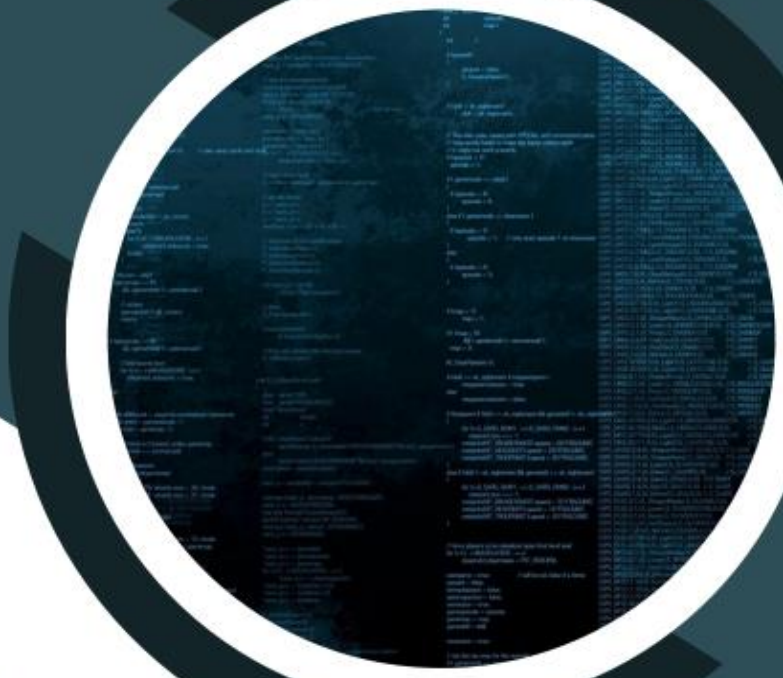
THREADING

SHOOT GAME



TRINOME

TOUATI MED AMINE

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THE MAIN:

When we execute the main bloc, a thread has been created with the name team 1.

Our thread has a name and a run method.

Our run method creates 4 players and it starts each player.

Our thread has a table with 4 semaphores.

The first semaphore is initialized to 1 because the first player starts directly when our game start. And the others are initialized to 0 because they should wait till there turn come.

So, our player has a position, a team and a table of semaphores of his team.

We have 4 methods:

BACK:

First, we verify if the player is not the last one because the last one won't do the back method. If he's not then he verifies the semaphore of his position if it is greater than 0 or equals 0 (**acquire**). Then he returns to verify if the score still under ten or no, if it's not we print that the player has passed the ball and we (**release**) the next player. (The semaphore of the next player was 0 when we do the release, he increments the semaphore to 1 the decrement it to 0.

The last player can't enter our condition because he won't play the back, he directly moves to our second method:

FORTH:

The same thing happens with our second method, the last player verifies the first condition if he's the last player or not. Then he finds the (**acquire)** so he can play and

decrement it to 0. then we print that the ball has been passed to player before and do the (**release**). The third and second player will do the same operation till the ball arrive to the first player, he goes to the else section he verifies if his semaphore is 0 or 1. then he tests if the score is 10 or under then do the shoot method, then he do the (**release**) TO HISELF because he's the one who will play the back method.

THE FALL:

This method is been used by the two previous methods.

We create random and it's under 10. 0 references to the ball have fallen, then we set fall 1 to true and that mean the ball from the team 1 fell and we print that the ball fell. the same thing goes with team 2.

SHOOT:

First, we verify if the team is 1 or 2. then we verify if the ball has fell or no,

if the ball didn't fall that mean fall = false, the first player will shoot and the score rises and we print the score of the team 1 has been incremented.

If the ball fell and that mean fall = true, the first player won't shoot and they will repeat the same thing over and over till the ball has not been fallen.

Our programme (game) will stop whenever one of the team scored 10 goals.

In our video you will find more explanation about our programme.

Thanks for giving us another chance we really appreciate that.