



Multimedia Technology

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Installation Instructions

I developed the game using the Eclipse IDE and the Java language.

To run the game, you must have [Java version 17](#) or above installed. When installed, you can just run the “Tetris.jar” Executable Jar File to launch the game.

Assets used

I only used standard Java libraries to develop the game, the libraries I used are:

- Java.awt (Abstract Window Toolkit) for the interfaces and graphics
- Java.swing for window creation
- Java.sound for sound effects and music
- Java.util and Java.net for miscellaneous

The only assets I needed to find online were for sound effects and music. I found the sound effects on www.sounds-resource.com and the theme music on www.vertigogaming.org.

User Instructions

To play the game, you only need Java version 17 installed and a keyboard. The Tetrominos (wikipedia.org/wiki/Tetromino) are controlled using the 4 arrow keys.

- Left and Right Arrows to move the Tetromino left and right
- Down Arrow to move the Tetromino downwards faster
- Up Arrow to rotate the Tetromino
- Escape Key to pause the game

Software Documentation

Here, I will briefly go over what each .java file does:

- **Main** creates the game's window and adds the GamePanel to it.
- **GamePanel** sets the game area, the game loop, the GameManager and starts the game thread.
- **GameManager** controls all the gameplay. This includes the tetrominos, the score, the effects, the statistics, the sound and game logic.
- **KeyHandler** controls the input given by the player.
- **Sound** controls the audio files and gives an interface to use them.
- **Mino** controls the logic of the tetrominos. It controls their collisions, rotation and movement.
- **Mino subclasses** set the shapes and orientations for each tetromino.
- **Block** sets the size and color for the blocks of the tetrominos.