objects will ap... ? How will the player i... they move them? ... and the ... them? Pick ...

Personification – the assignment of living characteristics to inanimate objects.
Giving game characters emotions – how do they feel? How do they display these feelings? How do they react?
How is the environment personified? How is time portrayed? How is a scary environment made to affect the other elements in the game?

Textures
A texture could be the rough surface of a wooden box, or a path may change from soft to smooth and affect a character's movement.
What elements do not need detailed texture? The background may be generic but the objects that the player interacts with will be more detailed.

Animation
What is going ... e, and ... it going to move? Are ... to move? Are objects ... ve? ...cts move as a whole or do individual parts of them need animating individually?

Sounds
Is there background music in the game? Does this change depending on what is happening in the game?
Are there other sounds for the environment? If it is in a jungle are there animals? In a city are there people talking, and cars?
How do the sounds impact the atmosphere?

Character and object movement
- How are the main characters going to m 3D? Can ...ey walk? Run? Jump? Crawl?
- ...PCs move? How do they interac ... characters?
- ...ch objects can move? Can objects be Pulled? What happens if they are run into How and when can the player interact wi

Game actions and events
- What events and actions take place in th should come from the story.
- How do the actions/events move the gar do players need to do in these events? W players need to take? What happens if th wrong action?

Game start mechanisms
- How does the game begin? How is the pl the story and the character? How does t how to control the game? Does the playe specific options before they can start?

Inputs and outputs
- How is data input by the user? What har What specific buttons need to be pressed buttons or options that are not always a
- How are the results of the player's action output? Is there a visual result on screen result? Is there a vibration?

Player interaction and feedback
- How does the player interact with the ga from the inputs, outputs and controls.
- How ... the player know what actions ...? This comes from the output
- ... does the player interact with other ...ayers? Do they communicate through s Is this ad hoc, or are there set events?

Shortcuts and cheats
- Are there any opportunities for the playe about them? Where do they come from
- Is there a way for the player to cheat? Ar make it easier? Can the player change the

Pass
P2: Identify the assets required for the game prototype.
P4: Describe the game mechanics to be used in the game prototype.

PLAN AND DESIGN A GAME PR

Specific **software** or **templates**

Templates: pre-designed with headings for specific content, space for visuals. May limit content to what is in the template. Provides structure.

Blueprint for the game

Text and visuals: maps, flowcharts, character concepts

Traditional **text-based** document

Game Design Doc... GDDs

Lay... ...n is ...tion ...d line... Wiki is we... ...d. Interactive is ...re engaging, but will core information be missed with focus on appeal?

...working document: create before development but it evolves as there are changes

Format: depends on need for collaboration and updates. Wiki/specific software is more dynamic and may allow multiple users. Need to keep control of edits.

Storybo... stages of ...
- They ... batt...
- They ... by st...

Assets li...
- What ...
- What ...
- What ...
- Which ...
- What ...
- What ...

GDD content

Client requirements:
- What does the client need?
- What does the game need to do? What is the style? What is the controller? Who is the audience?
- These should always be leading the decisions.

Executive summary of game concept:
- The key elements of the game:
- What is the concept of the game? What is the game genre?
- What are the game mechanics?
- Who is the game intended to be used by?

Do...

Decision tree
- Shows ... choice...

Flowchart
- Used t...
- Shows ...

Pseudocode
- Used t...
- Code ... with n...
- Identif... inputs...

Game and gameplay elements:
- What are the goals? Aesthetics? The environment? Theme?
- How is scoring managed? How do players interact? What is the strategy? What is the story?

Success criteria:
- How will the game be measured as a success?
- What does the game need to do? Input? Process? Output? Visuals?
- Measurable statements that t... fin... game... be compared to.

Game assets:
- What images are needed? Backgrou... Scenery? Objects?
- What videos and animation need creating?
- What sound effects are required?
- What are the characters? (Both main character and NPCs)

Game ...
- ...e p...yer interact with the game? What controls ... use? What inputs are there?
- How will the outputs be presented?
- How will characters and objects move?
- How does the player start the game? What happens first?
- How does the game end?
- What elements need collision detection? What happens when a collision is detected?
- How are scores assigned, changed or used?
- What are the shortcuts and where are they located?
- What are the cheats and how do these work?

Pass
P3: Design game visuals approp... the game prototype.

CREATE HIGH-FIDELITY GAME P

Internet: pre-made images, sound, videos. Check copyright.

Stock library: pre-made image, sound, videos. May have to pay.

File format and properties: what file types are compatible with the software or language you are using to develop the program? Consider the resolution and co… depth of images vs the f… siz… Need to find a ba… nce.

Source and prepare assets

Preparing assets: will likely need changing to make them appropriate.

Naming conventions: will im… ta… w… ific set of characters, e.g. img? Will images for cha… se… t… cture so you know which they are?

Resizing/cropping – changing image/video dimensions. Cropping removes part of the image/video. Cropping so… reduces length.

Changing resolution – lower resolution removes pixels and details but reduces complexity and file size.

Animating objects – a non-animated asset may need altering to animate it, e.g. changing an image of a bird to make it look as though it is flying.

Duplicating – taking one element and using it multiple times, e.g. an image of a tree can be used multiple times to create a forest.

Changing duration – removing part of video/sound to make it shorter. Select only the part you need.

Creating multiple versions – a character or object that moves will need… different version for each movement. A detailed movement may have multiple separate images, each showing the object from a slightly different position.

Programming techniques

…iables

- A variable is a space in memory that can store a value. The value can change while the program is running. The space in memory is given an identifier (name).
- Variables are used to store data in the program, e.g. the input from a user, the current score, the health of a character, the coordinates of the character.

Assignment

Values are assigned to data structures (variables, constant, arrays). In the assignment statement the identifier of the data structure is written, then an = sign and then the value that is being stored.

Constant

- A constant is the same as a variable – except the value it stores is set when the program starts and cannot change unless you stop the program and rewrite the code.
- Constants are used to store values that should not change. These are often mathematical, such as the value of pi, or it could store the gravity setting for the game.

Inputs and outputs

- An input is data read from the user. This could be a butto… press, the movement of a controller, the entering … text
- The input data needs to be stored somew… …ten **assigned** to a **variable** and can th… …ed i… p…gram.
- Outputs is data being given … u… …. …ten a visual output, e.g. text … In a ga… …could be movement of the cha… r, … ot… perspective, sound effects.

…era…

…se perform mathematical and logical processes on data. …hematical operators include addition, subtraction, division and multiplication. There are also operators for other processes such as modulus division, integer division and power of. Logical operators are Boolean AND, OR and NOT.

Sequence

A sequence is when lines of code are written to be executed once from start to finish. The first line is executed, then the second, then the third, etc.

Iteration

Iteration means to repeat. Iteration is when … or more dependent on a condition. The condi… the code runs a set number of times, e.g. 10 t… could state that the code runs until a condition…

Subprograms (subroutines/ functions/pr…cedures)

A sub… …subroutine) is an …nt … of code that can be calle… …m other parts of the program (or … programs). Subroutines can be used when there is code that may need to run multiple times. Instead of writing it each time, the subroutine can be called. Values can be passed to subroutines; these are called parameters. A procedure is a subroutine that does not return a value to the program that called it. A function is a subroutine that returns one or more values to the program that called it.

Conditions

- Conditions are statements that equate to either true or false.
- They can include mathematical and Boolean operators.
- For example: 10 <= 20 AND 10 < 30 will equate to TRUE because both sides are true.

Game engine tools

Asset management

Provides organisation for … location of files, formats.

Animation systems

- Renders the images to…
- Allows the creation of… manipulates its move…

Rendering engine

This generates and displays … does the processing and ca… moving around an object d…

Scripting environment

- The area where you w… works with the engin…
- It may have features … debugging, e.g. auto…

Libraries: These provide p… having to rewrite and test … download additional librari…

TEST HIGH-FIDELITY GAME PR

Ele

Test plan – A document that identifies how you are going to test the program. It identifies the different elements that need to be tested, how they will be tested, and the test data that needs to be used to test it.

Dry run – Walk through the program without running it. Follow each line of code and write down the values in the variables and data structures.

Testing

Trace table – Used with a dry run. The table has a column for each data structure and the output. Follow the program one li... at a time and write the changes in values in the

... ...ng repeatedly throughout ... ...ection. Each time you make a change, or add something, test the program again. Test with different data and different run-throughs because one small change could affect other elements of the program.

Actions and events – each action that the player can make, e.g. making a movement, opening a door, climbing a wall. Th... d testing in each place where th... ju... because they can open one d... n't n... they can open every door.

E... nt that takes place, e.g. each collision, each change in scenery, each movement into a new area, each encounter with an NPC.

Game progression/levels – does the game play through as it should? Does the player move from the start of the game to the next section as intended?

Can the player move between different areas within the game or progress to the next level?

Player interaction and feedback – is the player able to interact (input and output) with the game as expected and required through the game?

Does each input the player makes produce the correct output?

Performance testing – how well does the program respond in terms of speed? Responsiveness? Scalability?

- Is there any lag in the game? Does it pause for any amount of time, e.g. when loading? Is this excessive and unreasonable?
- How effectively is the game making use of the processor and graphics processor? Is there excessive use at a time when it is not important?
- If online, does the game crash when there are a certain number of consecutive players? Does the response time decrease?
- Does the game stop working at any time?

Compatibility testing – the game is tested on different hardware and software. Does the game still function as it should? Does the performance of the game change depending on each system?

Play testing – the game is tested by potential users. They may have specific goals or they may be asked to play as they want to. The testing is monitored and problems or areas for improvement identified.

Testing types

Functional testing – ...ram perform the actions it w... ...o perform?

- When the left arrow o... keyboard is pressed, does the character move a step to the left? Does the background move with them?
- When a specific object is hit, does the character stop?
- Do the character's points increase by the correct quantity when they open a box?

Pos... ts a... sis and remedial action

- W... t do they show?
- Which tests worked and which identified a problem?
- What does the feedback show?
- Statistical analysis of results, e.g. % of performance testing that w...

Summarise the results

- Which features are successful?
- Which features do not work?
- What needs improving?
- Which of these points are critical, which are preferable, and whic...

Remedial action

Based on the results – what changes need to be made to the game? W... be fixed? What areas need changing to improve them?

REVIEW AND IMPROVE HIGH-FIDELITY

Client requirements: Does the game meet all of the measurable requirements?

Compare the system to each one in turn and identify strengths and weaknesses.

Audio-visual/aesthetics quality: Do the visuals match the design requirements? Are they all appropriate? Are any visuals insufficient or missing elements?

Planning and design requirements: Does the game meet all of the requirements you identified in the design and planning stages? Compare the system to each one in turn.

Fitness for purpose

Use the results from testing to assess whether the game meets its requirements.

Game and gameplay: Do all aspects of the game work as intended? Does the player control the character as intended? Does the scoring work? Do levels work? Have all of the gameplay requirements been met?

Player interaction and engagement: Does the player use the game as intended? Do the controls work? Do they input the required commands? Do they get the required outputs?

Does the game engage the user as required? Do they stay interested? Did they encounter any problems?

Player suitability/appeal: Is the game appropriate for the intended audience? Are they interested in playing the game? Does it meet the requirements for the age rating? Do the style and genre match the requirements?

Use

Audio

- Are there some sounds,
- Is the background musi
- Do the sounds activate
- Are the sounds clear an

Gameplay

- Which of the success c of the game have not b
- What does the game n doesn't currently?
- What changes can be m aesthetics, to match th genre and audience?

Levels and progressi

- Does a change need ma move through to a new
- Is there a specific condi progress? Does this nee access to the next part

Further development opportunities

Building gaming communities

- How can a gaming community be created around the game?
- Does an online presence need creating? Does media need creating to draw attention to the game and engage players?
- Does a server need setting up to allow for online gam and interaction?

Facilitating in-game purchases

- Do systems need creating to allow players to buy additional items in the game? To purchase coins? Weapons? To gain access to additional levels?
- How will this system work? How will it be built into the game, and how will players know about it?

Widen scope of game

- Is there an opportunity to expand the game content? Is the game the start of a wider concept that can include additional levels or add-ons?
- Was the original plan for a small, limited content game, but the development has identified opportunities to include additional features that make the game larger, longer and more engaging?

Release to gaming platforms

- What needs to happen to allow the game to be released on different platforms?
- Is the game only designed for one platform? What changes can be planned to expand this? How does the game need changing to allow for interaction with different platforms?

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TYPES AND GENRES

2D: two-dimensional. Movement (usually) restricted to up, down, left, right. Example: *Sonic*

3D: three-dimensional. Can view area and characters from multiple angles. Example: *Assassin's Creed*

Immersive games: you are playing in a world where you are a character. You evolve your character and interact with other people and elements in the world. You feel as though you are the character. Example: *The Witcher*

Types of ...

Platform:

Simulation:

Role-Playing Games (RPG):

Massive Multiplayer Online (MMO):

Augmented reality:

Virtual reality:

Mixed reality:

Massive Multiplayer Online Role-Playing Games (MMORPG): the same concept as MMO but the type of game is role-playing. Example: *World of Warcraft*

▲ Write a description and ... example ... type of game.

Genre

- Action
- Puzzle and trivia
- Educational
- Quest
- Sports
- Strategy

Gaming platforms

Write a description of each platform.

The hardware or systems used to play a game.

- Gaming console:
- PC gaming:
- Virtual reality (VR):
- Cross-platform:
- Online streaming:
- Smart mobile gaming:
- Television streaming:

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PRINCIPLES OF GAME DES

Game concept

Purpose

Audience

Story

Unique [illegible] (USP)

Select a game and write its purpose, audience, story and USP.

Game elements

Decisions need to be made on your game elements – these [illegible] a decision in one element will affect decisions in other el[illegible]

Goals and objectives

Aesthetics and visuals

[illegible] and story

Complete a description of the game and gameplay elements and add an example for your chosen game.

Gameplay elements

Decisions need to be made on how the game will be played by the user. These [illegible] from your concept and elements, but you may need to amend some previous d[illegible] based on new ideas in the gameplay elements.

Player interaction

Player immersion

Reward and accomplishment

Competition

Scoring

Outcome and feedback

Strategy and chance

Balance:

100% Strategy

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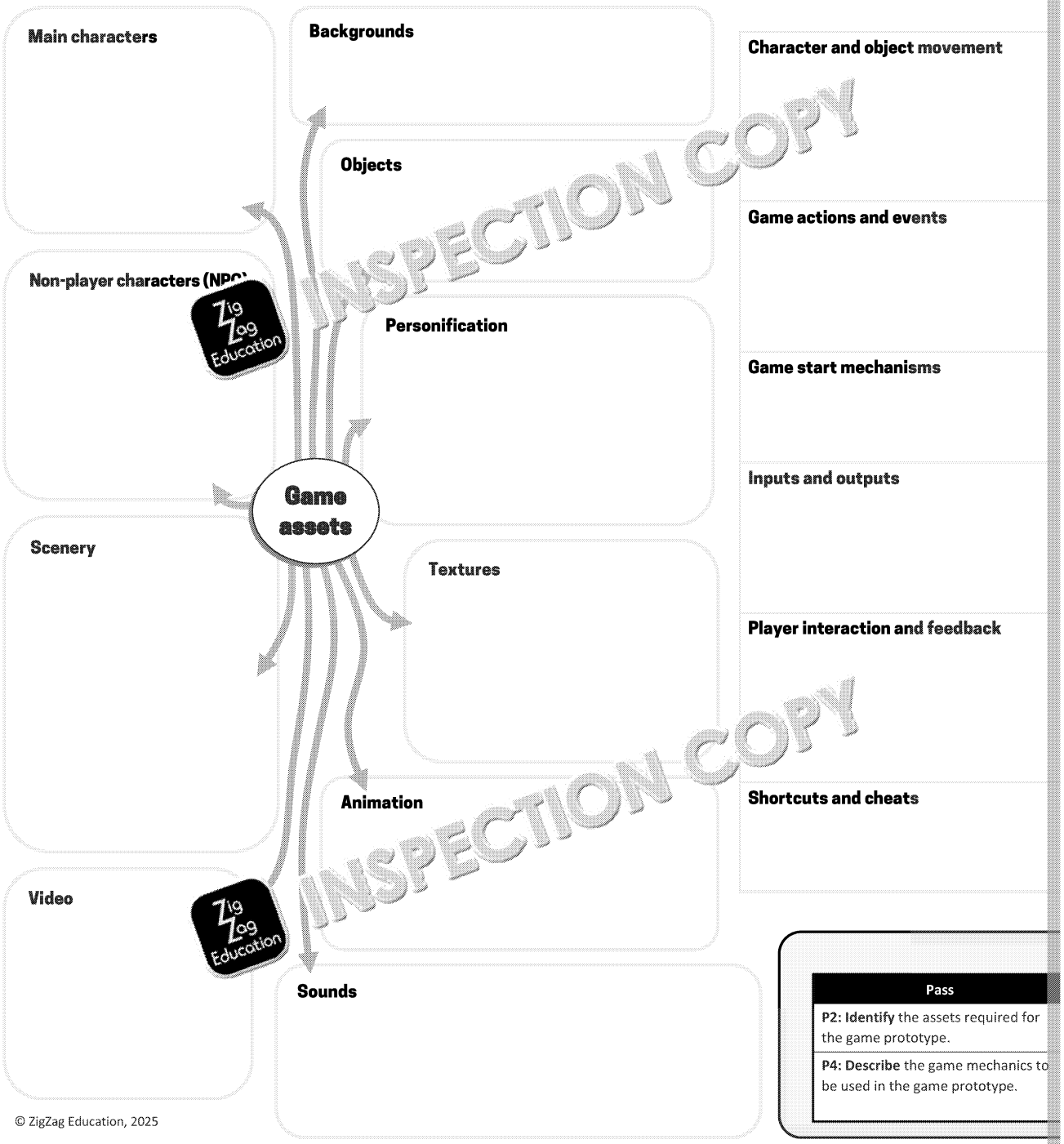
PRINCIPLES OF GAME DES



Pass
P2: Identify the assets required for the game prototype.
P4: Describe the game mechanics to be used in the game prototype.

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PLAN AND DESIGN A GAME PR

Specific **software** or **templates**

Templates: pre-designed with headings for specific content, space for visuals. May limit content to what is in the template. Provides structure.

Blueprint for the game

Text and visuals: maps, flowcharts, character concepts

Traditional **text-based** document

Game Design Doc... GDDs

Lay... ...n is ...tion ...d line... Wiki is we... ...d. Interactive is ...re engaging, but will core information be missed with focus on appeal?

...working document: create before development but it evolves as there are changes

Format: depends on need for collaboration and updates. Wiki/specific software is more dynamic and may allow multiple users. Need to keep control of edits.

Storybo...

Assets li...

GDD content

Client requirements:

Executive summary of game concept:

Complete the descriptions of planning and design tools.

Doc...

Decision tree

Flowchart

Pseudocode

Game and gameplay elements:

Success criteria:

Game assets:

Game ...

Pass
P3: Design game visuals appro... the game prototype.

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CREATE HIGH-FIDELITY GAME P

Source and prepare assets

Describe the ... sets ... be prepared.

Internet:

Stock library:

File format and properties:

Preparing assets:

Naming conventions:

Resizing/cropping

Changing resolution

Animating objects

Duplicating

Changing duration –

Creating multiple versions

Game engine tools

Asset management

Animation systems

Rendering engine

Scripting environment

Libraries:

P... techniques

Complete the description of programming techniques.

...iables

Assignment

Constant

Iteration

Inputs and outputs

Subprograms (subroutines/ functions/pr...cedures)

Sequence

Conditions

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TEST HIGH-FIDELITY GAME PR

Test plan

Dry run

Testing

Trace table

Describe the testing methods.

How will you test these elements of your prototype?

Actions and events

Game progression/levels

Player interaction and feedback

Performance testing

Compatibility testing

Play testing

Complete the descriptions of testing types.

Testing types

Functional testing

Results analysis and remedial action

Summarise the results

- Which features are successful?
- Which features do not work?
- What needs improving?
- Which of these points are critical, which are preferable, and whic

Remedial action

Based on the results – what changes need to be made to the game? W be fixed? What areas need changing to improve them?

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REVIEW AND IMPROVE HIGH-FIDELITY

Client requirements:

Audio-visual/aesthetics quality:

Write notes on what you are going to do to review and identify areas for improvement. What will you be looking for?

Audio

Gameplay

Levels and progression

Planning and design requirements:

Fitness for purpose

Theme and gameplay:

Use the results from testing to assess whether the game meets its requirements.

Player interaction and engagement:

Player suitability/appeal:

Further development opportunities

Building gaming communities

Facilitating in-game purchases

Widen scope of game

Release to gaming platforms