## **PORTFOLIO**

HTML/CSS
Visual Basic
C++

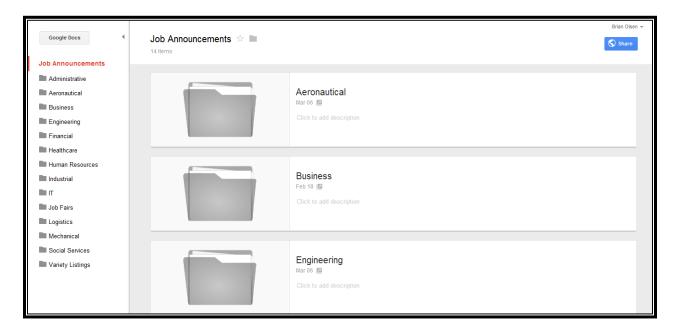
**Microsoft Excel** 

### HTML/CSS

#### **MAIN PAGE**



#### **GOOGLE DOCS - JOB LISTINGS**

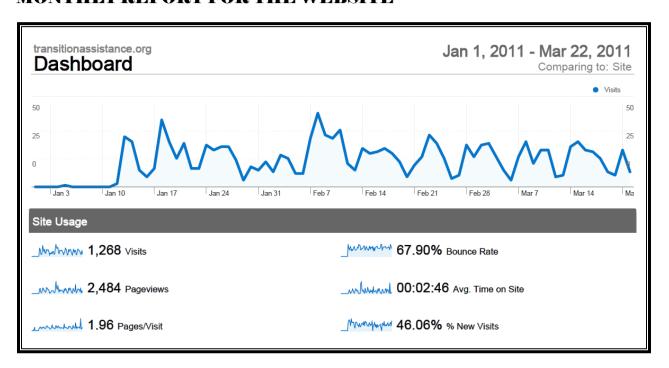


#### **DOWNLOAD ASSISTANCE**

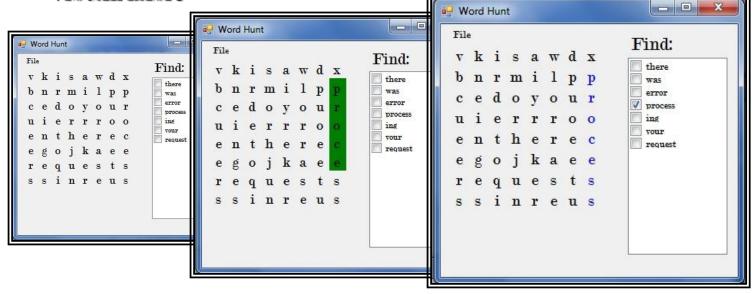


CLIENT: AIRMAN & FAMILY
READINESS CENTER
CLIENT DESCRIPTION: JOB
FINDING AND TRANSITION
ASSISTANCE
PROJECT BRIEF: I ESTABLISHED A
WEBSITE THAT EXPEDITED THE
JOB FINDING PROCESS FOR
RECENTLY RETIRED MILITARY
MEMBERS. I ALSO PROVIDED
MANY USER FRIENDLY
TUTORIALS FOR THE CLIENT
AND TRACKED STATISTICAL
DATA FOR THE COMPANY.

#### MONTHLY REPORT FOR THE WEBSITE



#### VISUAL BASIC



COURSE: CS 275 – INTERACTION
PROGRAMMING
PROGRAM DESCRIPTION: WORD
FINDER APPLICATION THAT LOADS
DIFFERENT WORD PUZZLES FROM A
SAVED TEXT FILE.
COMMENTS: I CHOSE THIS CODE TO
DISPLAY MY ABILITY OF PROBLEM
SOLVING BY NARROWING DOWN
VARIABLES TO SIMPLIFY THE ABILITY TO
TRACK THE MOVES OF THE USER
BASED ON THE PREVIOUS DIRECTION
THEY HAD CLICKED ON.

```
If Not puzzleInUse Then
   Puzzle(i, j).BackColor = Color.Green
   puzzleInUse = True
   k = i + 1
   l = j + 1
ElseIf k \ge 0 AndAlso 1 \ge 0 AndAlso
k <= rows - 1 AndAlso l <= cols - 1 AndAlso _
Puzzle(k, 1).BackColor = Color.Green Then
   tempAngle = Nothing
   If i = k AndAlso Not l = j Then
      tempAngle = "HORIZONTAL"
      countOfUsedIndeces += 1
   ElseIf j = 1 AndAlso Not k = i Then
      tempAngle = "VERTICAL"
      countOfUsedIndeces += 1
   ElseIf i - j = k - l AndAlso Not i = k Then
      tempAngle = "ULDIAGONAL"
      countOfUsedIndeces += 1
   ElseIf i + j = k + l AndAlso Not i = k Then
      tempAngle = "LLDIAGONAL"
      countOfUsedIndeces += 1
   Else
      tempAngle = "BADPLACEMENT"
      k = i + 1
      l = j + 1
   End If
End If
```

 $\mathbb{C}++$ 

COURSE: CS 312 – INTRODUCTION TO ORGANIZATION AND ARCHITECTURE PROGRAM DESCRIPTION: PROCESSER SIMULATOR THAT READS IN BINARY FILES AND PARSES THEM INTO ASSEMBLY CODE INSTRUCTIONS.
COMMENTS: I CHOSE THIS CODE TO DISPLAY MY ABILITIES OF OBJECT ORIENTED PROGRAMMING. DURING THE CODING IT WAS EASY TO MIX UP INSTRUCTIONS WHILE ABSTRACTING THE PROCESSOR. I MADE A CLASS TO ORGANIZE MY CODE AND MAKE THE CODING EASIER FOR MY GROUP.

```
class Instruction{
       private:
              int memaddress, value, dest, srcRS, srcRT;
              string instruction, opcode, rs, rt, rd, sa, fcn,
              imm, jump;
              char validbit;
              Instruction* next;
              bool wasMoved,cacheMiss;
       Instruction(stringinstruction="",Instruction*next
=NULL):wasMoved(false),memaddress(memaddress),value(valu
e),cacheMiss(false),srcRS(srcRS),srcRT(srcRT){
       Instruction::instruction=instruction,
                     opcode=instruction.substr(1,5),
                     validbit=instruction.at(0),
                     rs=instruction.substr(6,5),
                     rt=instruction.substr(11,5),
                     rd=instruction.substr(16,5),
                     sa=instruction.substr(21,5),
                     fcn=instruction.substr(26,6);
                     imm=instruction.substr(16,16);
                     jump=instruction.substr(6,30);
              }
```

Cycle:5

Pre-Issue Buffer:

Entry 0: [ADD R3, R3, R1]

Entry 1: [ADD R3, R3, R2]

Entry 2: Entry 3:

Pre ALU Queue:

Entry 0: Entry 1:

Post ALU Queue:

Entry 0:

Pre\_MEM Queue:

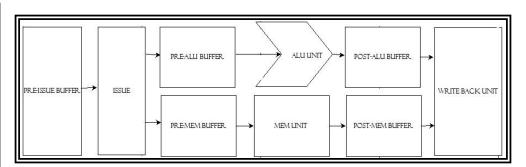
Entry 0: [LW R2, 148(R0)]

Entry 1:

Post\_MEM Queue:

Entry 0: [LW R1, 144(R0)]

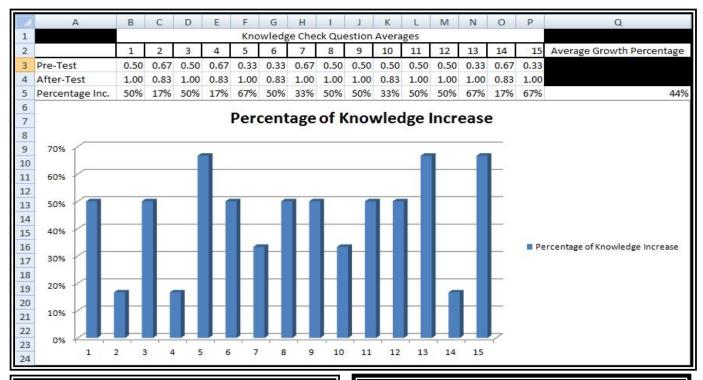
#### Registers:



ABOVE IS A FLOW DIAGRAM THAT DISPLAYS AN ABSTRACTION OF HOW THE PROCESSOR HANDLES INSTRUCTIONS.

TO THE RIGHT THERE IS A SAMPLE OF THE OUTPUT THAT DISPLAYS A SNAPSHOT DURING ONE CYCLE SHOWING THE LOCATION OF INSTRUCTIONS DURING RUNTIME. THE INSTRUCTIONS ARE DISPLAYED IN ASSEMBLY CODE FORMAT NEXT TO THE QUEUE THEY ARE LOCATED IN. THE STATE OF THE REGISTERS ARE ALSO DISPLAYED ON THE BOTTOM.

### MICROSOFT EXCEL



S	Т	U	٧	W	Х	Υ	Z	АА	AB	AC	AD	AE	AF	AG
Pre Test Results (1=Correct, 0=Wrong)														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1	1	0	1	0	1	1	0	1	1	0	0	1	0
1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
1	0	1	1	0	1	0	1	0	1	1	0	1	0	1
0	1	0	1	0	0	1	0	1	0	0	1	0	1	0
0	1	0	1	0	0	1	0	1	0	0	1	0	1	0
			8				- 6				-8			

# CLIENT: AIRMAN & FAMILY READINESS CENTER

PROJECT BRIEF: I CREATED A SPREADSHEET
THAT TAKES INPUT FROM OUR CLIENTS
THAT MEASURES THE AMOUNT THAT THEY
LEARNED DURING OUR VARIOUS CLASSES
AND SEMINARS.

