# ASE 420 Team Project

## Error 404: Name Not Found

### Sprint 1 Plan – Tetris

📅 Sprint 1: Sept 8 – Oct 13

🎤 Presentation: Oct 15

# Team Info

**Leader**: Jeffrey Perdue

📧 perduej7@nku.edu

**Members**

- Anna Dinius – diniusa1@mymail.nku.edu
- Cody King – kingc26@mymail.nku.edu
- Owen Newberry – newberryo1@mymail.nku.edu

All members went with AI Option Assisted (#2)

# Team Rules

- Be on time to meetings
- Respond to team communication within 24 hrs
- Weekly updates on Canvas
- Commit code to GitHub regularly
- Be respectful & accountable
- No surprises
- Start Early, Finish Early
- K.I.S.S.
- **No force pushing into repo**

## Sprint 1 Goals

- Build a working MVP Tetris game
  - Pieces move, rotate, clear lines
- Write requirements & track progress
- Share work on GitHub + GitHub.io

# Sprint 1 Features (1/2)

## Anna – Board & Line Clearing

- Build playing field grid
- Detect and clear full lines
- Write tests for clearing logic

## Cody – Pieces & Collision

- Represent pieces (type, rotation, color)
- Allow movement & rotation
- Collision detection (walls, floor, pieces)
- Write unit tests

# Sprint 1 Features (2/2)

**Owen – Rendering & Controls**

- Render board and pieces with Pygame
- Handle keyboard input (move, rotate, drop, quit)
- Hook game loop together
- Add simple “Game Over” overlay

# Sprint 1 Requirements (1/2)

**Anna**

- Grid playing field visible
- Full lines clear automatically

**Cody**

- Distinct shapes, orientation, and colors
- Move & rotate pieces
- Pieces stop at walls/floor/other pieces

# Sprint 1 Requirements (2/2)

**Owen**

- Keyboard controls for gameplay
- “Game Over” window when loss conditions met
- Empty grid rendered at start
- See falling & locked pieces on screen

# Milestones (1/3)

## Anna

- Wk2: Refactor grid, write tests
- Wk3: Line clearing logic + tests
- Wk4: Edge cases, cleanup, docs
- Wk5: Finalize docs, integrate, prep slides

# Milestones (2/3)

## Cody

- Wk2: Requirements & design Piece class
- Wk3: Implement Piece + shapes/rotations
- Wk4: Movement & rotation logic + tests
- Wk5: Manual + unit testing, polish

# Milestones (3/3)

**Owen**

- Wk2: Board rendering, draw active piece
- Wk3: Keyboard input mapping
- Wk4: Main loop, integrate render + input
- Wk5: Add “Game Over” overlay, polish

## Decisions Made

- One shared repository
- **Main branch = production**
- Each member works in personal branch (name-based)
- If code breaks main, **responsible dev must fix**

## Deliverables

- GitHub Repository (code + docs + tests)
- GitHub.io project page
- Marp slides for presentation (Oct 15)

# ✅ Next Steps

- Week 2: Each member starts on assigned files
- Commit early and often
- Weekly check-ins to track progress