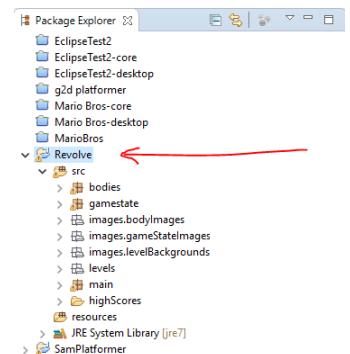


## Installation

1. Download the .ZIP archive that you received, and put it in a place that you'll remember. LEAVE IT AS A .ZIP DO NOT EXTRACT
2. Open the project with the Eclipse IDE by importing it into the workspace {[how to do this](#)}
3. In the **Package Explorer** window in the Eclipse IDE, select the project called "Revolve"
4. Click the green Play button on the top menu bar to run the game
5. Play "Revolve"!



## Purpose of Program

The game "Revolve" by Tom Yan, Sam Macpherson, and Aseem Malhotra is designed as a new take on the platformer type game. Rather than the classic 2 dimensional linear platformer, "Revolve" uses gravity mechanics to allow players to beat levels in a multitude of ways, while keeping the game fast-paced and interesting. The player will find their hands full with key controls and mastering the mechanics takes skill. **Why play this game?** Simply put, it's one of the most interesting platformer games out there.

## Reference Manuals

This section is split into 3 parts.

[How to Navigate Menus](#)

[How levels work](#)

[Using the Game Controls](#)

## How to Navigate Menus

Menus are made up of choosable buttons. However, you cannot click on buttons to select them, you must use the arrow keys to navigate through the options. For example, on the **Main Menu** (right), use the UP and DOWN


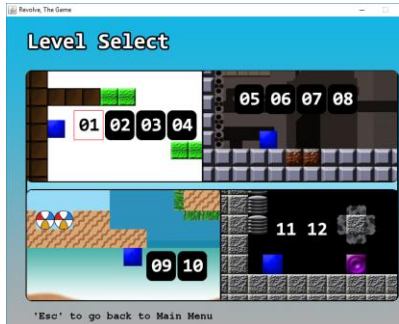
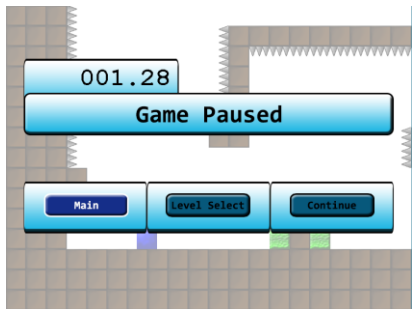


arrow keys to highlight which option you want to select.

When you're ready to select a button and move on to the screen that its text describes, hit the ENTER key to select it.

### The Different Menus:

Here is a detailed description of what you can expect to find on each menu and what you can do on each menu.

Description of Menu	Image of menu
<u>Main Menu</u> <ul style="list-style-type: none"><li>• Play: Proceed to level selection</li><li>• Tips: Play a short tutorial explaining the game mechanics</li><li>• Credits: View information about the developers</li><li>• Quit: Exit the application</li><li>• Use the UP and DOWN arrow keys to navigate</li></ul>	
<u>Level Select Menu</u> <ul style="list-style-type: none"><li>• Each number represents a different level</li><li>• Navigate the menu with the arrow keys and choose a level</li><li>• The level that is selected is outlined in red</li><li>• The images behind the buttons describe the visuals of a set of levels</li><li>• Use the RIGHT and LEFT arrow keys to navigate</li></ul>	
<u>Pause Menu</u> <ul style="list-style-type: none"><li>• <b>Only accessible when playing a level</b></li><li>• Continue: Keep playing the current level</li><li>• Main: Go back to the main menu</li><li>• Level Select: Go back to level selection menu</li><li>• Use the RIGHT and LEFT arrow keys to navigate</li></ul>	

### Level End Menu

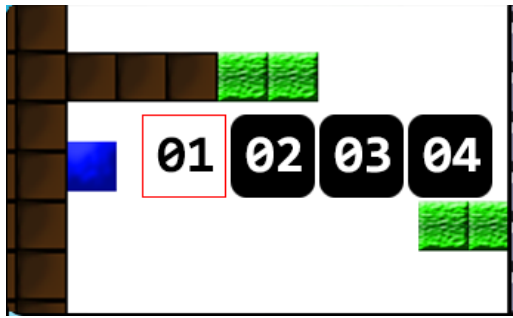

- **Only accessible after completing a level**
- Next Level: Proceed to the next level
- Main: Go back to the main menu
- Level Select: Go back to level selection menu
- Note that lowest time scores per level are viewed here as well
- Use the RIGHT and LEFT arrow keys to navigate

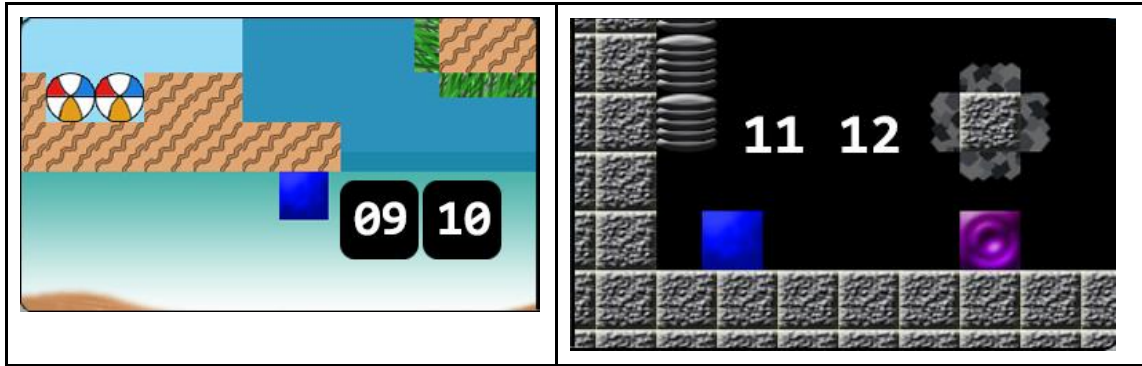
Level Completed!	
1 Sam	001.66
2 Sam	011.42
3 Sam	012.57
4 Sam2	033.15
<div><div>Main</div><div>Level Select</div><div>Next Level</div></div>	

### How Levels Work

Contents
<a href="#">Level Sets</a>
<a href="#">Completing a Level</a>
<a href="#">Player</a>
<a href="#">Table of Blocks</a>

There are 12 levels in total to choose from in the Level Select Menu. See [above](#) for more information on level selection and menus. In the level selection menu, behind the level buttons (01, 02, etc), you can see previews of what a level will look like. There are 4 types of levels,

Classic	Factory
	
Beach	Space



and levels have different features. For starters, all the graphics are the same, so a bouncy block on levels 1-4 will not look the same on levels 4-8. In addition to the graphical difference, some sets of levels have specific mechanics that others do not.

#### List of Features by Level Set

Level Set	Features
Classic	<ul style="list-style-type: none"> <li>• The classic game</li> <li>• Change gravity when touching the ground</li> <li>• The basic block types</li> </ul>
Factory	<ul style="list-style-type: none"> <li>• Similar to the classic game</li> <li>• Addition of teleporter blocks</li> </ul>
Beach	<ul style="list-style-type: none"> <li>• Addition of water blocks <ul style="list-style-type: none"> <li>◦ Change gravity whenever in water (doesn't have to touch the ground)</li> <li>◦ No use of arrow key controls while in water</li> </ul> </li> </ul>
Space	<ul style="list-style-type: none"> <li>• Zero-gravity environment, the level acts as if the player is in water the whole time</li> <li>• No use of the arrow key controls at any time</li> <li>• Player must navigate the course using nothing but the gravity change keys</li> </ul>

For more information on controls, see [Using the Game Controls](#)

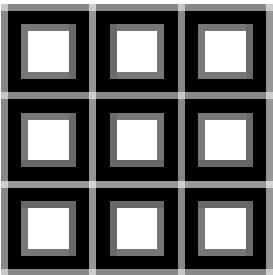
#### Completing a Level

The player has completed a level when they reach the end block.

It looks like this:

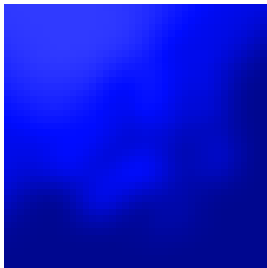
When the user reaches this block, they’re given the “Level End Menu”. See [above](#) for more information on the level end menu.

It should be noted that the player should go through the tutorial found on the “[Tips](#)” menu before attempting actual levels.

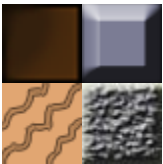







**Player**

This is what the player looks like:  
The player interacts with the different blocks in a level.



**Table of Blocks**

Platform	Spike	Bounce Pad	Water	Teleporter	Receiver
					
Harmless, they allow the player to stand and jump on them	These kill the player, resetting his position to the level start	Bounces the player high into the air upon contact	Player can’t use keyboard controls, but can change gravity anytime while in water	Teleports the player to the corresponding receiver block	This is where the player is teleported from a purple teleporter block

## Using the Game Controls

The in-game controls are simple on their own but when combined can cause quite a complex environment.

### Basic movement:

The arrow keys allow for the player to move left, right, and jump. It's important to note that the controls can change after the direction of gravity is changed. For example, if gravity is pulling to the left, the up arrow key will not make the player jump, but rather move up the wall as if it was the ground, and the down arrow key will move the player down the wall as if it was the ground. Try changing the gravity in a level while playing for real explanation.

### Changing gravity:

The WASD keys represent the direction gravity will pull in after one of them is pressed.

**W:** Gravity pulls upward

**A:** Gravity pulls to the left

**S:** Gravity pull downward

**D:** Gravity pulls to the right