Assignment 1 design

By 1686498

Palindrome
States: enteredPhrase – Stores the entered phrase allLettersPhrase – Stores the all letters phrase lowerCasePhrase – Stores the lower case phrase backwardsPhrase – Stores the phrase backwards
Behaviours: removeNonLetters – To remove things like full stops lowerCase – To change all characters to lower case isPalindrome – To check if the word is the same forwards as it is backwards

- The users input will be stored in enteredPhrase
- isPalindrome will take in enteredPhrase
- isPalindrome will call removeNonLetters using the enteredPhrase as input
- removeNonLetters will go through the enteredPhrase character by character and copy only letters into allLettersPhrase, allLettersPhrase will then be retured by the function.
- AllLettersPhrase will then be eneterd into the function lowerCase as a paramenter
- lowerCase will change all characters to lower case and store this phrase in lowerCasePhrase, which will be returned.
- Then in isPalindome lowerCasePhrase will be reversed and stored in backwardsPhrase.
- These will strings will then be compared and isPalindrome will return either yes or no

Main:
- This will take in input from the users
- It will create the class Palindrome
- It will then run the function isPalindrome
- It will output what isPalidrome returns

Testing:
I will test with a few different samples of inputs
Input 1:
    glenelg
Output 1:
    yes
Input 2:
    bike
Output 2:
    no
Input 3:
    BenEb
Output 3:
    yes

Input 4:

betteb

Output 4:

yes

Input 5:

trie,4%eirt

Output 5:

yes

Input 6:

Race fast, safe car.

Output 6:

yes

Input 7:

ADDS is fun.

Output 7:

no