

Caleb Gill
ECE470
HW3

```
/* The test program for SplitURL function from Homework 2 - ECE470 */

/**
    HW3
    file: split_url.cpp
    Author: Caleb Gill
*/
#include<iostream>
#include<string>
using namespace std;

void SplitURL(const string &url, string &type, string &host, string &page)
{
    // *** do not modify above (except for adding your homework header comment) ***
    unsigned int currentPos = 0;

    //TYPE
    if (url.find("://") != string::npos)
    {
        type = url.substr(0, url.find("://")); // extracts string containing type
        (http, etc.)
        currentPos = url.find("://") + 3; // update pos in url
    }
    else
    {
        type = "http"; // http by default
    }

    //HOST
    if (url.substr(currentPos).find("/") != string::npos)
    {
        host = url.substr(currentPos, url.substr(currentPos).find("/")); // extracts
        all text until next "/" char to get host
        currentPos = currentPos + url.substr(currentPos).find("/"); //update pos in
        string
    }
    else
    {
        host = url.substr(currentPos);
        currentPos = string::npos;
    }

    //PAGE
    if (currentPos != string::npos)
    {
        page = url.substr(currentPos);
    }
    else
    {
        page = "/";
    }
}
```

```
    }  
    // *** do not modify below ***  
}  
  
int main() {  
    cout << "This is the test program for SplitURL function" << endl << endl;  
    for (;;) {  
        cout << "\nPlease enter the URL to split or q to quit" << endl;  
        cout << "URL=";  
        string U;  
        cin >> U;  
        if (U == "q") break;  
        string T, H, P;  
        SplitURL(U, T, H, P);  
        cout << "TYPE: " << T << endl;  
        cout << "HOST: " << H << endl;  
        cout << "PAGE: " << P << endl;  
    }  
    cout << "Good bye!" << endl;  
    return(0);  
}
```

```
CA\GitRepos\ECE470\IW3\IW3\Debug\IW3.exe
This is the test program for SplitURL function

Please enter the URL to split or q to quit
URL=http://www.bradley.edu/
TYPE: http
HOST: www.bradley.edu
PAGE: /

Please enter the URL to split or q to quit
URL=http://www.bradley.edu
TYPE: http
HOST: www.bradley.edu
PAGE: /

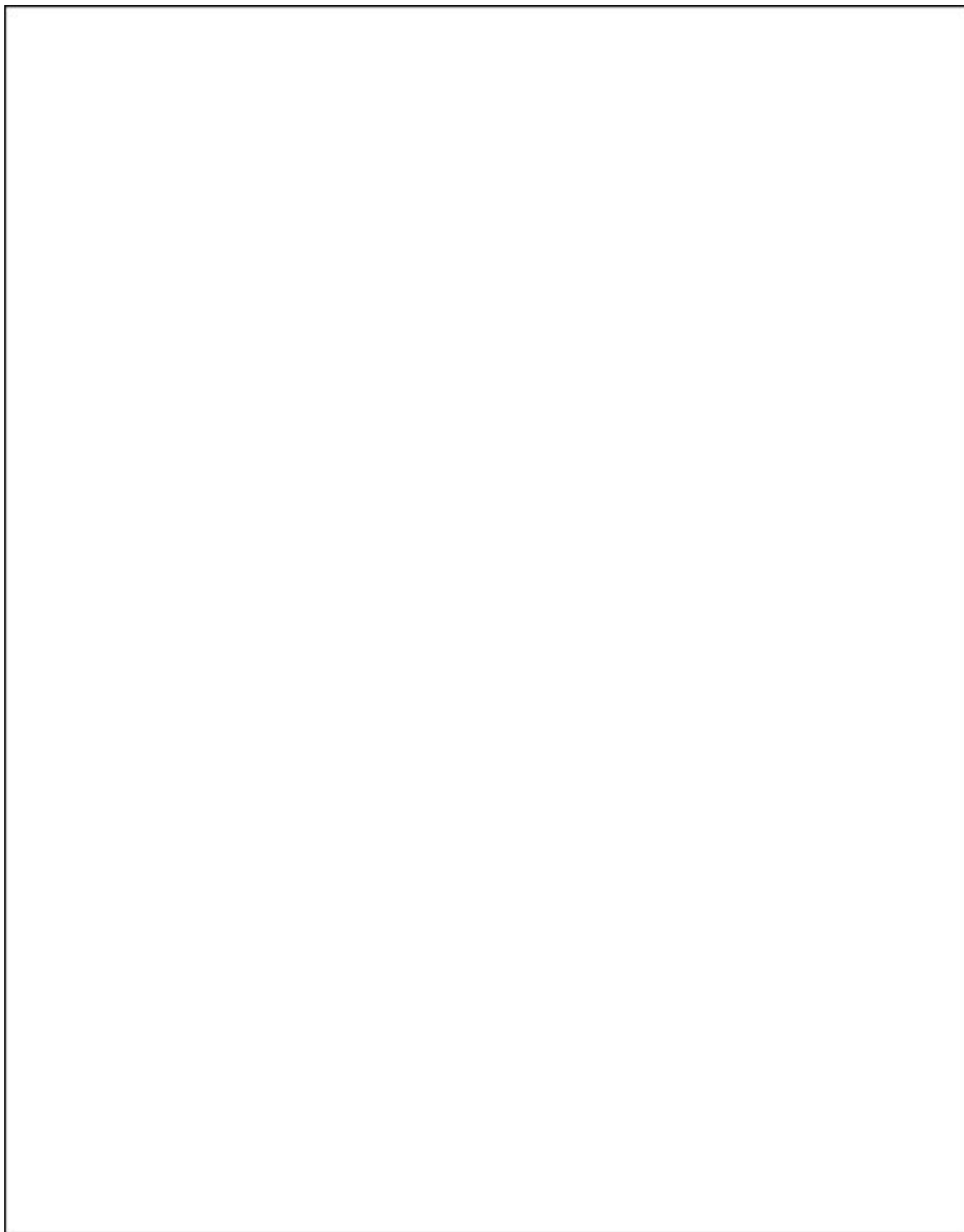
Please enter the URL to split or q to quit
URL=www.bradley.edu
TYPE: http
HOST: www.bradley.edu
PAGE: /

Please enter the URL to split or q to quit
URL=http://ee.bradley.edu/projects/index.shtml
TYPE: http
HOST: ee.bradley.edu
PAGE: /projects/index.shtml

Please enter the URL to split or q to quit
URL=www.weather.com
TYPE: http
HOST: www.weather.com
PAGE: /

Please enter the URL to split or q to quit
URL=http://www.weather.com/weather/local/USIL0935
TYPE: http
HOST: www.weather.com
PAGE: /weather/local/USIL0935

Please enter the URL to split or q to quit
URL=ieee
TYPE: http
HOST: ieee
PAGE: /
```



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C:\GitRepos\TCF470\IW3\IW3\Debug\IW3.exe

Please enter the URL to split or q to quit
URL=www.bradley.edu
TYPE: http
HOST: www.bradley.edu
PAGE: /

Please enter the URL to split or q to quit
URL=http://ee.bradley.edu/projects/index.shtml
TYPE: http
HOST: ee.bradley.edu
PAGE: /projects/index.shtml

Please enter the URL to split or q to quit
URL=www.weather.com
TYPE: http
HOST: www.weather.com
PAGE: /

Please enter the URL to split or q to quit
URL=http://www.weather.com/weather/local/USIL0935
TYPE: http
HOST: www.weather.com
PAGE: /weather/local/USIL0935

Please enter the URL to split or q to quit
URL=ieee
TYPE: http
HOST: ieee
PAGE: /

Please enter the URL to split or q to quit
URL=http://datatracker.ietf.org/doc/rfc1630/
TYPE: http
HOST: datatracker.ietf.org
PAGE: /doc/rfc1630/

Please enter the URL to split or q to quit
URL=TYPE://HOST/PAGE/LOCATION
TYPE: TYPE
HOST: HOST
PAGE: /PAGE/LOCATION

Please enter the URL to split or q to quit
```

