

Tetris

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Threads:

Background threads:

- Settings menu
 - o Game starts here
 - o Pauses game and opens settings menu to change starting difficulty
 - o Restarts game upon exiting
- Restart game
- Upcoming blocks
 - o Tracks the upcoming blocks
- Block Fall
 - o Lowers the position of the block
 - o Checks for block collision
 - Update board
 - Resets active block
- Rotate block
 - o Joystick button was pushed, rotate block
- Active block
 - o Checks joystick for movement of the block Left and Right
 - o Checks joystick for holding (up) and soft drops (down)

Periodic threads:

- Display
- Joystick

Aperiodic threads:

- Joystick Button
- Change rotation Button (SW1)
- Hard Drop Button (SW2)
- Settings menu Button (SW3)
- Restart game Button (SW4)
- Timer interrupt (Block fall rate)

Scheduler — Priority scheduling

IPC (FIFOs) — Joystick, Upcoming blocks, Held block