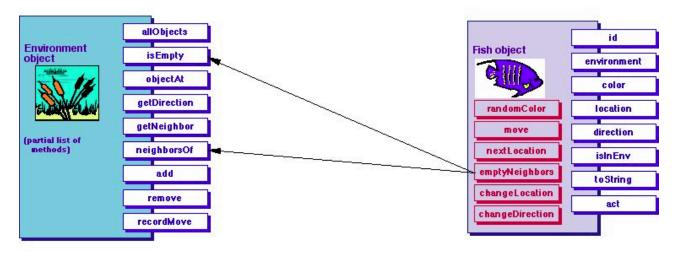
## **Marine Biology Simulation Case Study**

## Fish: emptyNeighbors method



## General Outline:

Fish emptyNeighbors method

A. asks the environment for all of the fish's neighboring locations

Environment's neighborsOf method returns a list of all valid neighboring locations.

- B. constructs a new list for neighboring empty locations
- C. asks the environment if each location in the list is empty
- D. adds the empty locations to the new list

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Go to diagrams for:

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