

# PROJECT TETRIS

## User Guide

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# 1 Introduction

The purpose of this user guide is to provide an overview of the game installation and setup. The guide is structured as follows:

- The first part of the guide will deal with system requirements as well as step-by-step installation instructions (see page ).
- The second part of the guide will serve as an instruction manual for the game. It will outline the controls and basic objective (see page ).
- The third part of the guide provides additional help in the FAQ and troubleshooting sections (see page ).

## 1.1 Terminology and Definitions

Term	Definition
Java	The language used to code this game.
Jar	The executable file used to run and start the game.
Tetrimino	The name of the pieces in the game.
Well	The surrounding walls/boundaries that hold the pieces in.
Level	Progress of the game. A higher level will increase the speed at which the pieces fall.

Table 1: List of Terminology and Definitions

# 2 Getting Started

## 2.1 System Requirements

PROJECT TETRIS is compatible with the following operating systems:

- Microsoft Windows
- Mac OS X
- Linux

The following software will be required to run the game:

- Java

Please refer to the Installation in the following section for further details.

## 2.2 Installation

1. Download and install the latest version of java (<https://java.com/en/download/>).
2. Run ProjectTetris.jar

## 3 Game Basics

PROJECT TETRIS is a redevelopment of the classic game Tetris. The objective of the game is the align and set the falling tetrimino pieces to the well. Once a row has been completely filled, it will automatically clear and move down any pieces in the rows above.

### 3.1 Controls

Key	Function
LEFT ARROW	Moves the current tetrimino piece to the left 1 space.
RIGHT ARROW	Moves the current tetrimino piece to the right 1 space.
UP ARROW	Rotate the current tetrimino piece clockwise.
DOWN ARROW	Rotate the current tetrimino piece counter-clockwise.
SPACE	Manually drop the current tetrimino piece down 1 space.
P	Pauses the game.
H	Opens the help screen.

Table 2: Controls

## 3.2 Scoring

- Every row cleared will add 100 points
- Manually dropping the piece 1 space (by pressing SPACE) will add 1 points

## 3.3 Levels

At level 1, the game refreshes at a rate of 1000ms. Every 5 pieces dropped, the level will increase which will reduce the refresh rate by 100ms. This is capped at 200ms to preserve a playable speed.

## 3.4 Winning the game

The game ends once the tetrimino pieces have stacked pass an upper boundary. Until this limit has been reached, the game will continue to run endlessly. What's the highest score you can achieve?

# 4 FAQ

## 4.1 Can I save my current progress?

No, PROJECT TETRIS is about survival and achieving the highest score. You can temporarily suspend the current play session by pausing, however you will not be able to load any previous progress if you close the game.

## 4.2 What happens if a piece completes multiple rows?

If a falling tetrimino piece completes multiple rows, all the the mentioned rows will clear and any piece on top will cascade and set to the bottom.

## 4.3 I am trying to rotate a piece but it isn't moving.

If the new position of a piece after rotation collides with the wall or any other set piece, the command will be rejected. This is to prevent the tetrimino from clipping into each other.

#### **4.4 Can PROJECT TETRIS be played without an internet connection?**

Yes! Assuming you have the latest version of Java installed, PROJECT TETRIS does not require an internet connection to play.

### **5 Troubleshooting**

#### **5.1 The jar executable does not run**

Make sure you have the latest version of Java installed. In addition, make sure your system is running on one of the operating systems listed in the System Requirements section. It may be possible for PROJECT TETRIS to run on other operating systems, however it has only been tested on what is listed.