

Project Description

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ICT Engineering

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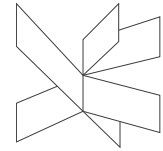
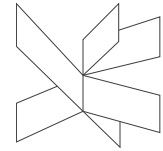


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Appendices (including Group Contract)



1 Background description

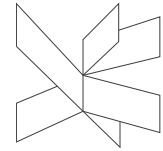
The project in question is a 4th semester ICT Engineering project at VIA University College in Horsens, with the focus on serious games. The company Ensign Games asked the ICT students in the Cross-media specialization to develop a serious game for memorization training. The instructors Kasper Knop Rasmussen and Jakob Knop Rasmussen set the following requirements:

- The application must improve the user's ability to memorize something
- The application must be developed using Unity
- The application must be developed for phones/tablets
- The group should consist of 2-4 people

Following these requirements and adding extra requirements for this specific project as follows:

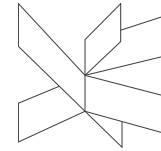
- Include the memory palace technique as the core mechanic around the game
- Have several levels that the player can choose from with different topics for the process of memorization
- The game should be made in a 3D environment
- The topics of memorization include real topics such as chemistry or math and practical purposes such as remembering the grocery list or the ingredients in a cooking recipe

The resulting project will be a serious game for Android phones/tablets, made in Unity, with it is purpose of aiding the user in the memorization process, within different areas and topics listed in the following sections, using the memory palace technique.



2 Definition of purpose

The purpose of this project is to offer a tool to the users that would help them improve their efficiency and capacity of memorizing desired lists, elements, names or numbers. The purpose of this project is also to achieve the above stated goal through a fun and enjoyable game.



3 Problem Statement

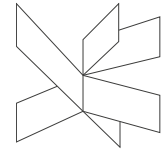
The project tackles the difficulty that a person faces when trying to memorize something, whether it would be numbers, names, lists, etc., as being one of the main problems that the modern man is dealing with. This issue appeared as the result of the various factors that the modern society influences and changes man.

One of the main factors that caused the apparition of this irregularity is the influence of technology and rather exponential progression of the technological advancements in the last few decades. The ordinary man is often suffering from a lack of not only physical exercise, but more importantly and relevant for the topic of this project, from a lack of mental training. The reason for this is that our current modern tools aid the people in the daily tasks so much, that the people do not use their mind to memorize things, as much as they used to, because now the information is as accessible as it has never been before.

One way in which the difficulties in memorization caused by the lack of mental exercise could be dealt with is through medication, psychological treatment or some other sort of medical intervention. But this is not the aim of this project, but rather the use of a serious game in order to improve a person's ability to memorize something.

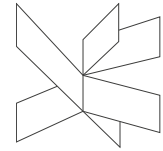
Over time there have been a lot of different ways, methods, techniques, smaller or bigger games that were addressing this problem. Some of them include for example the memory cards games, in which the player was asked to match different patterns or images on cards placed upside-down on a table, the rule is that the player can turn maximum two card at the same time to see the image on that specific card. Some other options may include games such as crosswords where the vocabulary, the memory and the cleverness are put to the test.

Though, so far, no one attempted to use a technique such as the memory palace and include it in game to try to solve this problem. Moreover, the uniqueness of this project comes from the fact that the memory palace technique is used in a serious game, within a 3D environment in a virtual world.



4 Delimitation

This project is not based on the solving things. It will not include things where you have calculations. Mathematics and Physics will not be included. It is also decided that things like sudoku, crosswords will not be part of the project, since they are widely spread. Project will be based more on unusual way of training our brain memory.



5 Choice of models and methods

In this project SCRUM will be used as a framework for the group work.

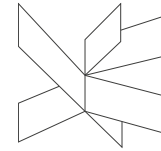
For the design and modeling phases there will be used tools such as UML, Use case diagrams, Activity diagrams, Class diagrams

The game itself will be developed in unity, using assets from the Assets store, and intended for the Android platform on smartphones and tablets.

Semester Project

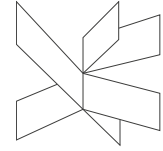
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TASK	ASSIGNED TO	PROGRESS	START	END																												
					W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W						



7 Risk assessment

Risks	Description	Likelihood Scale: 1-5 5=high risk	Severity Scale: 1-5 5=high risk	Risk mitigation e.g. Preventive- & Responsive actions	Identifiers	Responsible
Nescience	Not knowing how to do something	3	4	Research	Group member	Group member
Illness	One or more group members are ill	2	3	Taking care & Working from home	Group member	Group member
Skipping meetings	One or more group members are skipping meetings	2	4	Making clear when is meeting, more work for person that skipped	Group member	Group member
Laptop breakdown	Laptop from one or more group members broke down	2	5	Maintaining laptop, quick repair	Group member	Group member
Unity bugging	Unity not working properly to one or more group members	3	3	Updating unity	Group member	Group member



Appendices

Group contract

1. Each group member agrees to show up to class and to outside group meetings on time.
2. In the event that a group member is less than five minutes late, s/he may quietly join the group without disrupting it to ask what s/he missed.
3. Group members who are avoidably late must: [write out a consequence for being late.]
4. If a member submits plagiarized material and/or cheats, the group agrees to bring this to the instructor's attention immediately.
5. Members agree to treat one another with respect. Respect includes no name-calling. If you don't like an idea, address the idea, not the person (for example, "I don't think that idea will work because..." not "That's stupid"). In the event that a group member treats someone inappropriately, s/he will [write a consequence]:
6. No "cross talking" is allowed. This means not interrupting when someone else is talking.
7. In the event that a group member or members are dominating the group, it's the time keeper's job to politely interrupt them (this is when you can interrupt) and ask that someone else speak.