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**UNIX**

**A simple URL Parser**

A simple program that prompts the user to enter a string and parses the information of the given URL.

EXECUTABLE: urlparsexe.out

C++ file: urlparse.cpp

Sample Input:

<https://cs.utdallas.edu:80/directory/faculty/people.html?name=Robert>

Sample Output:

**Protocol: https**

**Domain: cs.utdallas.edu**

**Port: 80**

**Filepath: directory/faculty/people.html**

**Parameters: name=Robert**

**Functions**

**int main()**

**bool isValidProtocol(string protocol);**

**bool isValidDomain(string& domain, string& port);**

**bool isValidFilePath(string& filepath, string& parameters);**

**void URLparse(char url[]);**

**bool isValidPort (string& s);**

**bool isValidTLD (string TLD);**

**bool isValidDomainToken1(string token1);**

**bool isValidDomainToken2(string token2);**

**bool isValidDomainToken3(string token3, string& port);**

**int main()**

Prompts the user to enter the string and passes it to **URLParse**

**void URLparse(char url[]);**

Takes the string and it parses it, it calls all other functions

**bool isValidDomain(string& domain, string& port);**

Takes a domain string and an empty port string

if it determines that the domain includes a port it parses and initializes the port.

**bool isValidFilePath(string& filepath, string& parameters);**

Takes a filepath string and an empty string parameter determines if the string contains a parameter and if it does it, it initializes the string.

**bool isValidProtocol(string protocol);**

Takes a string and determines if it is a valid protocol

**bool isValidPort (string& s);**

Check if a port is in a valid range.

**bool isValidTLD (string TLD);**

Checks if a string is a valid top-level domain.

**bool isValidDomainToken1(string token1);**

Checks if the first argument of a domain is valid

**bool isValidDomainToken2(string token2);**

checks if the second argument of a domain is valid

**bool isValidDomainToken3(string token3);**

checks if the third argument of a domain is valid