

NOT FEEDING FRENZY!

TIME: 3 hours

Your challenge here is to build an interactive game featuring Chompy, a constantly-hungry little fish who is looking to grow (completely unlike the premise of well-known game *Feeding Frenzy*®). We have designed only the basic environment for you, to complete the challenge your program should have the following characteristics:

1. If Chompy makes contact with another fish that is larger, Chompy will be eaten and the game will end (LOSE scenario). [5 points]
2. Similarly, if Chompy makes contact with another fish that is smaller, Chompy will eat the other fish. [5 points]
3. After every 10 fish that Chompy eats, he will grow in size by a factor of 2, but his maximum speed should decrease by 10%. [5 points]
4. The player wins the game once Chompy eats 100 other fish (WIN scenario). [5 points]
5. The other fish should be spawned randomly (in terms of **size**, **color**, **placement**, **direction**, and **speed**). [10 points]
6. There can and should be multiple fish spawned on the screen at any time. The time between spawning a new fish should also be random. [10 points]

Things to Keep in Mind

Beyond the factors listed above, you will also be evaluated based on **completeness** (fitting the requirements), **timeliness** (submitted on time), and **documentation** (well documented either through code comments or written notes). [10 points]

Also try to keep in mind that the game will become too easy if the randomly-generated fish do not scale in size with Chompy.