Engineering 101– W05
Lecture 2
Mark Brehob

E-mail questions I got

• Make-up exams
  – Are on the following Saturday at 9:30am
  – Contact Wanda Dobberstein
    <wldobber@engin.umich.edu>
• Same person as above for overrides.
• Last time I mentioned “cygwin”
  – You can get it from “www.cygwin.com”.
  – It isn’t hard to install, but it is a bit difficult to get working

More questions

• Working from “home”
  – Not an easy thing.
  – CAEN should be able to help
  – “putty” (type that word into Google) may be useful
    • But you can’t use the debugger or nedit
    • Good excuse to learn vi or Emacs 😊
• Also:
  – Changed directory name to use in handout from “Eng101” to “101”.
    • You can use either.

Announcements

• Everything here is on the webpage
  – So don’t feel obligated to copy it all down. I’m just telling you here to give you a feeling about stuff.
  – The webpage is:
    http://www.eecs.umich.edu/courses/engin101/
### Office hours (may be Michigan time)

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Name</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>11:00-1:00</td>
<td>Nadine</td>
<td>11:30-1:30</td>
</tr>
<tr>
<td></td>
<td>6:30-8:30</td>
<td>Alina (CENTRAL)</td>
<td>4:30-6:30 Irene</td>
</tr>
<tr>
<td>Tuesday</td>
<td>11:30-1:30</td>
<td>Paul</td>
<td>12:30-2:30</td>
</tr>
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<td></td>
<td>2:30-4:30</td>
<td>Doug</td>
<td>4:00-6:00 Brad</td>
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<td></td>
<td>4:30-6:30</td>
<td>Irene</td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td>12:30-2:30</td>
<td>Alina</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2:30-4:30</td>
<td>Nadine (CENTRAL)</td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td>3:00-5:00</td>
<td>Brad</td>
<td></td>
</tr>
</tbody>
</table>

**Offices:**
- Default is B519 Pierpont
- CENTRAL is TBA

### My office hours

- **Location**
  - EECS 2220
- **Times:**
  - Monday 3:15-4:30 (will end promptly at 4:30)
  - Thursday 2:30-4:30
  - Friday 1:30-3:30
- **Also:**
  - In the lobby after each class other than the Friday at 10:30 lecture. I have a meeting at 11:30…
- So I’m available around 8 hours a week!

### Ask me about:

- Class questions
- Project questions
- Homework questions
- Other (folks with questions about the class have priority)
  - Major issues (I know a lot about the different EECS majors)
  - Advising questions (mainly EECS folks, but general questions I can help anyone)

### Ask the GSIs about

- Lab and in-lab questions
- Project questions
- They should also be able to help with:
  - Homework
  - Exam questions
  - Etc.
Last of the announcements

• HW1
  – You should be able to do #1
  – #2 and #3 you probably can’t start until after Monday.
  – Remember due date is now Thursday at noon.

Review

• Last time:
  – Assign values
  – Doubles/int
  – Output (cout)
  – A bit about “if/else” statements

```
#include<iostream>
using namespace std;

int main()
{
    int i;
    int j;
    double k;

    i=1;
    j=2;
    k=5.0;

    if(i*2>j)
        k=1.0;
    else
        j=3;

    if(k<2)
        k=4.0;

    cout << "i= " << i << endl;
    cout << "k= " << k << endl;
    cout << "j= " << j << endl;
}
```

Comments

• Notice the way the code is indented
  – We indent to indicate what goes with what.
  – **Indentation is only for humans**
    • It doesn’t change the behavior of the code!
  – It does make it more readable.
• Also note that the if or else only applies to the line that follows.
Comments on ex1.cc

• Notice that we used {} for the while loop
  – Without them the while applies to only one line.
• Notice that the indentation is still helping us to read the code.

This is the same as ex1.cc. But it is a lot harder to read. As programs get more complex, good formatting makes it much easier to read.
```cpp
#include <iostream>
using namespace std;

main()
{
    int i=0;
    int j=0;
    double k=1.2;

    while(i<4)
    {
        if(i>2)
        {
            j=j+i;
            k=k+j;
        }
        i=i+1;
    }
    cout << "j= " << j << endl;
    cout << "i= " << i << endl;
    cout << "k= " << k << endl;
}
```

```cpp
#include <iostream>
using namespace std;

main()
{
    int count, i=0, total=0;
    cin >> count;
    while(i<count)
    {
        total=total+i;
        i=i+1;
    }
    cout << "total= " << total << endl;
    cout << "i= " << i << endl;
}
```