The main text (Normal) in your coursework/dissertation should be using a sans-serif font, such as:

Arial

Calibri

Tahoma

Verdana.

Use 12 point for paragraph text in print.

For accessibility it is best to avoid using a font smaller than 12pt

I will start by introducing the project and explain how it is unique followed by the aim and research questions. Then I will talk about the research done on the questions by stating mechanics in existing games, reading, and watching videos by existing professionals in the industry. I will continue to talk about how and why I implemented these ideas and how it aligns with my vision for the game by answering the research questions.

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One-Way Ride

A picture containing indoor, floor, red, orange

Description automatically generated

Figure 1: Concept Art

Name: Shubh Ravishankar Gawhade

Course: BA (Hons) Game Design and Production

School of Design and Informatics

Abertay University

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# Abstract

You should write the abstract last. An abstract is not an introduction to the project report. Instead, the abstract is a synopsis of the complete project report. It should identify the research aim, the core research questions/problems/provocations, the broad field of existing knowledge the research drew upon, the nature of the research that was conducted, and a brief statement on what the outcome of the research was. It can be easier to write this last, as you can use each of the main sections of your body text as a basis for each point the abstract covers.

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# 1. Introduction

For your postmortem, it is recommended that you use your Introduction to establish the following:

* Introduce your topic and provide some explanation of why this is an interesting topic for design research. Consider identifying exemplars from your field that would provide a lay audience with an understanding of the state of the art, and/or which act as examples of the design problems you are interested in.
* An outline of the key research questions, design problems, or challenges.
* Your agreed aim & objectives
* Your method(s), which for a design research brief should be practice-based. For a postmortem, it is suggested that you discuss your practice-based methods here in the introduction, following on from your aim & objectives. Provide clear detail on how you went about your research practically, the tools/materials you used, and what the final artefact/portfolio was intended to be.

It is recommended that you try to keep your introduction concise and focus on setting up the remainder of the Project Report. Be careful to avoid diving too deeply into the literature or related research/practice at this stage, as that is the focus for the next section. Also be careful to avoid over explaining your project beyond the general method, as your third section is intended to focus on an analysis of the project. Overall, your introduction is likely to total **fewer than 500 words**.

My project is to make a story-driven indie game prototype that combines 3D top-down gameplay with multiple genres of play-styles. The game idea is heavily inspired by other games like What Remains of Edith Finch, Disco Elysium and the Mafia Series which are known for their immersive storytelling, rich characters, and diverse gameplay mechanics. I aim to explore the creation of engaging and immersive puzzles for a narrative-driven game that follows the protagonist’s journey through different chapters, with a mix of gameplay mechanics and story events.

This topic is interesting for design research because it explores the unique challenge of designing puzzles around key story events and how each chapter has a different play-style on top of the 3D interaction and exploration system which drives the overall story and it explores how different play-styles can affect the player’s perception and emotional connection with the characters and the world.

The aim of this design research brief is to explore the interplay between narrative and game design by implementing interactive gameplay around a pre-determined narrative and creating “narrative puzzles” for our game prototype.

The key research questions which arise are:

- How can we design puzzles around key story events and give players enough freedom without making it a handheld experience?

- Does a unique gameplay experience in each chapter of the story add to the novelty of the experience?

- How can you alter player experience based on their prior interactions without changing the overarching narrative?

- How to create a fail state for stories central to the gameplay?

The research method is practice-based and informed by literature review. The literature review consists of analysing game design sources such as books, articles, and GDC talks that are relevant to the game concept and genre. The research is embedded within the process of design and development of the game prototype, which is a playable demo that showcases the core gameplay features and narrative elements of the game. The tools and materials used for the prototype include Unity as the game engine and C# as the programming language.

The findings of this research will contribute to the field of game design by providing insights into how to create compelling puzzles that integrate with the story and enhance the player experience. The findings will also inform the further development and improvement of the game prototype.

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# 2. Research Context

The second section is your analysis of existing literature and knowledge, which you may choose to title the research context, project context, contextual review, literature review, background, critical framework, theoretical framework, or equivalent.

This is the section in which you draw upon a wide range of appropriate authoritative sources to develop the critical framework and theoretical foundation for your design practice. As a design research project, it is anticipated that you will be drawing upon relevant design and media theory to establish the criteria and concepts that apply to your project. You may also draw on relevant knowledge from adjacent fields, such as psychology, sociology, business, etc. that help contextualise the work you are doing and provide criteria that you have applied in your design work. The discussed literature should relate to the general research questions, problems, or challenges that you have identified in the introduction. Ultimately, these sources will serve to frame your postmortem. In addition to (but not in place of) key texts related to your research questions, problems, or challenges, you may also incorporate discussion and critique of existing design practice developed and disseminated by leading practitioners/studios in your field.

The research context section is a very important section of your postmortem. It is directly referred to in the assessment rubric for the module (assessment category: *research context*). As an honours student, there is an expectation that you will demonstrate critical engagement with existing knowledge. The research context section of your report is the part of the overall submission where that evidence should be most prominent. To that end, it is recommended that your research context section should total around **1,500 to 2,000 words.**

You may want to consider breaking down your research context section into sub-headings (i.e. 2.1, 2.2 etc) if this is appropriate, for instance if your review covers a few different themes. However, avoid fragmenting your review with too many sub-sections. If you break down your review into too many sub-sections you might find that each sub-section forms little more than a paragraph, which would likely result in overly descriptive and less substantive, analytical writing.

You are encouraged to include figures within your research context section where you refer to existing art or media projects.

**2.1 How can we design puzzles around key story events and give players enough freedom without making it a handheld experience?**

To answer this question, we must first understand what is a puzzle? A puzzle is a problem which challenges the player to tests their knowledge about the situation. In a puzzle, the solver is expected to put pieces together (or take them apart) in a logical way, to arrive at the correct solution and complete a task. There are three types of puzzles, internal logic, where the puzzles are based on the game’s rules and setting, to designer logic, where the puzzles are arbitrary and confusing, to lock and key, where the puzzles have one fixed solution that can be solved in multiple ways [1].

Clara Fernández-Vara, an expert in adventure game analysis points out that puzzles in adventure games are frequently integrated into the narrative events, and the game story is advanced through puzzle solving, she further defines these types of puzzles as “narrative puzzles” [2]. According to a paper by Wei Huaxin and Betty Durango [3], narrative puzzles are distinct design elements that play a role in the unfolding and the player’s experience of game plot. They review other previous literature on puzzles and identify four main functions that narrative puzzles can perform for game storytelling: preparation and acquisition, advancement and guidance, creating plot variation, and pacing and structuring.

Preparation and acquisition: This function involves puzzles that help the player acquire narrative information or in-game items that are useful for future puzzles. These puzzles may not have an obvious solution or goal, but they provide short-term aesthetic experiences and introduce the player to the game world and its logic.

Advancement and guidance: This function involves puzzles that move the game plot forward and guide the player to the next plot segment. These puzzles are often integrated into the narrative events and require the player to interact with objects or characters in the game world. They may also unlock clues or objectives that show the player where to go next.

Creating plot variation: This function involves puzzles that have potential to change the plot trajectory and create different outcomes based on the player’s performance. These puzzles are often embedded with crucial plot points or branching points, where the player’s actions and choices can lead to different consequences or endings. These puzzles can enhance the player’s agency and engagement with the game narrative.

Pacing and structuring: This function involves puzzles that help pace the plot and gameplay along the game progression. These puzzles can align the level of difficulty or complexity with the narrative arc to create dramatic tension or rhythm. They can also serve as narrative units that organize the game plot into segments or chapters. These puzzles can improve the player’s comprehension and immersion in the game narrative.

The paper concludes that puzzles in narrative games are not only a gameplay mechanic but also a storytelling device that can enrich the game’s plot and the player’s experience.

Some common mistakes when designing puzzles include making them too difficult or easy, not providing enough feedback to the player, and not considering the player’s perspective when designing the puzzle.

**2.2 Does a unique gameplay experience in each chapter of the story add to the novelty of the experience?**

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# 3. Research project

Which you may title research project, design project, practical project, or project postmortem (as this is the section that should be written in the style of a postmortem). You may also give it its own unique descriptive name reflecting the project you carried out or use the title of your design project.

This is the ‘findings’ section of your postmortem, where you will now focus on the design project that you carried out and the learning that you gained from it. Remember that the learning here is with reference to your research questions/problems/challenges and the wider aim of your academic research. Your focus should not be on your own personal development, but instead on the learning that is valuable to other designers in your field. Try to imagine your target reader is not a tutor who will mark your personal development, but instead another designer who could be interested in reading about your design project and what happened when you set out to tackle your research questions.

Your postmortem should be written critically, by which we mean drawing upon the existing knowledge base and ideas (discussed in the research context) to frame and ground your analysis. It is expected that your analysis will not be written as a personal reflection, nor should it be written subjectively. Strive to write an objective postmortem in which you focus on a substantiated evaluation of the elements of the design project framed by the knowledge gleaned from your research context. Given that your design project was also guided by research questions, remember to structure your postmortem with these questions/problems/challenges in mind, and provide an evaluation that offers some insight into how your project addressed them.

You should discuss your approach with your supervisor, but a suggested structure for the postmortem is:

* **3.1** **Project details** (providing a brief description of the final work)
* **3.2** **What went right (**evaluating the strengths and successes of the project, with reference to the research questions)
* **3.3** **What went wrong** (evaluating the difficulties or new problems that arose, again with reference to the research questions)

Alternatively, you may structure the postmortem by theme, where each sub-section deals with a different theme or concept that the project explored. In this case you might expect that the themes would be the same themes discussed in the research context section.

As with the research context, the research project section is very important and referred to directly within the assessment rubric (assessment category: *critical evaluation*). As an honours student you must demonstrate an ability to analyse and present the findings of your research, which is what this section guides you to do. It is therefore recommended that the research project section should be approximately the same length as your research context section, at around **1,500 to 2,000 words**.

It is expected that you will use figures throughout this section to illustrate the work you carried out. As an design practitioner, your postmortem is as much a visual document as it is a textual one. Consider including figures that show both design works in progress, as well as final works. Use figures to add value to your writing and ensure that when you use a figure you refer to it in the text (e.g. ‘see Figure 1 for an example of…). The aim should be to use figures and text in tandem to best evaluate and critique your work. Where you find yourself overly explaining a piece of work, consider if your writing could be made more efficient and less descriptive by using a figure to show what you mean. At the same time, try to avoid saturating your postmortem with too many unnecessary figures, to the point that it disrupts the flow of your text.

Our game prototype aims to combine elements from these games to create a unique and engaging experience for the players. The game is a top-down hybrid game that combines 3D top-down as a base with multiple genres of play-styles. We are experimenting with the application of game systems and mechanics and how the narrative and game design will work in tandem with each other.

Our game prototype is unique in the sense of how each chapter has its own play-style on top of the 3D interaction and exploration system that drives the overall story. Each chapter’s narrative introduces a new play-style, for example gun combat, stealth, and a combination of various gameplay systems.

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# 4. Conclusion

Which you may title conclusion, summary, or equivalent.

Try to keep your conclusion concise. This is not a place to introduce new ideas or content, particularly where this can lead to a relative reduction in word count in the research context and research project sections. Your conclusion may be between **250 and 500 words**, erring towards the former.

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# References

This should list **all** the references that are cited within the project report. This can include all source types, including not only journal articles, conference papers, books, chapters, and reports, but also web resources, videos, talks, games, films, artworks, and other media. Be sure that all references follow the prescribed guidance.

[1] Bycer, J., 2020. A Study Into Puzzle Design in Video Games. Game Wisdom.

[2] Fernández-Vara, C. (2019) Introduction to game analysis. London: Routledge

[3] Wei, H & Durango, B 2019, Exploring the Role of Narrative Puzzles in Game Storytelling. in Proceedings of the 2019 DiGRA International Conference: Game, Play and the Emerging Ludo-Mix. Digital Games Research Association