

CC2 - Week 5 - Spiral 1 Submission

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Problem 3 - Nolan Downey

1) Identify Objectives

- a. Create a class which contains the four different elements
 - i. URL - string
 - ii. Website Header - string
 - iii. Date Visited - string
 - iv. Time Visited - string
- b. Create a main driver which reads in the information from a text file and stores it in the class
- c. Use a data structure to store the classes, then overload the ostream operator to print out the elements in the specific order required

2) Identify Risks and Alternatives

- a. Risk: Use a Hash Table to easily store the information
- b. Alternative: Have to keep the elements in the order that they are accessed
- c. Risk: Do not know how many websites are going to be entered
- d. Alternative: Store the websites into a data structure that can handle an unknown number
- e. Risk: Need to know whether the characters are in Unicode or ASCII
- f. Alternative: We can assume the characters will be in ASCII because they will be run on the Notre Dame computers
- g. Risk: Ensure that the right number of arguments is run on the command line
- h. Alternative: Write a function that ensures the right number of arguments is given
- i. Risk: Duplicates can be given in a browser history
- j. Alternative: Use a data structure that can take in multiple versions of similar elements

3) Product Testing and Development

- a. Use a `std::vector` to store the class Site
- b. The class Site should contain a constructor and an overloaded operator to store the elements from the text file and then a private element for each data type of the elements of the browsing history
- c. As the elements are read from the data file, they are stored into the class Site, then each class is pushed into the vector using the `.push_back()` method
- d. The following testing method displays the logic behind the approach
- e. Also the elements will be stored in the order that they are accessed

Vector	
0	Element 1 - Class Site - URL - Website Header - Date Visited - Time Visited
1	Next Element - Class Site - URL - Website Header

	- Date Visited - Time Visited
Etc..	Etc.

Problem 1 - Connor Ruff

1) Identify Objectives

- a. Create a class which contains the five different elements
 - i. Song ID - unsigned int
 - ii. Artist/Band Name - string
 - iii. Song Title - string
 - iv. Album Name - string
 - v. Year Recorded - unsigned int
- b. Create a main driver which reads in the information from a text file and stores it in the class
- c. Use a data structure to store the classes, then overload the ostream operator to print out the elements in the specific order required

2) Identify Risks and Alternatives

- a. Risk: Use a Hash Table to easily store the information
- b. Alternative: Have to keep the elements in the order that they are accessed
- c. Risk: Do not know how many websites are going to be entered
- d. Alternative: Store the playlist into a data structure that can handle an unknown number
- e. Risk: Need to know whether the characters are in Unicode or ASCII
- f. Alternative: We can assume the characters will be in ASCII because they will be run on the Notre Dame computers
- g. Risk: Ensure that the right number of arguments is run on the command line
- h. Alternative: Write a function that ensures the right number of arguments is given
- i. Risk: Duplicates can be given in a playlist
- j. Alternative: Use a data structure that can take in multiple versions of similar elements

3) Product Testing and Development

- a. Use a `std::vector` to store the class Music
- b. The class Music should contain a constructor and an overloaded operator to store the elements from the text file and then a private element for each data type of the elements of the playlist
- c. As the elements are read from the data file, they are stored into the class Music, then each class is pushed into the vector using the `.push_back()` method
- d. The following testing method displays the logic behind the approach
- e. Also the elements will be stored in the order that they are accessed

Vector	
0	Element 1 - Class Music - Song ID - Artist/Band Name - Song Title - Album Name - Year Recorded
1	Next Element - Class Music - Song ID

	<ul style="list-style-type: none"> - Artist/Band Name - Song Title - Album Name - Year Recorded
Etc..	Etc..

Problem 2 - Kelly Buchanan

4) Identify Objectives

- Create a class which contains the four different elements
 - Item ID - unsigned int
 - Manufacturer Name - string
 - Item Name - string
 - Cost - string
- Create a main driver which reads in the information from a text file and stores it in the class
- Use a data structure to store the classes, then overload the ostream operator to print out the elements in the specific order required

5) Identify Risks and Alternatives

- Risk: Use a Hash Table to easily store the information
- Alternative: Have to keep the elements in the order that they are accessed
- Risk: Do not know how many items are going to be entered
- Alternative: Store the websites into a data structure that can handle an unknown number
- Risk: Need to know whether the characters are in Unicode or ASCII
- Alternative: We can assume the characters will be in ASCII because they will be run on the Notre Dame computers
- Risk: Ensure that the right number of arguments is run on the command line
- Alternative: Write a function that ensures the right number of arguments is given
- Risk: Duplicates can be given in a receipt
- Alternative: Use a data structure that can take in multiple versions of similar elements

6) Product Testing and Development

- Use a `std::vector` to store the class Receipt
- The class Receipt should contain a constructor and an overloaded operator to store the elements from the text file and then a private element for each data type of the elements of the receipt
- As the elements are read from the data file, they are stored into the class Receipt, then each class is pushed into the vector using the `.push_back()` method
- The following testing method displays the logic behind the approach
- Also the elements will be stored in the order that they are accessed

Vector	
0	Element 1 - Class Receipt <ul style="list-style-type: none"> - Item ID - Manufacturer Name - Item Name - Cost
1	Next Element - Class Receipt <ul style="list-style-type: none"> - Item ID

	<ul style="list-style-type: none">- Manufacturer Name- Item Name- Cost
Etc..	Etc..