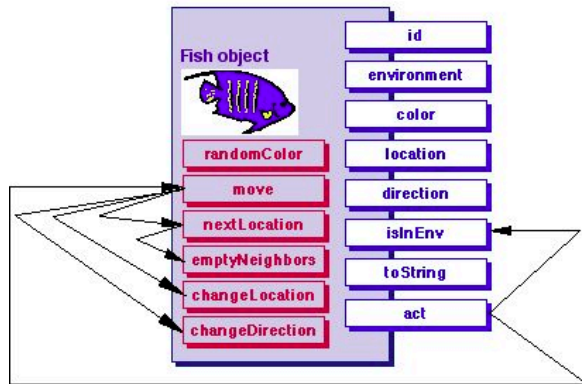


Marine Biology Simulation Case Study

Fish: act and move methods



General Outline:

Fish act method

- A. calls **isInEnv** to verify that fish is still in environment
- B. calls **move**, which
 - i. calls **nextLocation** to decide where to move, which
 - a. calls **emptyNeighbors** to find empty neighboring locations
 - b. randomly chooses one of those neighboring locations to move to
 - ii. calls **changeLocation** to move there
 - iii. decides which direction to face
 - iv. calls **changeDirection** to face that direction

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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](#)