

Proiect Laborator POO 2021

Squid Game

În realizarea acestui proiect de laborator am folosit limbajul de programare C++, folosind concepte de programare orientată pe obiecte, precum clase și obiecte, constructori și destructori dar și încapsulare, moștenire și abstractizare.

M-am gândit la faptul că aș lucra mult mai ușor cu fișiere așa că fișierul "users.txt" conține toți participanții la acest joc. De acolo am încercat să preiau aleator supraveghetorii și să îi pun în fișierul "supervisors.txt", apoi concurenții în fișierul "players.txt" cărora le-am dat atributele corespunzătoare.

```
6 #define USERS "users.txt"
7 #define PLAYERS "players.txt"
8 #define SUPERVISORS "supervisors.txt"
9 #define REFRESH "refresh.txt"
```

Fișierul "refresh.txt" l-am folosit practic la ușurința de a suprascrie un fișier ori de câte ori am avut nevoie.

Pasul următor a constat în alocarea în mod egal a concurenților pe supraveghetori, adică fiecare jucător are numărul corespunzător trecut în dreptul său.

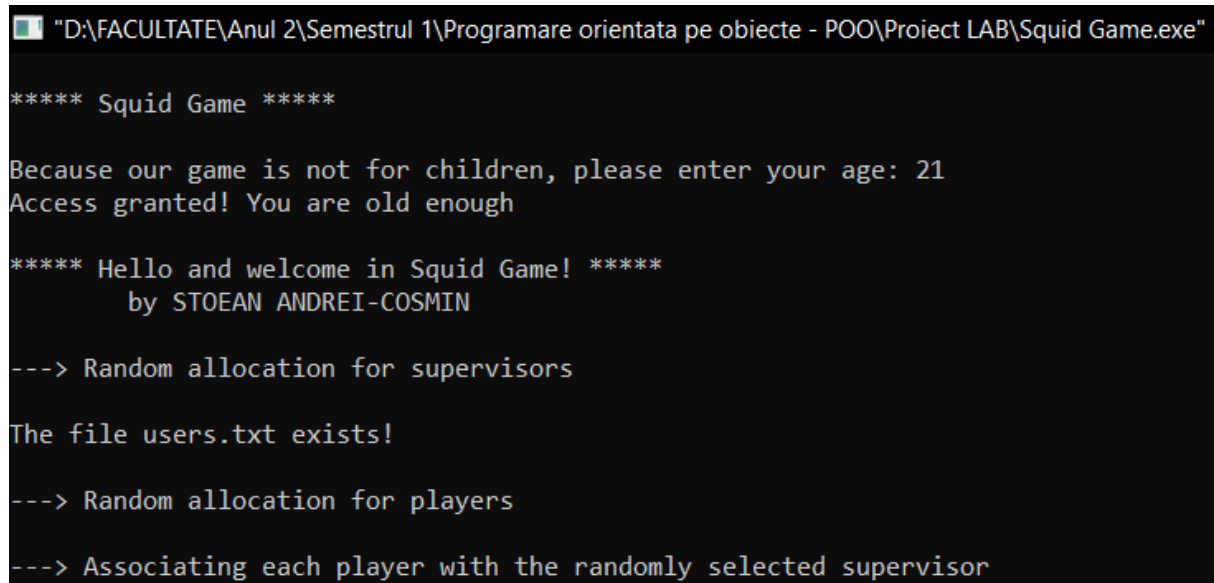
Implementarea jocurilor le-am realizat prin constructori, practic de după fiecare joc, făceam upgrade la fișierul cu jucători.

Detaliile pentru cerințele de afișare, din nou am făcut câte o metodă diferită pentru fiecare.

Am încercat să adaug problemei și o protecție împotriva copiilor, nefiind un joc destinat acestora . (:D)

Doresc să spun faptul că poate nu este cea mai bună sau cea mai fină implementare a problemei date, însă am lucrat la ea și funcționează conform cerințelor.

CAZ 1



```
"D:\FACULTATE\Anul 2\Semestrul 1\Programare orientata pe obiecte - POO\Proiect LAB\Squid Game.exe"

***** Squid Game *****

Because our game is not for children, please enter your age: 21
Access granted! You are old enough

***** Hello and welcome in Squid Game! *****
        by STOEAN ANDREI-COSMIN

---> Random allocation for supervisors

The file users.txt exists!

---> Random allocation for players

---> Associating each player with the randomly selected supervisor
```

---> Red Light Green Light MiniGame <---

```
1 Alessandro Jack Tokyo 27035 50 7
3 Enrique James Seul 41322 89 8
5 Marco Harris Delhi 25141 60 9
7 Adelmo Leo Urziceni 35547 52 2
9 Roberto Alfie Shanghai 30037 57 3
11 Valentino Alexander Moscova 37529 63 7
13 Senan Logan Londra 32190 56 5
15 Yacine Harry Paris 19040 67 3
17 Emilio Thomas Nagoya 37446 89 9
19 Akim Archie Bogota 34370 100 7
21 Dominik Finlay Tianjin 34393 79 2
23 Olezka Daniel Taipei 34084 63 3
25 Mislav Oscar Madrid 14966 82 8
27 Jesper Hunter Philadelphia 26944 53 4
29 Diedrich Mason Toronto 15537 66 3
31 Otis Ollie Detroit 32929 67 9
33 Wolfgang William Shenyang 14639 77 5
35 King Aaron Yangon 23977 61 3
37 Tyson Liam Chittagong 15021 82 2
39 Leo Jamie Berlin 16270 65 9
41 Basmus Caleb Sibiu 15097 89 9
43 Christian Tommy Montreal 19161 71 7
45 Egil Blake Brasov 33655 69 6
47 Gustaf Luke Medelin 37350 78 1
49 Jetmir Angus Nairobi 23966 63 1
51 Ingmar Samuel Izmir 28007 65 8
53 Carlitos Isaac Amman 37753 80 9
55 Bernardino Hamish Campinas 42209 67 8
57 Enrique Arlo Tampa 16422 57 7
59 Alexius Cole Cleveland 26413 97 5
61 Beau Dylan Cali 28762 73 3
63 Ulrich Ruaridh Dakar 37624 85 6
65 Dritan Kai Changsha 37595 62 2
67 Lawrence Jackson Hamburg 20291 82 6
69 Primin Cooper Guayaquil 14596 50 6
71 Odhran Theodore Suzhou 29668 54 8
```

```
71 Odhran Theodore Suzhou 29668 54 8
73 Hedeon Owen Manchester 10053 60 7
75 Andrin John Patna 16900 64 1
77 Baptiste Innes Zhongshan 13728 51 5
79 Jack Murray Vancouver 27807 74 2
81 Damien Aiden Havana 32813 78 5
83 Alexei Cody Giza 28935 59 5
85 Olezka Ben Xiamen 26519 88 5
87 Darijo Alex Botosani 16224 93 2
89 Franciszek Gabriel Valencia 24989 61 7
91 Mislav Callan Amsterdam 13093 62 6
93 Tihalt Frankie Maputo 39314 67 1
95 Talon Roman Bamako 23458 89 6
97 Xiomar Brody Kuwait 24798 82 6
99 Andrin Sebastian Montevideo 38009 75 6
```

Red Light Green Light game completed successfully !!!

---> Tug of War MiniGame <---

```
1 Alessandro Jack Tokyo 27035 50 7
5 Marco Harris Delhi 25141 60 9
7 Adelmo Leo Urziceni 35547 52 2
9 Roberto Alfie Shanghai 30037 57 3
15 Yacine Harry Paris 19040 67 3
17 Emilio Thomas Nagoya 37446 89 9
19 Akim Archie Bogota 34370 100 7
21 Dominik Finlay Tianjin 34393 79 2
23 Olezka Daniel Taipei 34084 63 3
25 Mislav Oscar Madrid 14966 82 8
27 Jesper Hunter Philadelphia 26944 53 4
31 Otis Ollie Detroit 32929 67 9
33 Wolfgang William Shenyang 14639 77 5
37 Tyson Liam Chittagong 15021 82 2
43 Christian Tommy Montreal 19161 71 7
45 Egil Blake Brasov 33655 69 6
47 Gustaf Luke Medelin 37350 78 1
49 Jetmir Angus Nairobi 23966 63 1
53 Carlitos Isaac Amman 37753 80 9
55 Bernardino Hamish Campinas 42209 67 8
```

```
55 Bernardino Hamish Campinas 42209 67 8
59 Alexius Cole Cleveland 26413 97 5
61 Beau Dylan Cali 28762 73 3
63 Ulrich Ruaridh Dakar 37624 85 6
65 Dritan Kai Changsha 37595 62 2
69 Primin Cooper Guayaquil 14596 50 6
71 Odhran Theodore Suzhou 29668 54 8
73 Hedeon Owen Manchester 10053 60 7
75 Andrin John Patna 16900 64 1
81 Damien Aiden Havana 32813 78 5
83 Alexei Cody Giza 28935 59 5
85 Olezka Ben Xiamen 26519 88 5
87 Darijo Alex Botosani 16224 93 2
89 Franciszek Gabriel Valencia 24989 61 7
91 Mislav Callan Amsterdam 13093 62 6
93 Tihalt Frankie Maputo 39314 67 1
95 Talon Roman Bamako 23458 89 6
97 Xiomar Brody Kuweit 24798 82 6
99 Andrin Sebastian Montevideo 38009 75 6
```

Tug of War game completed successfully !!!

---> Marbles MiniGame <---

```
1 Alessandro Jack Tokyo 27035 50 7
9 Roberto Alfie Shanghai 30037 57 3
15 Yacine Harry Paris 19040 67 3
19 Akim Archie Bogota 34370 100 7
25 Mislav Oscar Madrid 14966 82 8
27 Jesper Hunter Philadelphia 26944 53 4
33 Wolfgang William Shenyang 14639 77 5
45 Egil Blake Brasov 33655 69 6
47 Gustaf Luke Medelin 37350 78 1
53 Carlitos Isaac Amman 37753 80 9
61 Beau Dylan Cali 28762 73 3
63 Ulrich Ruaridh Dakar 37624 85 6
71 Odhran Theodore Suzhou 29668 54 8
75 Andrin John Patna 16900 64 1
81 Damien Aiden Havana 32813 78 5
85 Olezka Ben Xiamen 26519 88 5
91 Mislav Callan Amsterdam 13093 62 6
93 Tihalt Frankie Maputo 39314 67 1
97 Xiomar Brody Kuweit 24798 82 6
```

Marbles game completed successfully !!!

```
---> Genken MiniGame <---  
  
9 Roberto Alfie Shanghai 30037 57 3  
  
Genken game completed successfully !!!  
  
---> Winner <---  
  
The winner is Roberto Alfie  
  
The winner won 2675739  
  
---> Supervisor winner <---  
  
The supervisor winner won 290078  
  
---> Supervisors <---  
  
8 Bazyli Elliot 328971  
6 Tobias Robert 298442  
7 Fabian Benjamin 277202  
2 Hardwin Callum 284719  
9 Primin Evan 259131  
3 Apollo Matthew 279786  
1 Klaus Freddie 240792  
5 Lennart David 253263  
4 Hale Luca 244728  
  
---> The team of supervisors who won the most <---  
  
This form is rectangle
```

CAZ 2

"D:\FACULTATE\Anul 2\Semestrul 1\Programare orientata pe obiecte - POO\Proiect LAB\Squid Game.exe"

***** Squid Game *****

Because our game is not for children, please enter your age: 21
Access granted! You are old enough

***** Hello and welcome in Squid Game! *****
by STOEAN ANDREI-COSMIN

--> Random allocation for supervisors

The file users.txt exists!

--> Random allocation for players

--> Associating each player with the randomly selected supervisor

--> Red Light Green Light MiniGame <---

```
1 Demetrio Oliver Bucuresti 12740 98 3
3 Alexius Charlie Mumbai 36221 74 1
5 Adelmo Leo Urziceni 24847 76 7
7 Roberto Alfie Shanghai 31864 90 1
9 Valentino Alexander Moscova 16251 73 8
11 Senan Logan Londra 39667 87 9
13 Yacine Harry Paris 15464 61 1
15 Emilio Thomas Nagoya 38880 98 3
17 Akim Archie Bogota 17399 93 5
19 Dominik Finlay Tianjin 23602 59 3
21 Olezka Daniel Taipei 23953 76 5
23 Mislav Oscar Madrid 12643 58 7
25 Jesper Hunter Philadelphia 23134 100 1
27 Diedrich Mason Toronto 30703 91 9
29 Klaus Freddie Houston 37839 92 8
31 Tihalt Adam Miami 28119 85 3
33 King Aaron Yangon 14869 68 8
35 Tyson Liam Chittagong 34079 92 9
37 Leo Jamie Berlin 12967 56 8
39 Apollo Matthew Milano 19024 67 2
41 Basmus Caleb Sibiu 34496 93 7
43 Christian Tommy Montreal 23287 96 2
45 Egil Blake Brasov 25055 57 7
47 Gustaf Luke Medelin 27684 69 4
49 Jetmir Angus Nairobi 41029 78 9
51 Hale Luca Lisabona 24812 50 9
```



```
51 Hale Luca Lisabona 24812 50 9
53 Karl Joseph Dmasc 28027 67 4
55 Senan Ryan Lucknow 28903 85 8
57 Andie Sonny Zibo 29385 82 3
59 Alexius Cole Cleveland 24242 87 2
61 Julian Blair Onesti 38335 99 4
63 Ulrich Ruaridh Dakar 15982 87 2
65 Fabian Benjamin Suttgart 18096 77 9
67 Conor Michael Incheon 19520 79 3
69 Neor Leon Birmingham 24370 59 6
71 Anatoly Louis Sapporo 21199 90 2
73 Hedeon Owen Manchester 37024 97 3
75 Andrin John Patna 41417 89 9
77 Baptiste Innes Zhongshan 25241 54 4
79 Jack Murray Vancouver 37982 63 6
81 Damien Aiden Havana 16766 69 1
83 Bazylly Elliot Baltimore 10179 81 7
85 Olezka Ben Xiamen 40183 60 7
87 Darijo Alex Botosani 41393 50 2
89 Franciszek Gabriel Valencia 38510 66 7
91 Mislav Callan Amsterdam 18147 63 6
93 Tihalt Frankie Maputo 16274 63 5
95 Wolfgang Josh Sikasso 41372 60 5
97 Oliver Struan Quito 26838 61 2
99 Primin Evan Meerut 22558 77 5

Red Light Green Light game completed successfully !!!

---> Tug of War MiniGame <---

1 Demetrio Oliver Bucuresti 12740 98 3
3 Alexius Charlie Mumbai 36221 74 1
5 Adelmo Leo Urziceni 24847 76 7
7 Roberto Alfie Shanghai 31864 90 1
11 Senan Logan Londra 39667 87 9
15 Emilio Thomas Nagoya 38880 98 3
23 Mislav Oscar Madrid 12643 58 7
25 Jesper Hunter Philadelphia 23134 100 1
27 Diedrich Mason Toronto 30703 91 9
29 Klaus Freddie Houston 37839 92 8
33 King Aaron Yangon 14869 68 8
35 Tyson Liam Chittagong 34079 92 9
37 Leo Jamie Berlin 12967 56 8
39 Apollo Matthew Milano 19024 67 2
41 Basmus Caleb Sibiu 34496 93 7
43 Christian Tommy Montreal 23287 96 2
45 Egil Blake Brasov 25055 57 7
```

```
45 Egil Blake Brasov 25055 57 7
47 Gustaf Luke Medelin 27684 69 4
49 Jetmir Angus Nairobi 41029 78 9
53 Karl Joseph Dmasc 28027 67 4
57 Andie Sonny Zibo 29385 82 3
59 Alexius Cole Cleveland 24242 87 2
61 Julian Blair Onesti 38335 99 4
63 Ulrich Ruaridh Dakar 15982 87 2
65 Fabian Benjamin Suttgart 18096 77 9
69 Neor Leon Birmingham 24370 59 6
71 Anatoly Louis Sapporo 21199 90 2
73 Hedeon Owen Manchester 37024 97 3
75 Andrin John Patna 41417 89 9
77 Baptiste Innes Zhongshan 25241 54 4
79 Jack Murray Vancouver 37982 63 6
81 Damien Aiden Havana 16766 69 1
83 Bazyli Elliot Baltimore 10179 81 7
85 Olezka Ben Xiamen 40183 60 7
87 Darijo Alex Botosani 41393 50 2
95 Wolfgang Josh Sikasso 41372 60 5
97 Oliver Struan Quito 26838 61 2
99 Primin Evan Meerut 22558 77 5

Tug of War game completed successfully !!!

---> Marbles MiniGame <---

3 Alexius Charlie Mumbai 36221 74 1
5 Adelmo Leo Urziceni 24847 76 7
15 Emilio Thomas Nagoya 38880 98 3
25 Jesper Hunter Philadelphia 23134 100 1
27 Diedrich Mason Toronto 30703 91 9
35 Tyson Liam Chittagong 34079 92 9
39 Apollo Matthew Milano 19024 67 2
43 Christian Tommy Montreal 23287 96 2
45 Egil Blake Brasov 25055 57 7
49 Jetmir Angus Nairobi 41029 78 9
59 Alexius Cole Cleveland 24242 87 2
61 Julian Blair Onesti 38335 99 4
69 Neor Leon Birmingham 24370 59 6
71 Anatoly Louis Sapporo 21199 90 2
77 Baptiste Innes Zhongshan 25241 54 4
79 Jack Murray Vancouver 37982 63 6
85 Olezka Ben Xiamen 40183 60 7
87 Darijo Alex Botosani 41393 50 2
99 Primin Evan Meerut 22558 77 5

Marbles game completed successfully !!!
```

```
---> Genken MiniGame <---  
  
15 Emilio Thomas Nagoya 38880 98 3  
  
Genken game completed successfully !!!  
  
---> Winner <---  
  
The winner is Emilio Thomas  
  
The winner won 2580580  
  
---> Supervisor winner <---  
  
The supervisor winner won 365237  
  
---> Supervisors <---  
  
3 Wolfgang William 341674  
9 Gunther Lachlan 335795  
7 Yacine Fraser 286206  
4 Lennart David 296682  
6 Beau Dylan 282988  
5 Felipe Arran 274182  
1 Alessandro Jack 221249  
2 Marco Harris 228679  
8 Victor Aidan 224641  
  
---> The team of supervisors who won the most <---  
  
This form is triangle
```