**Topic**: text, text, text (arrays, functions, strings)

**Approach**: Build CGI programs, then build the tools they use

#### **Overview and Intro**

Basic Operation of Web Communication

Connect, Request, Act, Reply

Basic parts of a cgi application: form, connector, script, tools

#### **CGI Example**

stationnames - no form needed

# **Improving Our Website**

Clearer - use hyperlinks to make access to tools as text

Robust - Reduce user error with radio buttons Flexible - Add choices with radio buttons

Summary: (1) Hyperlinks, (2) radio buttons, (3) if..then..

### C Data Types and Structures

C has only the basic types the machine supports: int, float, char, pointer

Only three types of aggregate storage: array, struct, union

No data types hide any internal structure

## **Array Basics**

What

Operations: Creating, Indexing, Initializing

Note: a multi-dimensional array IS an array of arrays

Arrays and Functions: always pass by reference

example: array-func-demo.c

### **String Basics**

A string is an array of chars with a '\0' to mark end

One works with strings using functions

### **String Programming**

Inherits from array

Input/Output has special methods

writing splitline

using splitline

writing readln

using readln