

Tetris JS

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KAJ semestral work

24.03.2024

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1 Introduction

This version of Tetris is implemented using the latest technologies: JavaScript, HTML, and CSS. This allows for a smooth gaming experience right in your browser, without the need for downloading or installation. With simple controls and rich visual effects, this version of Tetris will immerse you in a world of strategy and quick thinking.

2 Main points

1. Main Files

- **index.html**: The main HTML file for the application.
- **index.css**: The main CSS file for styling the application.
- **index.js**: The main JavaScript file containing application logic.

2. Auxiliary Styles

- **media.css**: CSS file for media queries and responsive design.
- **animation_design.css**: CSS file for animation effects.

3. Auxiliary JavaScript Files for Tetris Game

- **view.js**: Responsible for drawing canvases for the Tetris game.
- **controller.js**: Handles keyboard inputs and operates the game, including audio.
- **game.js**: Manages the game logic and connects the controller and view.

4. Auxiliary JavaScript Files for Extended Functionality

- **account.js**: Manages user authentication functionalities such as login, sign up, and log out and save this info to local storage.
- **change-mode.js**: Implements black theme functionality and history API.
- **svg.js**: Provides functionality related to SVG graphics.

3 Structure

1. Controller.js

- (a) Handles user input and game control logic.
- (b) Manages game states like playing, pausing, and resetting.
- (c) Controls game sound effects.

2. View.js

- (a) Manages rendering of the game interface.
- (b) Renders the main game screen, start screen, pause screen, and end screen.
- (c) Renders the playfield, game panel, and next piece preview.

3. Game.js

- (a) Contains the core game logic.
- (b) Manages game state such as score, level, lines, and playfield.
- (c) Handles piece movement, rotation, locking, and line clearing.
- (d) Generates random Tetris pieces and updates the game state accordingly.

4. Index.js

- (a) Imports the Game, View, and Controller classes.
- (b) Initializes the game by creating instances of the Game, View, and Controller.
- (c) Controller.
- (d) Exposes the game, view, and controller objects to the global scope for debugging purposes.