

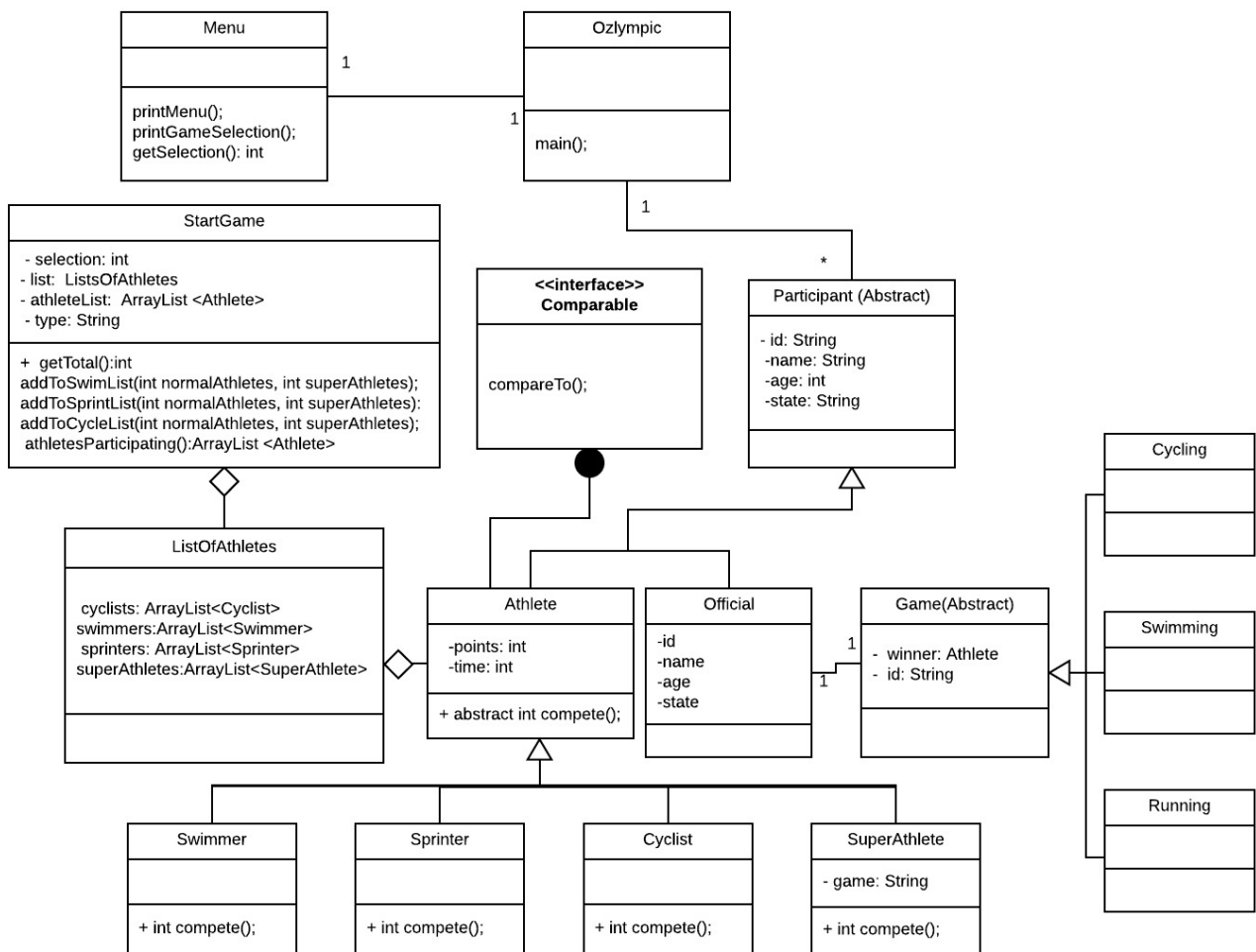
## Documentation of Assignment 1:

According to our design we made one Abstract class Game which takes arrayList of different Athlete as a parameter , gives an id to every game played and sets winner of every game played and display later on. It has subclasses of different games whose instances are created according to the user choice.

Once the game is chosen ,No. of Players are randomly generated which have super Athletes and normal athletes (Cyclist, Runners, Swimmers) . These players will be stored as **playersinGame**. All these classes extended from its parent class **Participant**.

Then user will select the player with the serial number and we will store it in int PredictedPlayer and we start the game (call compete method based on instance ) following polymorphism and then we sort it based on time taken( Athlete class implementing **Comparable interface**) and if the player with least time will be stored as **winner** and if user prediction is same as the player with least time , Congratulations message will come up. Similarly we will save **second** and **third** player based on time and allot points accordingly by calling **setPoints** method and storing using **getPoints** . All the data is stored in arrayList and we fetch the results from there.

## CLASS DIAGRAM



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OUR GITHUB REPOSITORY LINK IS : <https://github.com/rmit-s3614163-sapan-mittal/Assignment1#assignment1>.

