Eddie's Fanclub :: Ziying Jian, Andrey Sokolov, Joshua Gao
APCS
FP – Show Us What You Got
2022-05-26

Sokolov is Banned: a Sokoban in Processing Proposal

We plan to recreate the Sokoban game in Processing in our own game, Sokolov is Banned. This game consists of a grid-based maze with boxes littered throughout. The user can control a sprite that can move these boxes to a red target.

The objective of this game is to move all boxes onto the target without running out of moves. If no boxes can be moved and not every target has been fulfilled, the game is over. If every box is on a target, the user has completed the level and can move on to the next level. The game continues until the user has either run out of moves or has completed every level.

In the final release of the proposal, we are planning on utilizing Processing's ability to create visual items, along with a few of the concepts we learned during the second semester. Those include iterators for key presses and interfaces for class implementation.

Plan:
1. Create a Wall object
2. Parse together a wall in Processing through a plain text file
3. Create a Target object
4. Create a Box object
    a. The box cannot be moved if there is another box above it
5. Create a Player class
    a. Be able to move the sprite around, but only within the confines of the wall
    b. The sprite must be able to move itself and exactly one box in all four directions
6. Create a Game class
    a. Checks that targets work as intended
    b. Ends the games when there are no more moves
    c. Proceeds onto the next level when the user has complete the previous level