

UNIVERSIDAD TÉCNICA NACIONAL  
SEDE SAN CARLOS  
GARRERA: SOFTWARE ENGINEERING



Course

***Programming 1***

***ISW-112***

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*Project: Gestor de juegos*

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## **Introduction**

An application was made in JAVA programming language, the APP is in a game of games, where the user is a means of a menu of the games of son: A competition of swimmers where the user have fun in this sport and second game? Questions? And Answers? Where the user learns basic programming concepts through this game.

The project is organized through classes such as:

- 1) BotonMatriz
- 2) Cronometro
- 3) Perdió
- 4) Ganar
- 5) Super\_Metodo
- 6) VentanaComodin
- 7) Windows\_game1
- 8) Windows\_game2
- 9) Windows\_start1
- 10) Windows\_start2
- 11) Windows
- 12) Proyecto\_2

The start of the game manager is a main window where the user chooses the game he wants to continue

### **Swimming competition**

#### **Questions and answers**

The first game the swimmers competition was programmed the interface manually, to facilitate the coupling of a movement thread to determine the speed of the swimmers through a random so that the swimmers do not have the same speed and that works with each other with The user can choose the amount of swimmers through options, the lanes are properly identified for each swimmer, a window limit is established that tells swimmers where to stop, each swimmer will be inserted an image to identify them, At the bottom of the window a TextFiel was created, which will get the arrivals of each swimmer and print it in real time, to know which swimmer will arrive first and at the same time has a clean button that will clean the statistics of each race, in the Part of the reports, 5 buttons were created, each button event contains a specific function of each report, what it does is obtain Enter the swimmers data of the arrivals, the number of races made, the competitor who arrived first and last, each button will print what is requested for each race and there is also a button to clear data to erase the history of the Reports

For the swimmers competition images were inserted, it contains a start button where the user starts the game when he likes it. The pool is blue here we use a window property for the color of it.

For the second game, a 5x8 matrix was created with buttons to facilitate the user's handling of the game, the game starts at position [0] [0] and ends at position [4] [7], the game consists of a Game of questions and answers the questions will be stored in an array and the answers in another arrangement, where the user will indicate which position to move, inside the matrix there is a wildcard this same will be in a random position, also created 9 obstacles randomly. Of red, the other fields contain questions where the user must answer a true and false, every time the user hits a question if he removes an obstacle randomly and for each successful question wins a point and if the user does not answer the question You subtract a point and create a new obstacle within the matrix randomly, in the wildcard if the user gives a clip will open a box box window, where the user Enter 3 numbers from 1 to 10 and through 3 Random will generate three random numbers, these are compared to the three numbers that the user types with the randoms, if the user right wins the game automatically, has a time of one minute to Win, if the user does not hit within the minute, he will return to continue the game. The user wins the game with a difference of 3 earned points in the position [4] [7] and if the difference is less loses the game.