3　External specification

The program is created using a graphical library, so everything user need to play comes down to running the executable file (.exe). Sample gameplay can be watched on the recording available under the QR code. QR Code is also a clickable link, so everyone can click on it. Included in the recording is an example of creating a map, setting up the game in terms of the number of teams and worms, and gameplay leading to a victory for one of the teams.

Video

Exemplary gameplay

3.1　How to play

In this section I will describe step by step all the necessary information on how to play this game. Subsections are broken down into individual application states such as *map editor*, *game* or *menu*.

ⓘ **Info:** The camera inside the game can be moved using the middle mouse button. It can also be zoomed in/out using the scroll wheel.

3.1.1　Menu

Inside the menu and in many other cases, the buttons visible on the screen are clickable when hovering the mouse. Some of them can be clicked only with the left button, and some additionally with the right button
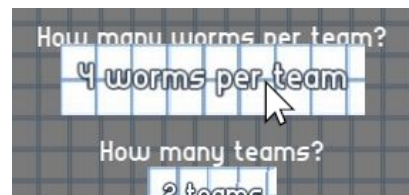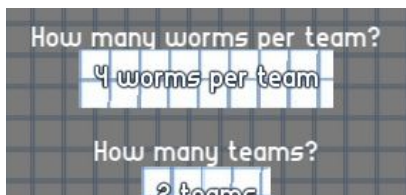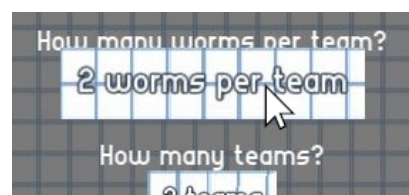
The button zooms in when hovered over

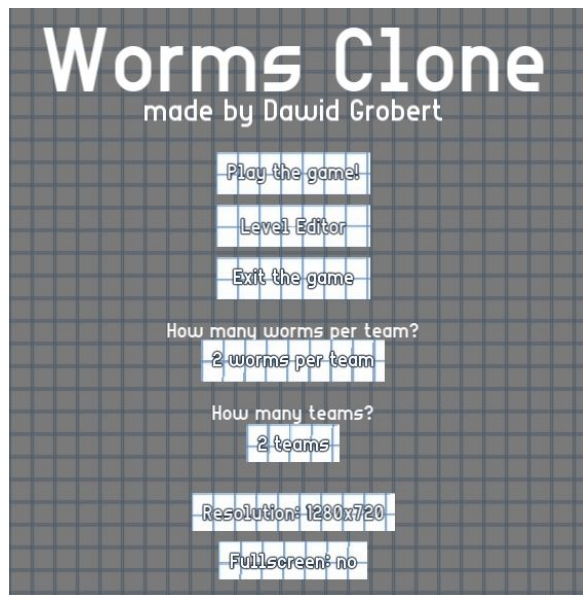We set the settings for teams and worms using:

- **Left Mouse Button** when we want to decrease its value

- **Right Mouse Button** when we want o increase its value
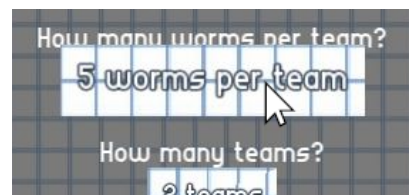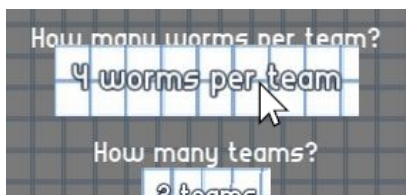
The right mouse button increases the value

The left mouse button decreases the value

The first three buttons in turn allow:

- **Play the game!** – starts the game with the current settings and the current map inside the *Level editor*.
- **Level Editor** – allows to edit the current map and save its status. Changes are saved even after the game is closed.
- **Exit the game** – Ends program operation

The next buttons allows to configure game settings.

- **The number of teams** can be set between 2 and 4.
- **The number of worms inside one team** can be set between 2 and 6 worms.
- **Available resolutions** are: 1024x768, 1280x720, 1366x768, 1680x1050, 1920x1080.
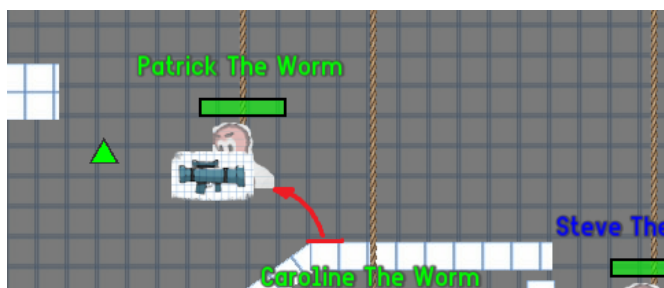- **The full screen** can be switched between 'yes' and 'no'.

3.1.2 In-Game controls
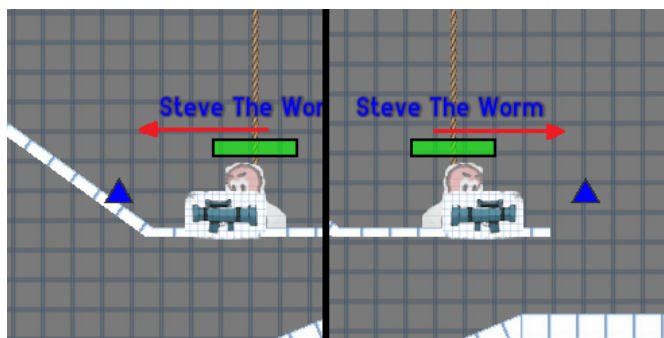
Moving the worm

Two buttons are needed to move the worm around the map.

- The **A** button makes the worm **move to the left**.
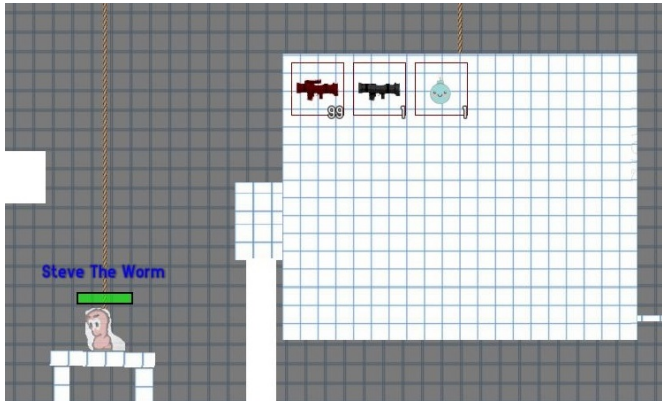- The **D** button makes the worm **move to the right**.

Jumping

To jump, **simply press the spacebar**. The worm will jump in the direction it is facing.

**Shooting – to get rid of your enemies**

To shoot, simply hold down the ENTER. Holding the enter down long enough increases the power with which the bullet will be fired. The higher the power, the further and faster the bullet will fly.

Equipment – weapon selection and weapon change

If there is a **need to check inventory or change weapon during a round**, it is possible **by pressing the E button**.

To the right of the worm, his equipment will slide out at his height. The available number of uses is displayed next to each weapon. **Weapons can be selected/changed using the left mouse button**.
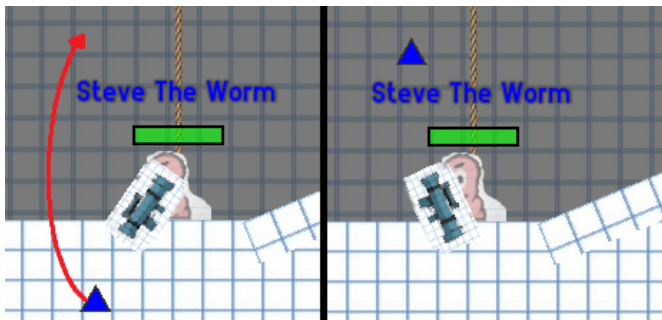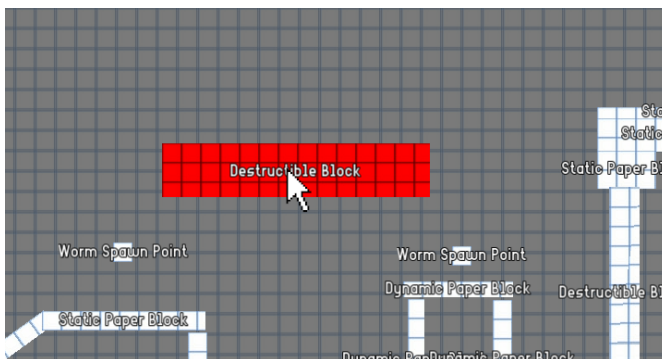
Aiming
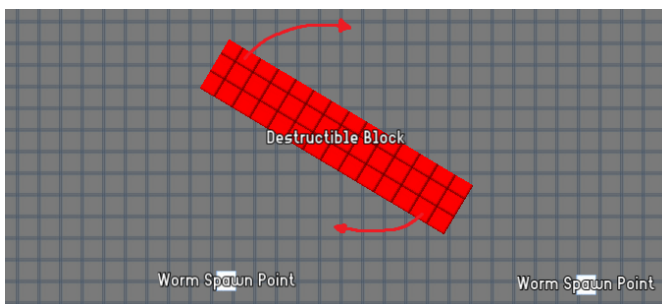
Two buttons are needed to aim.

- The left button (←) rotates the pointer in clockwise manner.

- The right button (→) rotates the pointer in counter–clockwise manner.

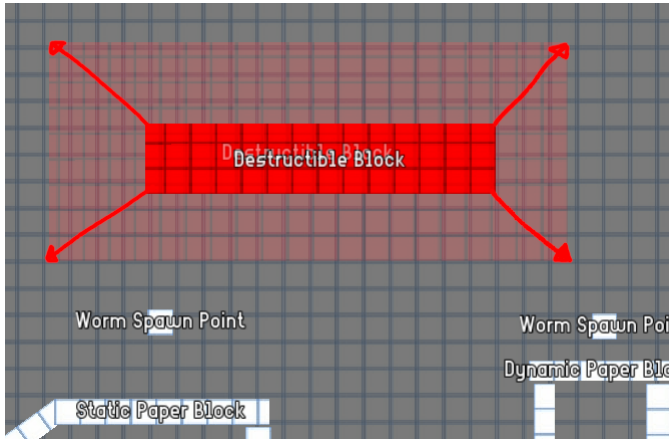### 3.1.3 Editor

Moving the objects

To move objects within the editor, simply **hover the mouse over them and hold down the left mouse button** to move them as desired.

Rotating the objects

To rotate objects inside the editor you use two buttons:

- **Q button** rotates object **to the left**.

- **E button** rotates object **to the right**.

Scaling the objects

Objects can be resized by using four buttons

- Use the **left arrow** button (←) to reduce the width of the object.

- The **right arrow** button (→) increases the width of the object.

- The height of the object is decreased using the **upper arrow** button (↑).

- The height of the object is increased by the **bottom arrow** button (↓).

Creating the objects

Objects can be created with **the right mouse button**. A menu of available objects is then displayed from which it is possible to select the object to be created. The object is selected with **the left mouse button.**
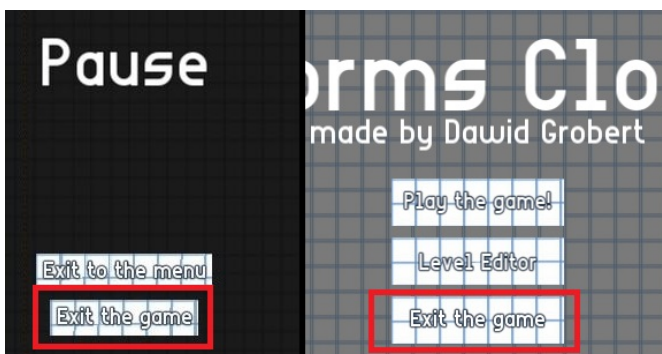
3.1.4 How to pause
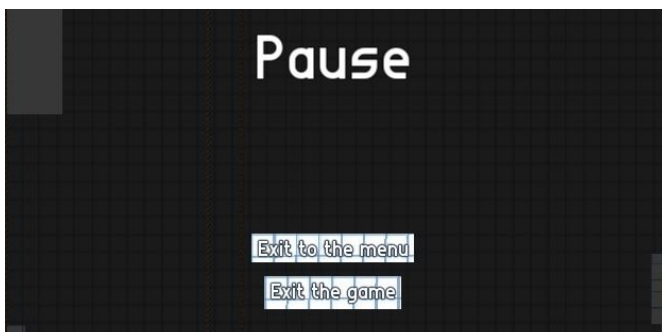
Pausing the game

To pause the application (whether in the editor or in the middle of the game), **simply press the ESCAPE key (ESC)**. Then, using the **left mouse button**, we can confirm one of the available options, **or return back by clicking ESC again**.
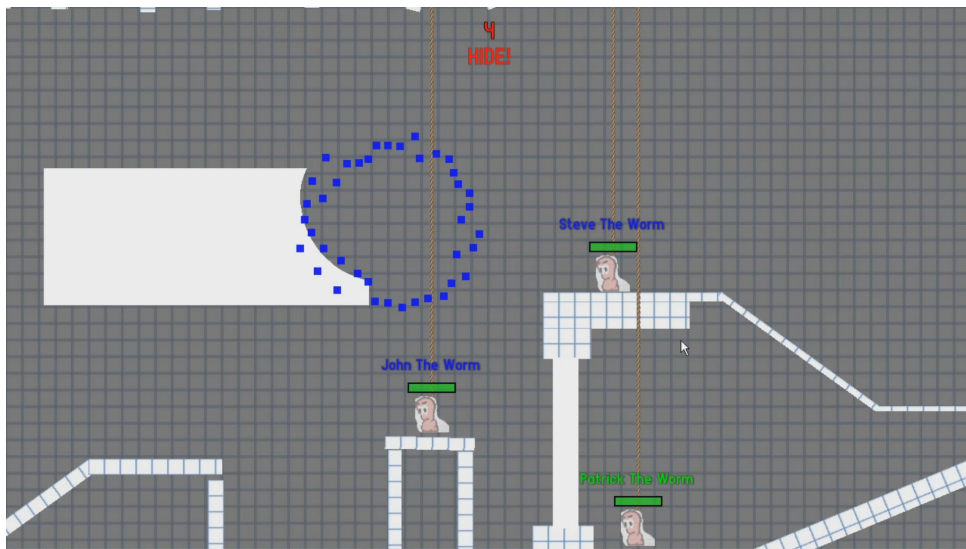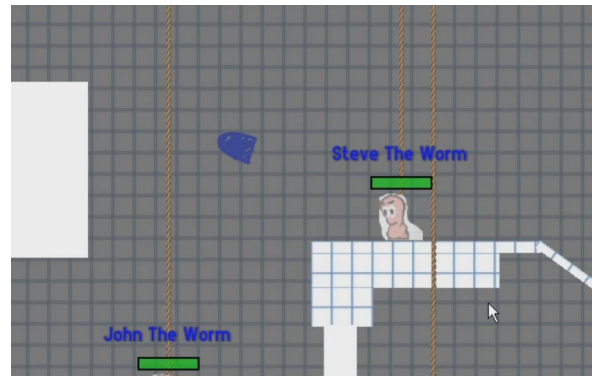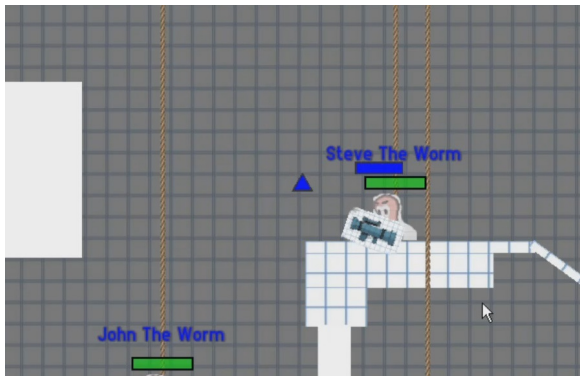
3.1.5 How to quit
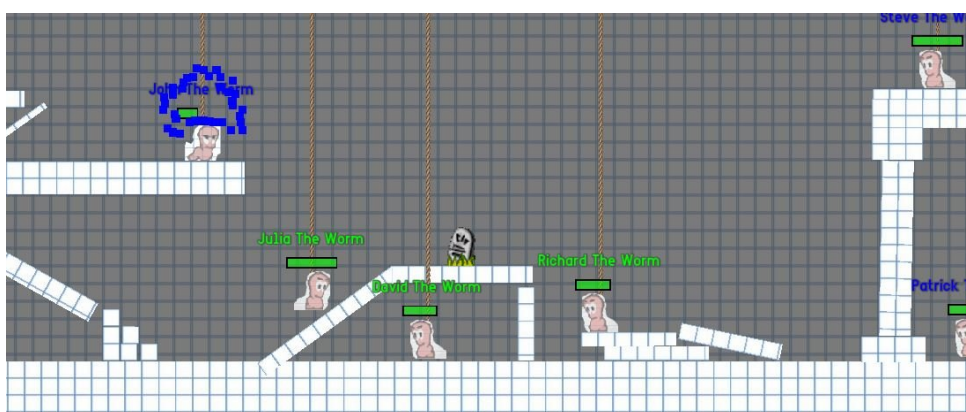

Exiting the game

It is possible to quit the game in two ways.

- By selecting the available button during pause (see *3.1.4. How to pause*).

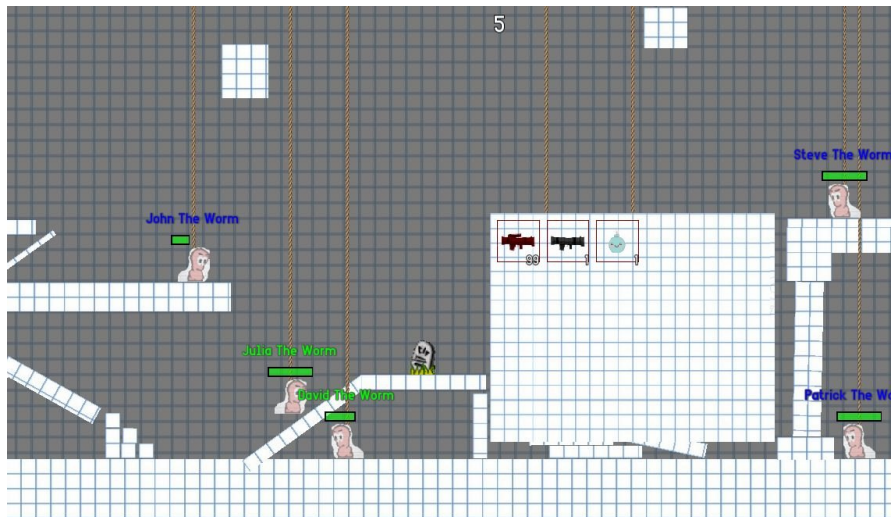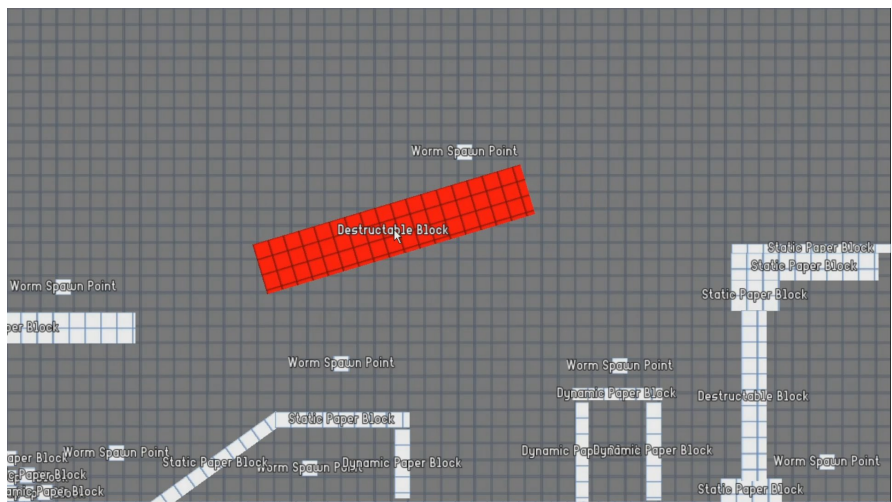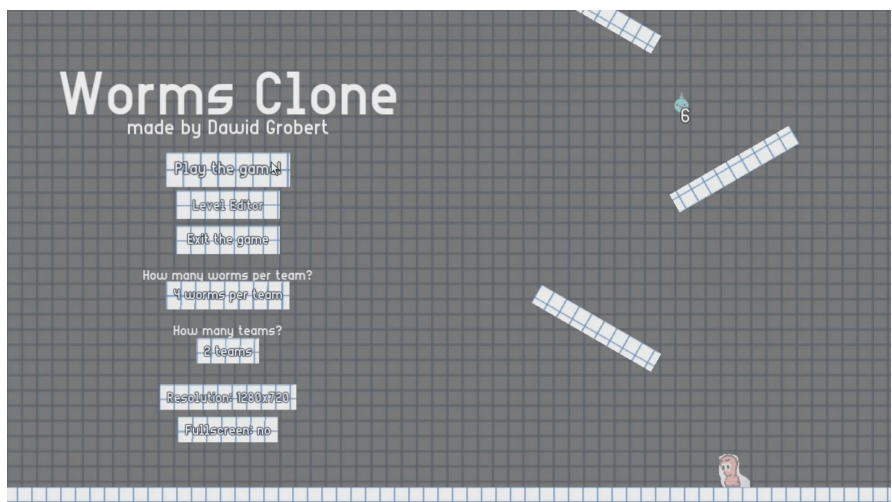- By selecting an available button in the main menu.

Destruction system

Exemplary gameplay

In-game inventory

Map-Editor

Main Menu