```
1: // Copyright 2023 Thomas O'Connor
    2: #ifndef SOKOBAN_HPP
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    4:
    5: #include <fstream>
    6: #include <iostream>
    7: #include <string>
    8: #include <vector>
    9: #include <SFML/Graphics.hpp>
   10: #include <SFML/System.hpp>
   11: #include <SFML/Window.hpp>
   12:
   13: using std::cout;
   14: using std::endl;
   15:
   16: #define TILE_SIZE 64
   17:
   18: class Sokoban : public sf::Drawable {
  19: public:
   20:
           // Constructors
   21:
           Sokoban() : _h(0), _w(0) {}
   22:
           Sokoban(int y, int x) : _h(y), _w(x) {}
   23:
   24:
          // Getters
   25:
          int getWidth() const { return _w; }
   26:
          int getHeight() const { return _h; }
   27:
          void getGameState() const;
   28:
   29:
          // Display
   30:
          void drawElapsingTime(sf::RenderWindow &window, sf::Clock &clock);
   31:
   32:
          // Interactors
   33:
          void movePlayer(Sokoban &game, sf::Keyboard::Key key);
   34:
          // Overload extraction operator
   35:
   36:
           friend Sokoban& operator>>(Sokoban& game, std::ifstream& file);
   37:
   38: private:
          // Draw game in SFML
   39:
           virtual void draw(sf::RenderTarget& target, sf::RenderStates states)
   40:
const;
   41:
   42: private:
          // Game state stored in row-major order
   43:
   44:
           std::vector<std::vector<char>> gameState;
          // Dimensions of the window/game (read from file)
   45:
   46:
           int _h, _w;
   47: };
   48: #endif
```