

Week 7 Progress Report: Pause/Resume

- Dates: 10/27 - 11/2

Week 7 Goals:

- ✓ Integrate preview with next piece generation system
- ✓ Add pause state management to the game loop
- ✓ Modify input handling for pause/resume commands

- LoC

- Source code:
 - `app.py` : 8
 - `src/game/game.py` : 12
 - `src/view/input.py` : 8
 - `src/view/pygame_renderer.py` : 46

Summary of changes under src/

- Files changed:
 - app.py
 - src/game/game.py
 - src/view/input.py
 - src/view/pygame_renderer.py

Major Changes

1. `src/view/pygame_renderer.py`

- Changes
 - Fixed next piece preview centering by computing the piece's 4x4 bounding box (min/max rows/cols) and offsetting so the shape is centered within `NEXT_PAGE_PREVIEW_RECT`.
 - Added `draw_pause_screen()` to render a semi-transparent overlay with a centered "PAUSED" label and instruction text.

2. `src/game/game.py`

- Changes
 - Added `paused` state to the `Game` class.
 - Updated `apply()` to toggle pause on `PAUSE` and resume on `CLICK` when

Other Notes

- Next Piece Preview now renders centered consistently across all shapes/rotations.
- Pause/Resume UX verified in manual runs (ESC to pause/resume; click also resumes).