

# Intro to Java

Jasamine Jackson  
CRA DMP 2008  
May 30, 2008

# Objectives

- ▶ LIT Review:

Preliminary Analysis of Factors Affecting Women and African Americans in the Computing Sciences

Author: Jamika D. Burg, Tiki L. Suarez

- Motivation
- Solution Proposed
- Evaluations
- Contributions
- Future Work

- ▶ Week Work Load

- Outline
- Work Completed
- Problems
- Lesson Learned

- ▶ Next Week

# Literature Review

Motivation: Not enough women and African Americans in the field of computer science

## Ethnicity of Bachelor's and Master's Recipients

	Bachelor's		Master's	
	(CS and CE)		(CS and CE)	
African Americans	515	3%	136	2%
White	8,335	54%	2,249	26%
Total	15,317		8,536	

## Gender of Bachelor's and Master's Recipients

	Bachelor's		Master's	
	(CS and CE)		(CS and CE)	
Male	13,081	83%	5,882	75%
Female	3,022	17%	2,160	25%
Total	19,772		9,640	

# Literature Review

- ▶ Solution Proposed: Develop strategies to attract and retain
- ▶ Recommendations:
  - Develop and increase the number of partnerships to improve teaching methods
  - Use our own educational resources
  - Work with high school counselors, teachers and churches
  - Provide support groups for women and African Americans
  - Increase awareness of the different pedagogical strategies
  - Increase positive media to display computing sciences departments and programs in interesting and creative environments

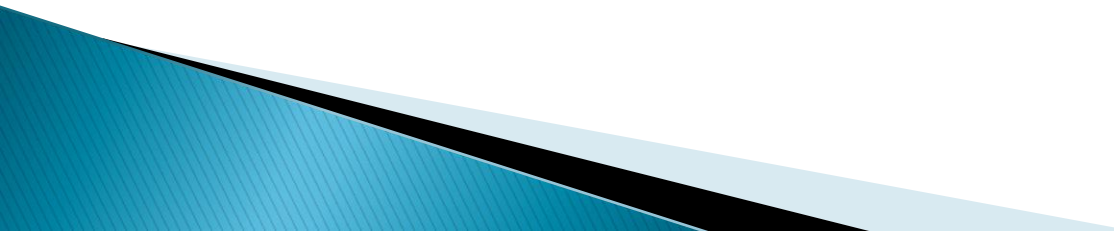
# Literature Review

## Evaluations

Factors Affecting Percentage of Underrepresented Groups Studying Computer Science			
	Social	Cultural	Financial
African Americans	<ul style="list-style-type: none"><li>•Teaching Method</li><li>•Nerdy Perception</li></ul>	<ul style="list-style-type: none"><li>•Society dictates career and educational goals (More research required)</li></ul>	Financial assistance
Women	<ul style="list-style-type: none"><li>•Intimidation In the Workforce/Teaching Method</li><li>•Nerdy Perception</li></ul>	<ul style="list-style-type: none"><li>•Not enough female role models</li><li>•Male Dominated Field</li></ul>	Financial assistance

# Literature Review

## Contributions

- ▶ Growing number of support organizations
  - ▶ Recruitment programs for African Americans
  - ▶ Increased awareness of underrepresented groups in computer science
- 

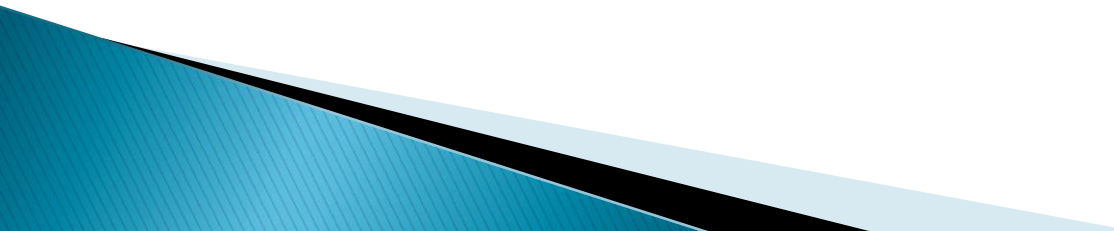
# Literature Review

- ▶ Developing better research tools to analyze the problem

(Ex: Institute for African–American Eculture)

# Week Workload

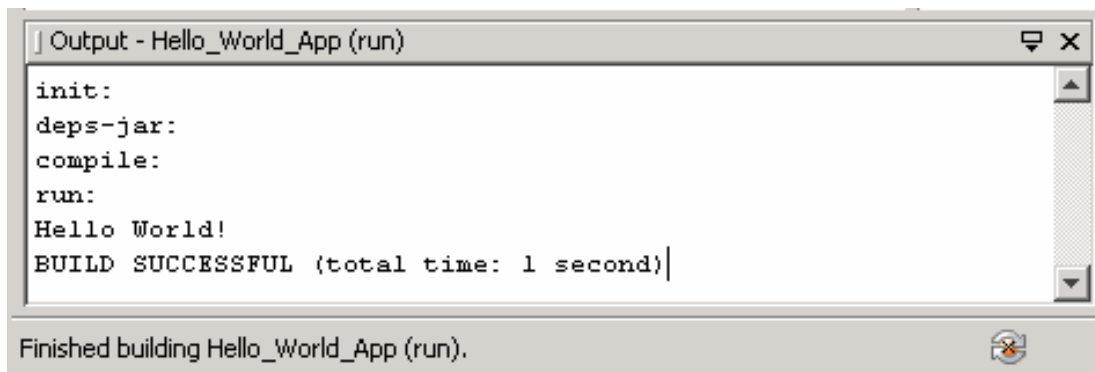
## The Plan

- ▶ Summer 2008 Project: Dance Tool Project
    - Objective: Teaches computer science code using 3D dancing graphics
    - Plan for this week: Complete mini Java assignments
- 



# Week Workload

## Mini Assignment #1: Hello World

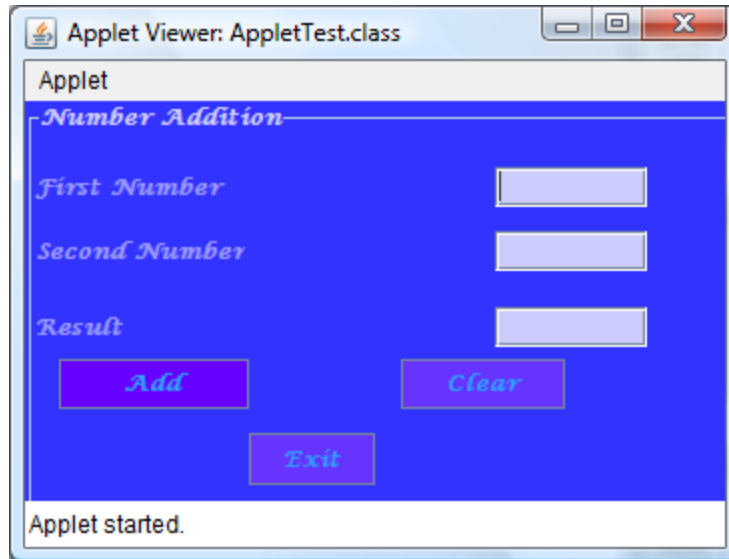


```
Output - Hello_World_App (run)
init:
deps-jar:
compile:
run:
Hello World!
BUILD SUCCESSFUL (total time: 1 second)|

Finished building Hello_World_App (run).
```

# Week Workload

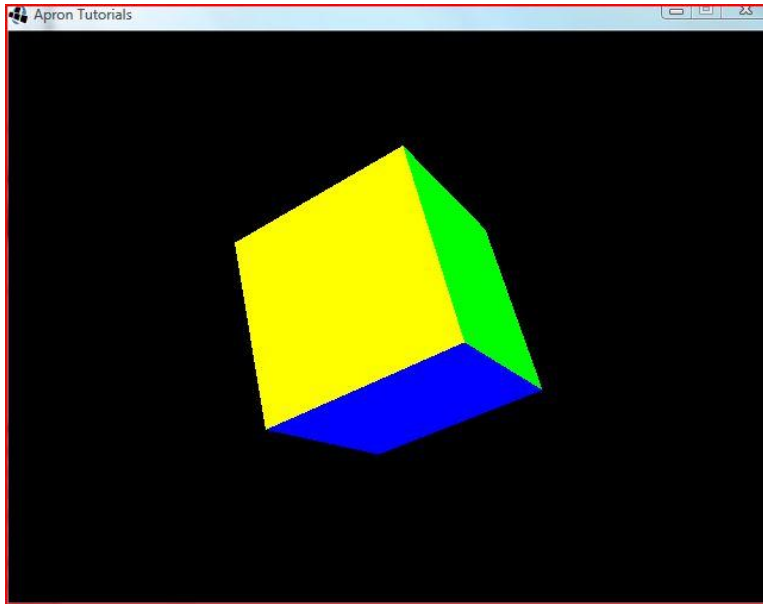
## Mini Assignment #2: Addition GUI in Applet Form



# Week Workload

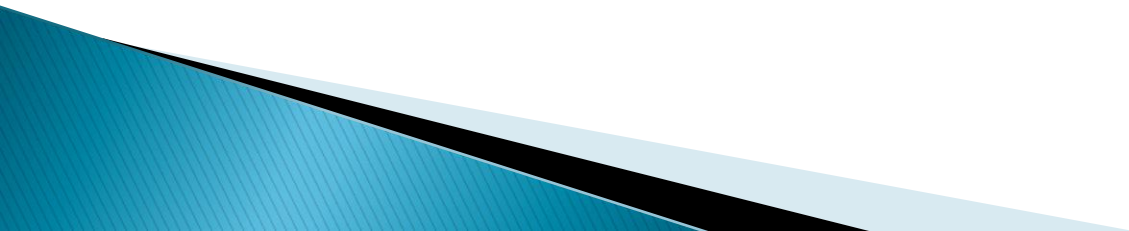
## Mini Assignment #3: The Cube:

- ▶ Requirements: Lightning, Size Manipulation, Texture, Rotation

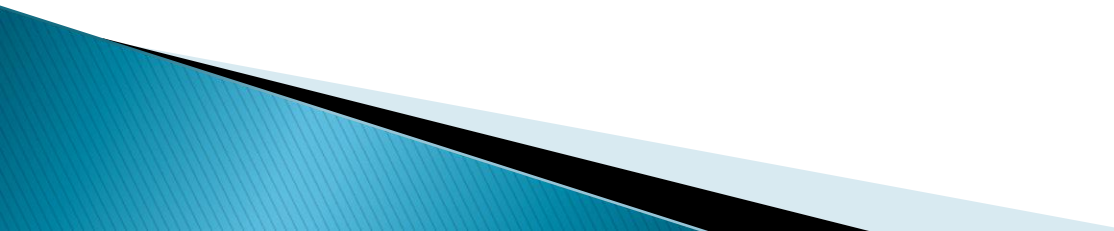


# Problems

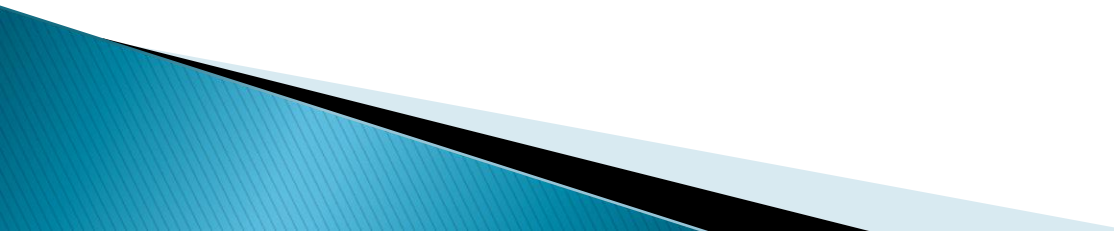
Finding good LWJGL tutorials on-line



# Lessons Learned

- ▶ Basics of Java
  - ▶ NetBeans IDE 6.1
  - ▶ LWJGL (LightWeight Java Graphic Library)
  - ▶ Better Understanding of 3D graphics
- 

# Next Week....

- ▶ Finishing the cube
  - ▶ Mini Assignment #4
  - ▶ Starting Dance Tool Project
- 

# References

*NetBeans: Introduction to GUI Building*

<http://www.netbeans.org/kb/60/java/gui-functionality.html>.

May 28, 2008.

*Java Tutorials: "Hello World for the NetBeans IDE"*

<http://java.sun.com/docs/books/tutorial/getStarted/cupojava/netbeans.html>.

May 28, 2008

*NetBeans IDE 4.0 Applet Tutorial*

<http://www.netbeans.org/kb/articles/tutorial-applets-40.html#embed>.

May 28, 2008

*OpenGL Apron Tutorials: The Rotating Cube*

[http://www.morrowland.com/apron/tutorials/gl/gl\\_rotating\\_cube.php](http://www.morrowland.com/apron/tutorials/gl/gl_rotating_cube.php)

May 29, 2008

**Any Questions?**

