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**Core Project Document**

**Group 5 – REAKTOR**

*Group:*

Lou Bakker – game designer loujbakker@gmail.com

Dixie de Klerk – producer dixiedeklerk@me.com

Pim Klaassen – lead artist pim.o.klaassen@gmail.com

Joost Zwart – world builder joost.zwart@hotmail.com

Tim Hosman – lead programmer timhosman@hotmail.com

*Brainstorming:*

you only get one 🡪 one real enemy 🡪 horror 🡪 Soviet Union 🡪 Chernobyl 🡪 radio-activity 🡪 reactor 🡪 gas masks 🡪 Geiger counter 🡪 escaping from reactor with an enemy

*Game idea:*

The player wakes up in a dark room after a nuclear disaster in Russia. The only tools you have to save yourself are a flash light and a Geiger counter. You are constantly followed by a radioactive person with a gas mask, who is trying to kill you. This person is attracted by your light and noise you make, and can spot you with its own light. The player should avoid locations contaminated with radioactivity. The game goal is to escape from the reactor and get as scared as possible. To do this, the player needs to find keys to open the certain doors.

*Components:*

Computer graphics : 18/10

* 3D models (\* \* \* \*) Pim

The enemy, Chernobyl reactor scenery (control room, reactor, side objects), Geiger counter, keys for the doors.

* 3D animated models (\* \* \*) Pim

The enemy, cinematic events.

* Audio mixer effects (\* \*) Pim

Footsteps, Geiger counter, action sounds.

* Scenery music / voices (\* \*) Pim

Scenery music for different levels of tension.

* Camera shakes (\*) Lou

Camera shakes for walking and running.

* Unsteady camera (\*) Lou

Camera pointing at the enemy when you die.

when dying from radio-activity camera drops.

* Play with lights and shadows (\*) Lou

Flashlight of the player.

* Start, pause, end screen (\*) Dixie
* Game intro (\*)

Short, scary game introduction.

* UI animations (\*) Dixie

UI effects in main menu etc.

* High scores (\*) Dixie

Time to complete the game

Artificial intelligence: 11/8

* Smart enemy (\* \* \*) Tim

The main enemy is attracted by sound, knows the map and is able to follow the player by tracking the flash light of the player, the enemy also has a flash light so he can spot the player.

* Huge amount of different dumb enemies (\* \* \*) Lou

Radio-active areas, rats, things that fall from the wall, a water pipe breaking suddenly.

* Some “consciousness” in enemies or the level (\* \*) Tim

See: ‘Smart enemy’.

* Path finding using own algorithm (\* \* \*) Tim

The enemy choosing a path leading to the player.

Web & Databases, game analysis: 6/6

* Your own game analysis tool on your webserver (\* \* \* \*) Dixie

Analysis of scariness, time between checkpoints (opening doors with a key), the amount of times you visit a room

* Collect and show high scores from web server (\* \*) Dixie

Programming: 10/10

* Procedurally generated levels/weapons (\* \* \*) Joost

Randomly generated scenery per room.

* Use Unity’s triggers to trigger certain actions (\*) Joost

Triggering of scary moments.

* Race against the clock (\*) Joost

High score, running for the enemy.

* Use Unity’s physics simulation for all movement (\* \*) Joost

Doors opening, falling objects.

* Player can go back in time (\* \* \*) Lou

By means of checkpoints, rewind to checkpoint on death.

*Rough schedule:*

Week 1 – Base game design and start with the prototyping of the components

Week 2 + 3 – Prototyping, testing and adjusting the base game plan accordingly

Week 4 + 5 + 6 + 7 – Building the game

Week 8 – Adjusting the game according the game analytics

Week 9 – Optimize the game, solve final bugs and prepare the presentation

*GitHub link:*

<https://github.com/tbhosman/Minor-Project-Game.git>

<https://github.com/tbhosman/Minor-Project-Reports.git>