

For the random testers I built off what was already in the testIsValid() function instead of creating new code. Previously in the code base each url that was being tested was the order of how you create a url, ie. <http://www.google.com>. To make the URL's random I created a new array of the previously used string parts, but reordered them. This is the new array of arrays:

```
Object[] testUrlPartsRandom = {testUrlPort,testPath, testUrlScheme,  
testUrlQuery,testUrlAuthority};
```

When I ran unit tests the number of valid URL's was over 1000, when I did this random test I only get these back as valid

```
http://www.google.com  
http://go.com  
http://go.au  
http://0.0.0.0  
http://255.255.255.255  
http://255.com  
ftp://www.google.com  
ftp://go.com  
ftp://go.au  
ftp://0.0.0.0  
ftp://255.255.255.255  
ftp://255.com  
h3t://www.google.com  
h3t://go.com  
h3t://go.au  
h3t://0.0.0.0  
h3t://255.255.255.255  
h3t://255.com
```

Just by feeding in random strings it is far less likely a usable URL will be created.