

Functional Requirements

FR1-. The program must be able to implement three data structures, which are: Linked lists, binary search trees and ArrayList to represent them as the countries that will be part of the competition.

FR2-. The program must be able to implement the algorithms of adding, searching and deleting in the three data structures. These actions will represent the discipline or sport of each country.

FR3-. The program must be able to receive a number of data entered by the user to perform the operations of adding, searching and deleting in the different data structures.

FR4-. The program must be able to implement a stopwatch every time a new race starts and count the time in minutes, seconds and milliseconds that elapse from the start to the end of the race.

Non-functional requirements

NFR1-. The algorithms that implement each of the data structures must be both recursive and iterative.

NFR2-. Each algorithm implemented in the program must be executed in its own thread.

NFR3-. The elements entered by the user will be stored in long type data.