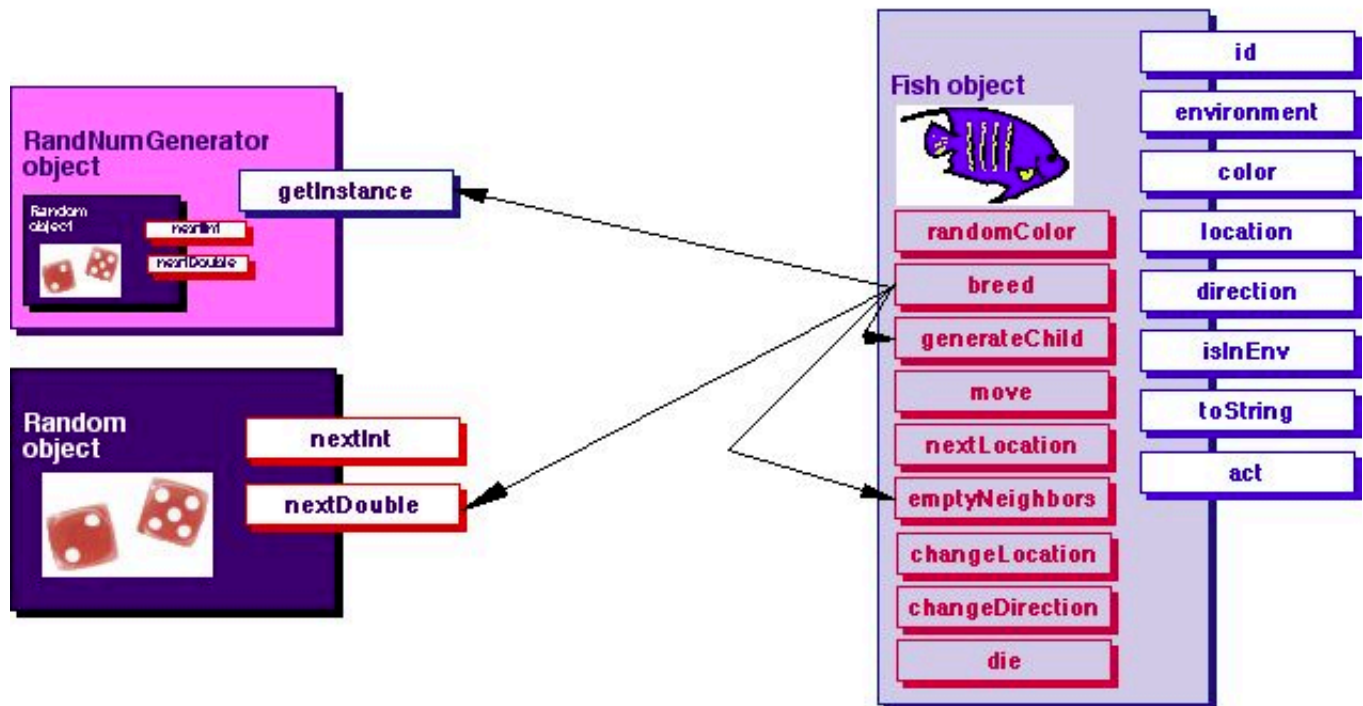


Marine Biology Simulation Case Study

Fish: breed method



General Outline:

Fish breed method

- calls **RandNumGenerator.getInstance**, which returns a **Random** object
- asks the **Random** object for a random double
- uses the random double as a probability to determine whether to **breed**
- calls **emptyNeighbors** to find possible places to breed
The **emptyNeighbors** method returns a list of empty neighboring locations.
- breeds** into all empty neighboring locations; calling **generateChild**

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Overview: [Cast of Characters](#) | [The Driver](#)

Initial Program: [Simulation: step](#) | [Fish: act and move](#) | [nextLocation](#) | [emptyNeighbors](#)

Breeding and Dying: [Fish: modified act method](#) | [move](#) | [breed](#) | [die](#)

Specialized Fish: [DarterFish](#) | [DarterFish: move](#) | [SlowFish: nextLocation](#)

Environment Implementations: [Environment Class Hierarchy](#)