FishList.h

//Enumeration for fish species

enum Species {PERCH, WALLEYE, BASS};

//Class to manage the list of fish

Class FishList:

//structure for list nodes

struct ListNode:

string name

double length

double weight

Species speciesType

ListNode pointer to next

//Constructor

ListNode()

Set the name to empty string

Set the length to zero

Set the weight to zero

Set next to nullptr

//Head of the list

ListNode pointer head

//Private method to print list in reverse

printReverse(ListNode \*node);

//Constructor for the Fishlist which sets head to nullptr

FishList():

Set head to nullptr

//Copy constructor creates a copy of the list

FishList(FishList &theCopy);

//Destructor deallocates all the nodes in the list.

~FishList();

//Insert a new node into the list

insertItem(string name, double length, double weight, Species speciesType);

//Print items of a specific species

printSpeciesItems(Species speciesType);

//Print all items in the list

printList();

//Public method to print the list in reverse

printReverseList();

FishList.cpp

//Inserts a fish to the list, sorted by length and weight in descending order.

void FishList::insertItem(string Thename, double Thelength, double Theweight, Species ThespeciesType);

//Prints the details of a specified species.

void FishList:: printSpeciesItems(Species \*Type) const;

//Displays the details of all fish in the list.

void FishList:: printList() const

//Recursively prints the list in reverse order (private function).

void FishList::printReverse(ListNode\* node) const;

//Initiates the reverse printing of the list.

void FishList:: printReverseList() const;

//Destructor that deallocates the list's nodes.

FishList::~FishList();

//Converts the Species enumeration to a string.

string speciesString(Species species);

main.cpp

//Displays and get the user's choice from the menu.

int printMenu();

//Allows user to insert a fish item into myList.

void insertItem(FishList& myList);

//Displays items from myList of a specific species.

void listSpeciesItems(FishList& myList);

//Prints all items in the list

void printList(FishList &myList);

//Prints all items in myList in reverse order.

void printListReverse(FishList &myList);

//Asks user to choose a fish species and returns it.

Species getSpecies();