Project: FerryBoat

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Instance Variables

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| --- | --- | --- |
| Name | Type | Description |
| maxCapacity | int | Maximum ferry vehicle capacity |
| numOnBoard | int | current vehicle count |
| curPort | int | current location port |
| totalPorts | int | total number of ports |
| destination | int | Sets the destination port |
| carsPortA | int | number of cars waiting at port A |
| carsPortB | int | number of cars waiting at port B |

Methods

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Parameters | Description |
| FerryBoat | NA | maxCap  starting port #  total # ports  cars in port A and B | constructor!  numOnBoard=0 |
| getMaxCapacity | int | none | returns maxCapacity |
| getNumOnBoard | int | none | returns numOnBoard |
| getCurPort | int | none | returns current port |
| getTotalPorts | int | none | returns totalPorts |
| getDestination | int | none | returns destination |
| loadPax | void | none | Loads max of vehicles <= remaining capacity, subtracts from total waiting |
| unloadPax | void | none | unloads max vehicles <= number currently on board |
| setDestination | void | destination port | sets the port that moveFerry will end up |
| moveFerry | void | next port | moves ferry from port x to port y |
| setCurrentPort | void | none | Sets the port that the ferry is at, currently. |
| genRandNumberFromRange | int | max, min | Generates a value between x and y |
| setAutosPortA | int | max, min | uses genRandNumberFromRange and assigns result to the number of cars in port A |
| setAutosPortB | int | max, min | uses genRandNumberFromRange and assigns result to the number of cars in port B |
| getAutos | int | port number | returns the number of cars in port x |