

# Stigma

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# 1. Introduction

„STIGMA” is a 2D platform fighter game which allows play in single player and multiplayer mode.

## 1.1. Local Single Player

It is short adventure exploring the recesses of the dark magic land. At the beginning player can chose only one character but during passing the levels our main character will be fighting which other heroes. Each land has its own unique creatures and their hero. Defeating him allows unlock characters, which be able to chosen by player in multiplayer mode.

## 1.2. Multiplayer

It is mode which have been created in order to assure players rivalry via a network connection or localhost. Up to 4 players fights on small area until one of players wins battle.

# 2. Mechanics

Heroes have health points and energy which amount depends on own statistic. To increase dynamic of fights, player can jump twice. Every character has own special skills, which create unique combination of fight. Each skill can be cast in 3 levels of power. Higher levels cost more energy but also increase damage of spells. Skills can be used only if weapon is not wielding. Skills divide into: magic attack, physical attack, defensive, applying positive and negative effects. Weapons are unique for specific characters. Weapon attack can be use if weapon is wielding. Attack have randomly damage depends of character specification and can by executed while character don't move, running or during jumping. Jump attack have the greatest interval of damage.

# 3. Technologies

- Game engine – UNITY
- Integrated Development Environment – Microsoft Visual Studio 2017
- Programming language – C#
- Animation - Spriter
- Graphics – GIMP 2

## **4. Implemented in the current version**

### **4.1.Game elements**

#### **Character:**

- Fully animated
- Two specials skills (water ball and water implosion)
- Three version sword attack

#### **Map:**

- Small map with two platforms and additional background elements
- Close play zone

#### **Graphics:**

- Map's background was downloaded from [ferdinandladera.deviantart.com](https://www.deviantart.com/ferdinandladera)
- Menu background from [jjcanvas.deviantart.com](https://www.deviantart.com/jjcanvas)
- Font: JMH Moreneta
- Character and skills are fully animated.

#### **Character mechanics:**

- Collisions and move
- Applying damage system
- Regeneration and consumption of energy points
- Three level of spell power
- Attack and cast spell cooldowns
- Water ball spell – single projectile magic attack
- Water implosion – Enlarging Circle per second witch push back enemy and deals damage
- Sword attacks: standing attack, running attack and jumping attack
- Play zone - limited area which cause death to player when exits area
- Death conditions: losing all HP, falling down from platforms

## **Menu:**

- Start game button
- Authors button
- Option button – not implemented
- Exit button
- Singleplayer/Multiplayer button

## **Singleplayer:**

- Small map for testing working mechanics of game
- Allows playing two characters using one keyboard
- All mechanics implemented

## **Multiplayer:**

- Allows to local connection for up to four players
- Character is created when player join game
- Mechanics are implementing (Applying damage, energy system, spell power, cooldowns, spells, play zone are testing and modified for multiplayer)

# **5. Game instructions**

## **5.1.Menu**

### **5.1.1. Main menu**

- Start Game – opens sub menu with game mode buttons: Singleplayer and Multiplayer.
- Options – unavailable in current version.
- Authors – shows game authors on left side of menu.
- Exit – exit game, closes the application.

### **5.1.2. Game mode menu**

- Singleplayer – launches the game in single player mode, all players in one application.
- Multiplayer – launches the game in multiplayer mode, one player hosts game, other players connect from other application.

## **5.2. In game control**

### **5.2.1. Player 1**

A – move left  
D – move right  
W – jump  
Q – pull out/hide weapon  
R – sword attack  
T – use first skill  
Y – use second skill  
F1 – use low power of skills  
F2 – use medium power of skills  
F3 – use high power of skills  
ESC – pause menu

### **5.2.2. Player 2:**

← (left arrow) – move left  
→ (right arrow) – move right  
↑ (up arrow) – jump  
NUM 7 – pull out/hide weapon  
NUM 4 – sword attack  
NUM 5 – use first skill  
NUM 6 – use second skill  
NUM 1 – use low power of skills  
NUM 2 – use medium power of skills  
NUM 3 – use high power of skills  
ESC – pause menu