February 10, 2021

URL Parses

Programming ASsignment 1: Documentation

# Description

This assignment is to write a simple URL parser to take apart the components of a URL given as input to your program. The program analyses the input, breaks down the components and then processes each part step by step.

The working of the code is such that it can analyze each component of the code and then break it down into it's respective parts. The parts would be protocol, domain, port, file path and parameters. Once it does take the input, it can then check the input against specified conditions and then inform the user whether the URL is valid or not.  
One extra feature of this parses is that it can point out the mistake in the URL as well. For example  
if the port entry was not within 1-65535 or if the specific protocol was invalid.

## Processes/Working

### Takes an input string from user, generates respective variables to store bools and char

### Breaks down string and components with the help of substr function and pointers such as the period symbol, comma, slash etc

### Stores respective components in the variables initially set aside.

### Check each component for validation and assign flag accordingly.

### Display either success or error message based on flag.

## Major concepts used

### Variables, if/else loops, string functions, string comparisons and variable comparisons

## Snapshots of Code

### This is the initial prompt

### Sample error message when the input has problem in domain nameText Description automatically generated

## Sample Input

### A picture containing text, electronics, computer Description automatically generated

## That is the end of the documentation. If there are any other questions please reach out to me via my email: [Abhitej.arora@utdallas.edu](mailto:Abhitej.arora@utdallas.edu)

## Thank you,

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