Tetris

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# Threads:

## Background threads:

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