COS30031-2023-103071494 / 08 - Spike - Game State Management / GameStateManagement / StateManager.h 口

unknown Finished Task 08 - Spike 'Game State Management' unlike last week unlike week unlike last week unlike last week unlike last week und week unlike last week unlike week unlike week unlike week unlike week

91 lines (76 loc) · 1.44 KB

```
Raw [ 🖳 🕹 🧷 🔻
                                                                                                      <>
Code
         Blame
    1
           #pragma once
    2
    3
           enum STATES {
    4
                   WELCOME,
    5
                   MAIN MENU,
    6
                   ABOUT,
    7
                   HELP,
                   SELECT_ADVENTURE,
    9
                   GAMEPLAY,
                                    //New Highscore
   10
                   NEW_HS,
                   VIEW_HoF,
                                    //View Hall of Fame
   11
                   QUIT,
   12
   13
           };
   14
          class State {
   15
           public:
   16
   17
                   virtual STATES update() = 0;
                   virtual void render() = 0;
   18
   19
           };
   20
   21
           class MainMenu : public State {
   22
   23
           public:
                   STATES update() override;
   24
   25
                   void render() override;
   26
           };
   27
   28
          class AboutMenu : public State {
           public:
   29
                   STATES update() override;
   30
                   void render() override;
   31
   32
           };
```

```
33
       class HelpMenu : public State {
35
       public:
36
               STATES update() override;
37
                void render() override;
38
       };
39
       class AdventureSelectMenu : public State {
40
41
       public:
42
                STATES update() override;
               void render() override;
43
44
       };
45
       class GameplayState : public State {
46
       public:
47
               STATES update() override;
48
49
               void render() override;
50
       };
51
       class NewHighScoreMenu : public State {
52 🗸
53
       public:
54
               STATES update() override;
55
               void render() override;
56
       };
57
       class HallOfFameMenu : public State {
58
       public:
59
               STATES update() override;
60
61
               void render() override;
62
       };
63
      class QuitState : public State {
64
65
       public:
               STATES update() override;
66
                void render() override;
67
       };
68
69
70 🗸
       class StateManager
71
       {
72
       private:
73
               MainMenu _main_menu;
74
                AboutMenu about menu;
75
               HelpMenu _help_menu;
76
               AdventureSelectMenu _adventure_select_menu;
77
               GameplayState _gameplay;
               NewHighScoreMenu _new_highscore_menu;
78
79
               HallOfFameMenu _hall_of_fame_menu;
                QuitState _quit;
80
81
                State* _current_ptr = & main menu;
```

```
STATES _current_state = STATES::MAIN_MENU;
83
84
85
       public:
86
87
                StateManager();
                bool isRunning();
88
                void update();
89
                void render();
90
91
       };
```

COS30031-2023-103071494 / 08 - Spike - Game State Management / GameStateManagement / StateManager.cpp

unknown Started Task 09 - Spike 'Game Data Management'. 4 days ago 🚥 🕓

181 lines (144 loc) · 5.51 KB

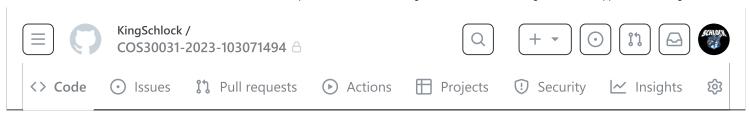
```
<>
Code
       Blame
   1
         #include <iostream>
   2
         #include "StateManager.h"
   3
   4
         //State manager definitions
         StateManager::StateManager() {
   6
                _current_ptr->render();
   7
         }
   8
   9
         bool StateManager::isRunning() { return current state != STATES::QUIT; }
  10
  11
         void StateManager::update() {
                //Wrapped up all nice and cozy
  12
  13
                _current_state = _current_ptr->update();
  14
                if (_current_state == STATES::MAIN_MENU) { _current_ptr = &_main_menu; }
  15
                else if (_current_state == STATES::ABOUT) { _current_ptr = & _about_menu; }
  16
  17
                else if (_current_state == STATES::SELECT_ADVENTURE) { _current_ptr = &_adventure_se
  18
                else if (_current_state == STATES::GAMEPLAY) { _current_ptr = &_gameplay; }
  19
   20
                else if (_current_state == STATES::NEW_HS) { _current_ptr = &_new_highscore_menu; }
                21
                else if (_current_state == STATES::QUIT) { _current_ptr = &_quit; }
  22
   23
  24
         }
   25
   26
         void StateManager::render() { _current_ptr->render(); }
  27
  28
         //Main menu definitions
  29
         STATES MainMenu::update() {
  30
                int choice;
   31
                std::cin >> choice;
  32
```

std::cout << ">> quit" << std::endl << ">> highscore (for testing)" << std::endl;</pre>

```
83
                 system("pause");
                 std::cout << std::endl;</pre>
 84
85
        }
 86
 87
 88
        //Select Adventure definitions
        STATES AdventureSelectMenu::update() {
 89
90
                int choice;
                std::cin >> choice;
 91
                std::cout << std::endl;</pre>
92
93
                switch (choice) {
94
95
                 case 1:
96
                         std::cout << "This is a pretty neat world" << std::endl;</pre>
                         return STATES::GAMEPLAY;
97
                case 2:
98
99
                         std::cout << "Wow this worlds pretty cewl" << std::endl;</pre>
100
                         return STATES::GAMEPLAY:
101
                 case 3:
102
                         std::cout << "This is the coolest shit i've ever seen :0" << std::endl;</pre>
103
                         return STATES::GAMEPLAY;
                 }
104
105
        }
106
107
        void AdventureSelectMenu::render() {
108
                 std::cout << std::endl << "Zork(ish) :: Select Adventure " << std::endl;</pre>
                 std::cout << "-----" << st
109
110
                std::cout << std::endl << ">>> 1. World" << std::endl;</pre>
111
                std::cout << ">>> 2. Cool World" << std::endl;</pre>
112
                std::cout << ">>> 3. Even COOLER World" << std::endl;</pre>
113
114
        }
115
116
        //Gameplay state definitions
117
118
        STATES GameplayState::update() {
                std::string command;
119
120
                std::cin >> command;
121
                if (command == "highscore") { return STATES::NEW_HS; }
122
                else if (command == "quit") { return STATES::QUIT; }
123
                 else { return STATES::GAMEPLAY; }
124
125
        }
126
        void GameplayState::render() {
                std::cout << std::endl;</pre>
127
128
                std::cout << "Gameplay stuff goes in here!" << std::endl;</pre>
                std::cout << "Allowed stage 1 commands can be found in the help screen" << std::endl
129
                std::cout << "Please enter test commands" << std::endl;</pre>
130
131
                 std::cout << ">> ";
```

void QuitState::render() { std::cout << "Quitting zorkish!" << std::endl; }</pre>

181



COS30031-2023-103071494 / 08 - Spike - Game State Management / GameStateManagement / main.cpp 🖟

```
unknown Nearly finished, bug with menu's double rendering. — last week — U
```

21 lines (16 loc) · 379 Bytes

```
Raw [ 🖳 🕹 🧷 🔻
                                                                                                    <>
Code
         Blame
    1
                   Task 08 - Game State Management
                   Author - Thomas Horsley (103071494)
    2
    3
                   The state manager was built implementing the OO State pattern.
    4
                   See spike report! */
    6
    7
           #include <iostream>
           #include <string>
           #include "StateManager.h"
    9
   10
   11
   12
           int main() {
   13
                   StateManager _game_manager;
   14
   15
                   while (_game_manager.isRunning()) {
                           _game_manager.update();
   16
   17
                           _game_manager.render();
   18
                   }
   19
   20
                   return 0;
   21
```