



Oh-oh-Ho-ho... in the shadows !

Projet Unity

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*Summary: This project is about making you code an entire game using Unity.*

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# Chapter I

## Foreword

The foreword has a vague connection to what you need to do:

No sleep  
No sleep, until I'm done with finding the answer  
Won't stop  
Won't stop before I find the cure for this cancer

Sometimes  
I feel like going down, I'm so disconnected  
Somehow  
I know that I am haunted to be wanted

I've been watching, I've been waiting  
In the shadows for my time  
I've been searching, I've been living  
For tomorrows all my life

Oh oh oh oh  
In the shadows  
Oh oh oh oh  
In the shadows

They say  
That I must learn to kill before I can feel safe  
But I,  
I'd rather kill myself than turn into their slave

Sometimes  
I feel that I should go and play with the thunder  
Somehow  
I just don't wanna stay and wait for a wonder

I've been watching, I've been waiting  
In the shadows for my time  
I've been searching, I've been living

For tomorrow's all my life

Lately, I've been walking, walking in circles  
Watching, waiting for something  
Feel me, touch me, heal me, come take me higher

I've been watching, I've been waiting  
In the shadows for my time  
I've been searching, I've been living  
For tomorrow's all my life

I've been watching  
I've been waiting  
I've been searching  
I've been living  
For tomorrow's

Oh oh oh oh  
In the shadows  
Oh oh oh oh  
In the shadows  
I've been waiting

In the shadows - The Rasmus

# Chapter II

## Introduction

In this project we will develop a game that looks like Shadowmatic. The goal of the game is as follows: we have to reproduce a shape that can be recognized as a shadow on a wall, with the support of various object located on the forefront. Here is the page to better understand:

<http://www.shadowmatic.com/>

And if you have an iPhone, the best is to download the app to test it!

# Chapter III

## Objectives

The goal of this project is to make you implement a simple game from A to Z using Unity. The game design isn't very complex but it does require some creativity.

# Chapter IV

## General Instructions

- This is a Unity project it has to be made entirely, exclusively and mandatorily in C#. No Javascript/Unityscript, Boo or any other horrors.
- In case you are wondering, there is no norm imposed at 42 for C#. You can use the style you like without restriction. But remember that a code that your corrector cannot read is a code that he or she cannot grade.
- You must sort your project's assets in appropriate folders. For every folder correspond one and only one type of asset. For example: "Scripts/", "Scenes/", "Sprites/", "Prefabs/", "Sounds/", "Models/", ...
- The use of the Unity Asset Store is forbidden. You are encouraged to use assets on the Internet, exception made of scripts obviously because you have to create everything you submit. However the use of Unity Standard Assets is authorised.
- This project will be corrected by humans only.
- For the correction, you will be asked to build the game to test it. It is the corrector that must build the game so you obviously have to push everything that is necessary to this build. Because of this, your project must be configured correctly for the build. No last-minute adjustments will be allowed.

# Chapter V

## Mandatory part

### V.1 The game

In the initial Shadowmatic game, there is one or more objects in the foreground. These objects can be moved by rotation. The goal is to reproduce with the shadow of objects a recognizable shape on the wall located in the background.

#### V.1.1 Menu

Your game must display at the start a menu to launch the game in two different modes:

- Normal mode: redirect the player to the path containing the different puzzles. There must be a clear difference between a solved puzzle, an unlocked puzzle but not solved and a locked puzzle.
- Tester mode: redirect the player to the path containing the different puzzles, all of which will be unlocked in order to be able to test easily during p2p.

This also means that the player's progress must be saved. For the mandatory part, a backup by "device" is sufficient.

Your puzzles must have a name that gives a hint on the shadow to achieve. As in the original game, you cannot show the player what he/she has to do.



A puzzle called "Meow" will reasonably give a shadow that looks like a cat.



### V.1.2 Gameplay

The game must be played entirely with the mouse. The association of the mouse click with a key of the keyboard (for example, CTRL) is allowed to differentiate the movements applied to the objects.

Your game must be playable. That is, the management of shadow validation must be neither too demanding nor too lax. If the validation is done to the pixel, it won't do, if there is a difference of over 50 pixels, it won't do either.

When you consider the shadow on the wall to be valid, a message appears to bestow glory on the player and a menu will allow him/her to either to leave or to return to the original menu, to contemplate the magnificent animation that you will create when a puzzle is valid and another is unlocked.

The movement of objects must be fluid.

### V.1.3 Various levels of difficulties

Your game must have 3 levels of difficulty, applied on different puzzles:

1. A single object to which only horizontal rotations can be applied.
2. A single object to which horizontal and vertical rotations can be applied.
3. Several objects to which horizontal and vertical rotations can be applied and which can be moved in space.

It is to differentiate the rotation of the displacement that you can combine the mouse click with a keyboard key.



Clic & drag: I can turn the object horizontally. (Clic + CTRL) & drag: I can turn the object vertically. (Clic + Maj) & drag: I can move my objects.

You must realize at least one puzzle for each level.

Some assets are given to realize the mandatory puzzles, but you are free to use many others.

# Chapter VI

## Bonus part

We will consider 4 different bonuses, if and only if you have FULLY completed the mandatory part of the project:

- Beauty: You have implemented nice textures, your menu rocks, the puzzle menu is well done... In short, your game is Too Cool 4 School!
- Creativity: You have implemented more shadows than requested in the mandatory part.
- Atmosphere: You have added a super soundtrack to your game, and enabled the player to activate or not deactivate the soundtrack via an option menu of, which may also contain other options (keyboard play, size of window...)
- Brown-nosing: One of the shadows of your game represents Ly's favorite animal.

# Chapter VII

## Submission and peer-evaluation

Submit your work on your `Git` repository as usual. Only the work on your repository will be graded.