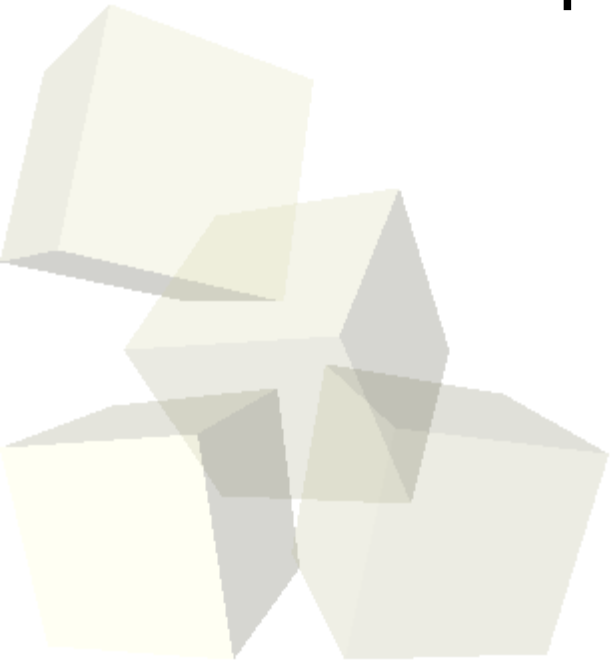


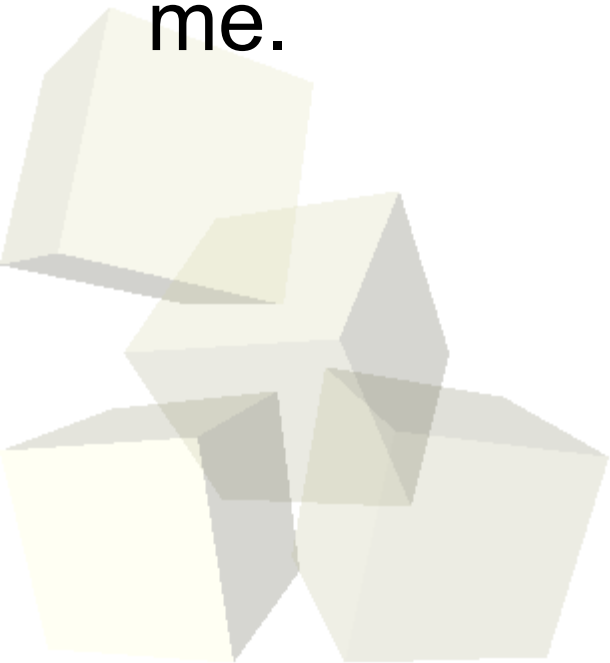
Dr. Mark C. Lewis
Department of Computer Science
1/16/2008





Opening Discussion

- I will start off every class with a little discussion. Typically this discussion includes questions about the previous class.
- Today I want to use this time to get to know a bit about you.
- I'd also like to give you a brief introduction to me so you can know some of the things that motivate me.

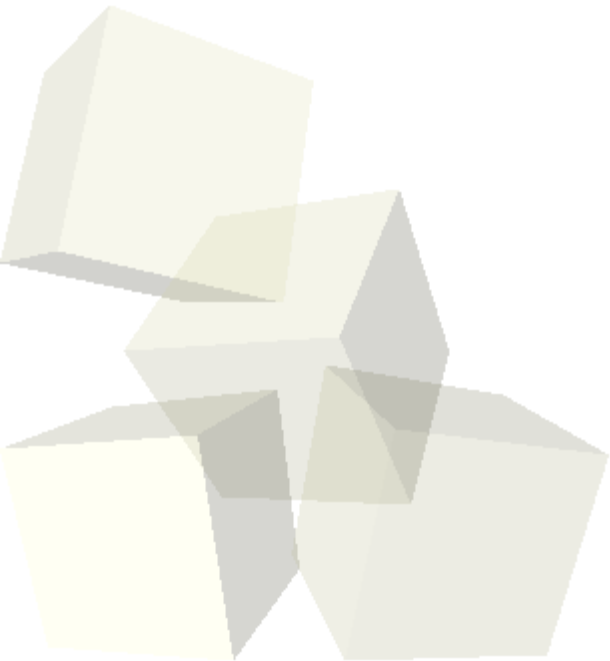




- Course web site:
<http://www.cs.trinity.edu/~mlewis/CSCI1311-S08/>
- Office: HAS 201K
- Office hours: 9:30-11:30am R. Open labs
4:30-6:00pm M, 3:30-6:00 W in in HAS 228, and
1:30-6:00 R in HAS 340.
- Phone: 7022
- E-mail: mlewis@trinity.edu (This is the best way to reach me most of the time.)
- There is a schedule on the web site listing all topics and when things are due. There are also links to my lecture notes.



- We will use “Alice in Action with Java”.
- You will be expected to do readings from this book and we will be following it rather closely. I will also be pulling problems from the book for you to work on.



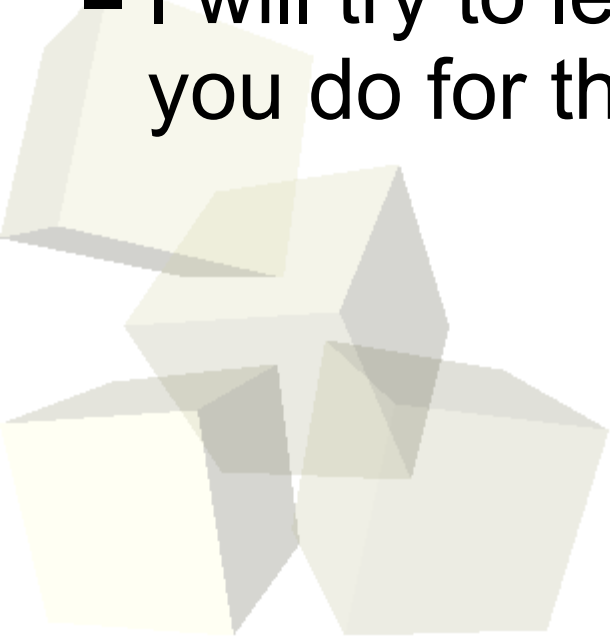


Course Description

- This course provides an introduction to programming with a primary focus on problem solving and logic.
- The course will specifically teach you how to program in Alice and Java. In the case of Java we will use the Eclipse editor. Everything can be done in Windows.
- My courses tend to be somewhat rigorous. My overriding objective is to make you think. Because of the nature of this course I want to go beyond just giving you new things to think about, but instead give you tools to think about things in new ways.

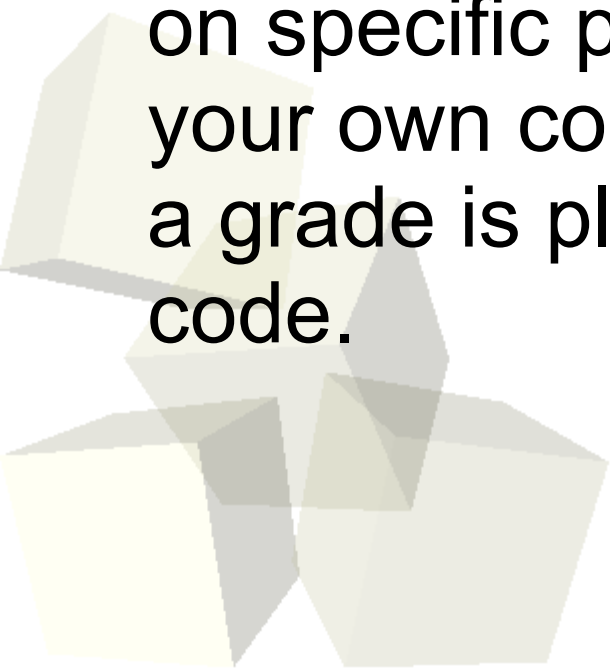


- Writing great programs is more art than science.
- Computers are the ultimate creative medium and also the ultimate creative outlet. The way we interact with them seems formal to some, but there can be a lot of fun in just looking for ideal ways to express ideas in the formal systems of different computer languages.
- I will try to let you express creativity in the work you do for this class.





- The largest chunk of your grade in this class is determined by the two projects that you will do. One will be in Alice and the other in Java.
- These projects will be fairly large scale where you apply all of the elements that we have learned about in each language.
- You can work with others on design and get help on specific problems, but what you turn in must be your own construction. Everything you turn in for a grade is pledged if you are under the honor code.





- Your grade comes from four different components.
 - ◆ Projects (2) – 40%
 - ◆ Tests (2) – 30%
 - ◆ Quizzes (6 with lowest dropped) – 10%
 - ◆ Interclass Problems – 10%
 - ◆ Class Participation – 10%
- The midterm and final are both equally weighted.
- The quiz questions are modeled after test questions so you will have an idea of the style to expect on the test.
- Each class I will give you a problem to do before the beginning of the next class.
- Class participation includes attendance and your actual participation during class.



Interclass Problems

- I use interclass problems to help you determine how much you have to read to master each topic. I will be calling on several people “randomly” at the beginning of each class to present their answers. Each of you will be called on a total of five times with each time being worth two points to your final average.
- If you don't have anything to show you get zero points. If you can display a serious effort you get two points. Limited efforts and incomplete results will give you one point.
- Problems will be small, but failing to do them can be a pretty significant impact on your grade.



What is a Program?

- A program is a set of instructions we give to a computer to make it do something.
- There are many languages we can do this in.
- A general commonality is that the instructions must be explicit and precise. Programming languages do not allow ambiguity.
- This is what makes programming so helpful for all people to learn.





Environment for this Class

- We will be using Windows for all of the instruction in this class.
- We will start off using Alice. Let's go ahead and open up Alice and see how it work.
- Later in the semester we will switch to using Java with the Eclipse environment. We won't really worry about that until we get there.
- Things should work fairly well on a Mac though Alice might have a few more bugs and Apple hadn't released Java 6 last I heard.



- Alice is an educational programming environment where your programs control the activities of graphical elements that you add to a 3-D virtual environment.
- You will start off by selecting an environment, then placing objects into that environment.
- You program in Alice by dragging and dropping commands.
- Alice is designed to be more intuitive than standard programming environments and to prevent you from running into the standard pitfalls of most programming environments.



- At the end of each class I ask one or more questions and you are supposed to answer them on a piece of paper. Make sure it has your name as this is how I do attendance.
- Do you have any questions about the course or what we will be doing?
- You should read the beginning of chapter 1 in your book and do the Alice tutorials.
- Interclass Problem : Build a scene in Alice with at least two objects in it where you have changed at least one property of each.