Reading guide

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Student Associate Degree
ICT & MEDIA DESIGN
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Version Control

Version	Changes	Date
Version 1.0	First draft	1-10-2024
Version 1.1	Overhauled the reading guide	16-11-2024
Version 2.0	Updated client project & Burden of Proof	21-12-2024
Version 3.0	Added Passion Project Introduction	12-01-2025
Version 3.1	Added Passion Project Contents	16-01-2025
Version 4	Updated Burden of Proof & Table of Contents	18-01-2025

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Introduction

Who am I?
My name is Thuva Vanniyasingam and I am an Associate Degree student of ICT & Media Design at Fontys University of Applied Sciences at semester 3. Before I started HBO-ICT, I already had a lot of passion for development, design, and technology, and I would like to continue this passion in this course.

Prior to HBO-ICT Media Design I graduated as Application & Media Developer back in 2021 and in late 2021 I started my study as Software Engineer at Fontys, but after getting my foundation degree, I did a switch to Media Design, because I wanted to do more than Front-end and Back-end developing, and also get experience in UI/UX, working with design software and 3D animating.

What are my talents?
I'm an all-rounder, I'm good at coding in both Frontend and Backend programming languages, I also can work with 3D animation , video editing and designing, but my goal is to advance further in these skills I have and also learn more along the way, especially since technology keeps changing.

What are my personal goals?
My goal for now is to become a fronted developer, but I'm also seeing myself in the future doing something with Game design since I have passion working with Unity and Unreal Engine.

Client Project Fairytales AI – Stuur.men

Introduction
In 4th week of this semester, I was introduced to Stuur.men, a branding agency located in Eindhoven. As a representative of Patched Studios, I had the opportunity to work on their project. The topic for this project is to make an user-friendly tool to generate personalized bedtime stories for children. It must be an interactive platform that generates personalized bedtime stories, with customizable elements, such as creating your own characters, settings and themes.

Roadmap
I will be working with three other students from my studio, Patched, on this personalized bedtime stories project. Together, we created a roadmap outlining our approach to the project and assigned roles based on our interests and strengths. Some students chose to focus on UI/UX, while I decided to take on front-end and back-end development for this project as preparation for our upcoming internships.

Communication tools
   Following our contract agreement we've decided to use the following tools as communication, planning and manage our work.

- **MS Team** : Used for quick messaging and Video/calls for meetings and updates.
- **WhatsApp**: An alternative for quick messaging.
- **Gitlab**: Manage, share and reviewing code that's related to the project.
- **Trello**: For organizing tasks, setting deadlines and working towards sprints.

Double Diamond
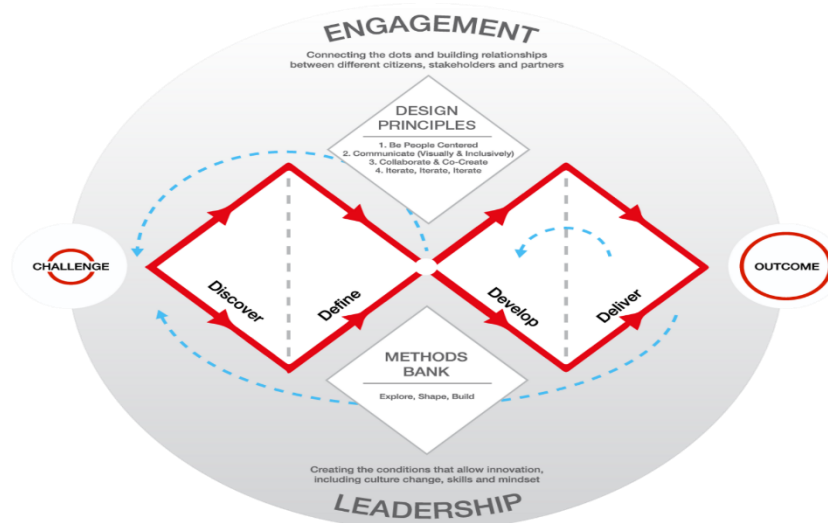
My studio group and I will follow the Double Diamond according to the design process, which is divided into four main phases: Discover, Define, Develop, and Deliver.
Each phase allows us to approach the project with a balance of structure and creativity.

Discover Phase

During this phase, we'll focus on collecting information to gain a deeper understanding of our target audience's needs. Our main goals will be:

- **Mindmapping**: We did a brainstorming session based on the requirements from the client briefing, breaking down the project into several branches providing me a better overview on the conditions of this project and made preparations for our research.
- **Survey**: I conducted a survey to gain valuable data and feedback from participants for a deeper understanding on our target audience's necessities and expectations for our product.
- **Research**: To understand how often and where adults read bedtime stories to 'their' children, I conducted an literature study – Library research.

Define Phase

After gathering our important findings, we started focusing on making our first concepts and deliverables.

- **Personas**: We made realistic representations of our target audience by making User Persona's. To know who our target audience is and their expectations.
- **Research Document**: A research document was made to collect our findings from both our primary and secondary researches. I did took part in most of the researches, but most of my input is in competitor analysis, literature study and surveys.

Develop Phase

During this phase, we started making iterations for our product.

- **Prototyping and Wireframing**: When we concluded our research and finalized our branding we made several app designs using design tools. We made iterations that consisted of Low-fidelty prototypes and high-fidelty prototypes.
- **User testing**: We conducted usertests by letting users interact with our application to know if the application meets their expectations, usability issues or examining their behavior while using the product.
- **Development**: After receiving sufficient feedback from user testing and our clients during the concept presentations. We started programming the application while working in branches using a version control system.

Deliver Phase

The presentation of our final product and the deliverables, that we will be presenting to the stakeholders.

- **Demo:** Demonstrating the application using a video to show off the final product, navigating through the pages and revealing it's core features and functionalities.
- **Presentation:** Presenting the presentation to the audience and stakeholders, the future plans for the app and conclusion.

During the deliver phase, we had everything ready, including the final product. However, the presentation for our clients didn't take place because of last-minute complications within the studio group and a lack of accountability. We did, however, send a message to the client to inform them of this inconvenience.

Passion Project

Introduction

The passion project I'm doing during this semester is a game inspired by **Bomberman**, titled "**Tunnel Blasters**" The game will be developed using Unity. The goal of this gameplay involves navigating through a maze-like environment which takes place in mineshafts. The player places bombs to create pathways and as goal to eliminate the opponents.

This is a childhood game I played when I was young, and I have always wanted to understand how a game like this was developed. So, I decided to challenge myself and make it in Unity.

Plan of action

To develop this game in Unity, I followed the double-diamond phases and applied its methods throughout the process. My stakeholder for this project is my uncle, who is passionate and is interested in retro and indie games, aligning perfectly with my target audience. I plan to stay in touch with him using Discord and WhatsApp. With a total of three weeks to complete this project, I will also ask regular feedback from my teachers to ensure its success.

Double Diamond

As shown before I will follow the Double Diamond according to the design process, which is divided into four main phases: Discover, Define, Develop, and Deliver.

Each phase allows me to approach the project with a balance of structure and creativity.
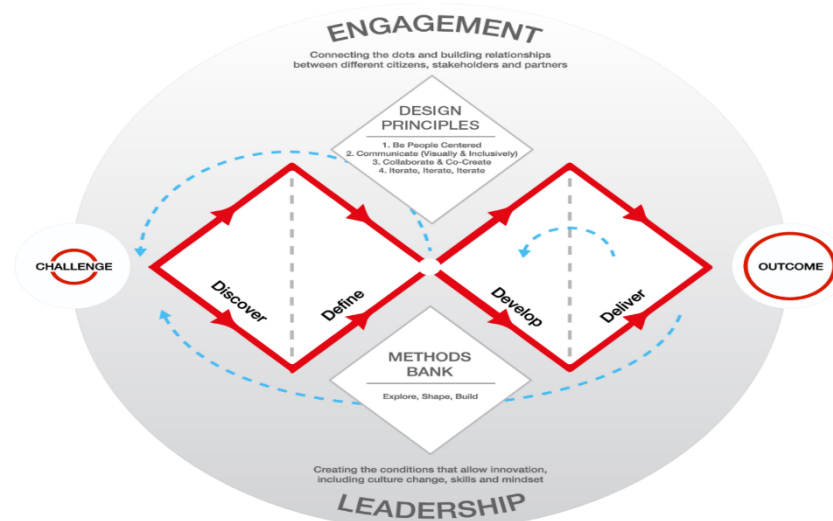
Discover Phase

During the Discover phase, I focused on understanding my stakeholders' needs and the core requirements of the game. I conducted various research on popular indie games within the same genre, analyzing their mechanics and documenting my findings.

- I created **Mindmaps** to break it down into different branches, To gain a clearer overview of the steps and strategies needed to achieve my goals and to dig deeper into the functionalities and features that will be implemented in to the game.

- I conducted a **competitive analysis** to find competitors from the same genre, so I can understand the strengths and weaknesses etc. (SWOT) and to understand what made those games so great, so I can achieve the same.

Define Phase

During the Define Phase I used the findings from the Discover phase to set a clear direction for the game I examined the target audience and stakeholders to shape the design, balancing nostalgia with modern gameplay. I outlined project goals, technical requirements, milestones, and mechanics, ensuring the game's vision is aligned with both stakeholder preferences and player needs.

- I created a **project plan** to organize and structure the project, which includes a 10-pager design covering important aspects like the game's concept, mechanics, target audience, goals and requirements. So I can stay on track and meet my stakeholder's expectations for the game **Tunnel Blasters**.

Develop Phase

During the Develop Phase, I began turning ideas and concepts from previous phases into a working prototype. I started implementing core game mechanics in Unity, designing sprites and levels and integrated feedback from user testing during playtests.

- I performed a **user testing** session at my university with peers and experts to gather valuable feedback on gameplay, controls and overall gaming experience, which helped me identify areas for improvement.

- I designed my own character, item and level **pixel-art sprites** based on existing **Bomberma**n sprites using **GraphicScale**, so I can use these visual assets in my own **Tunnel Blasters** game. Which will tie in better with the story of the game and helps me to portray it more effectively to the audience.

Deliver Phase

For this phase I'm ready to present and deliver the final version of my game to my stakeholder that I made in Unity, which includes some of the improvements from the feedback I received during user testing, due to limited time I mainly focused on mandatory features for the game.

I demonstrated the final version of **Tunnel Blasters** and explained the features I implemented, as well as the changes I made based on suggestions from peers and experts during the last playtest. I had my stakeholder play the game while screen-sharing it with me on Discord. I received valuable feedback, and he mentioned that it meets his expectations. In the end, he also encouraged me to continue developing the game, as he sees potential in it.

Burden of proof

Learning Outcome	Self-assessment	Proof
LO1 – Concept	**Proficient**	**[Concept]**
LO2 – Transferable Production	**Proficient**	**[Transferable Production]**
LO3 – Creative iterations	**Proficient**	**[Creative Iterations]**
LO4 – Professional Standards	**Proficient**	**[Professional Standards]**