

Where to Go from Here

Friday Four Square!

Yes, it's raining. But yes,
there's four square!

4:15PM, Outside Gates

Announcements

- FacePamphlet due right now.
 - **Congratulations on finishing the final assignment!**
- The final exam is next **Wednesday, March 21** from 12:15PM – 3:15PM
- Rooms divvied up by last name:
 - A – B: Go to 300-300
 - C – L: Go to Cubberly Auditorium
 - M – R: Go to Hewlett 201
 - S – Z: Go to 320-105
- Review session Sunday from 2-4PM in Hewlett 200.

Packaging Your Programs

Packaging Your Programs

-or-

How I Learned to Quit
Worrying and Love the JAR

JAR Files



- A **JAR file** (Java **AR**chive) is a packaged set of Java files.
- You can share your programs with others by creating a JAR file for your programs.

Putting Your Programs in JARs

- You can create a JAR file for your programs as follows.
- First, add a **main** method to your program that looks like this:

```
public static void main(String[] args) {  
    new ClassName() .start(args) ;  
}
```

- This **main** method will start up the program when you run it.

Step one: Add the main method.

Step two: ???

Step three: Profit!

Beyond CS106A



Where We've Been

- Variables
- Methods
- Loops
- Statements
- Graphics
- Strings
- Classes
- Files
- Arrays
- **ArrayList**
- **HashMap**
- Collections
- Images
- Interactors
- Graphs
- Networking

FirstKarelProgram

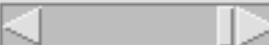
File

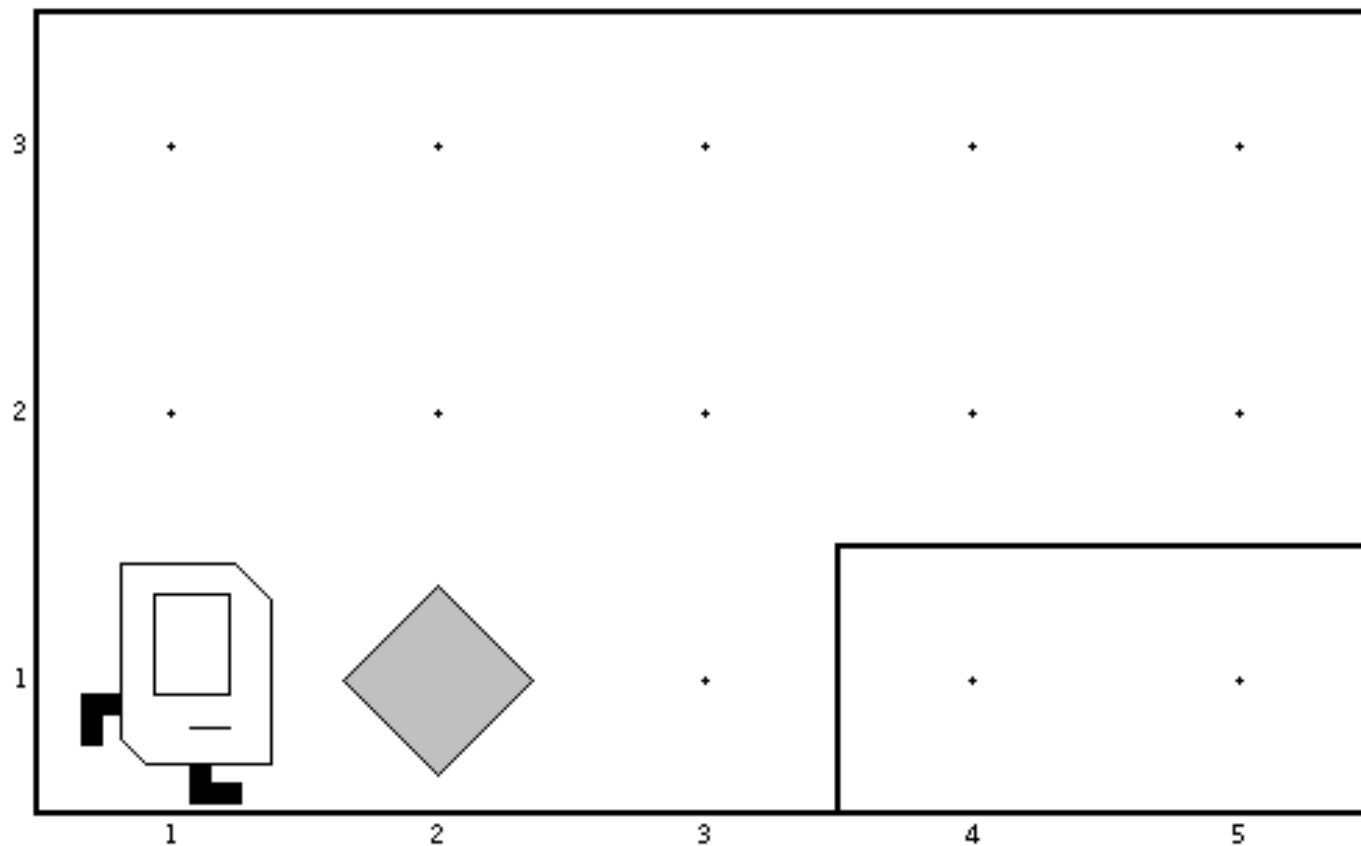
Start Program

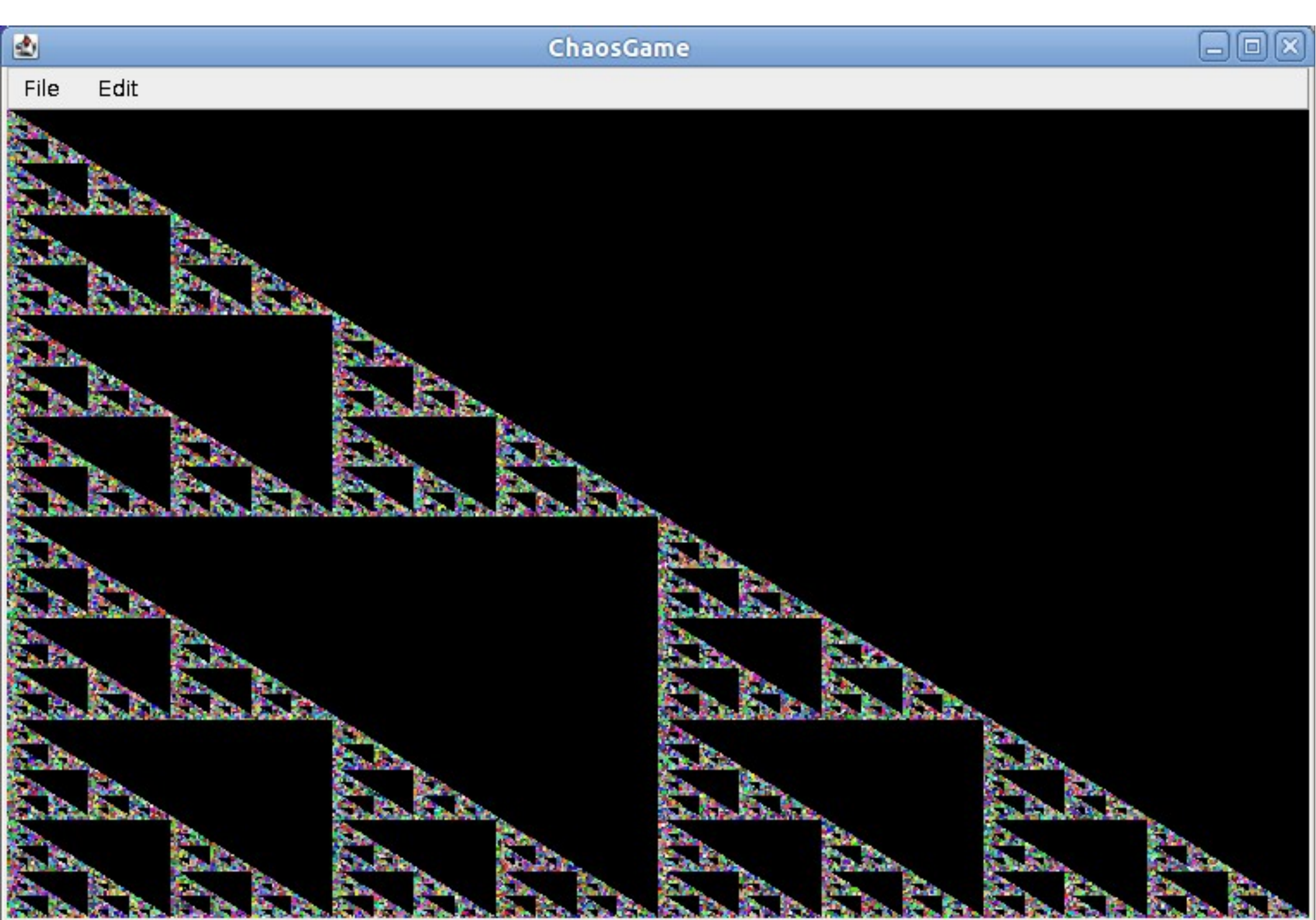
Load World

New World

Edit World

Slow  Fast



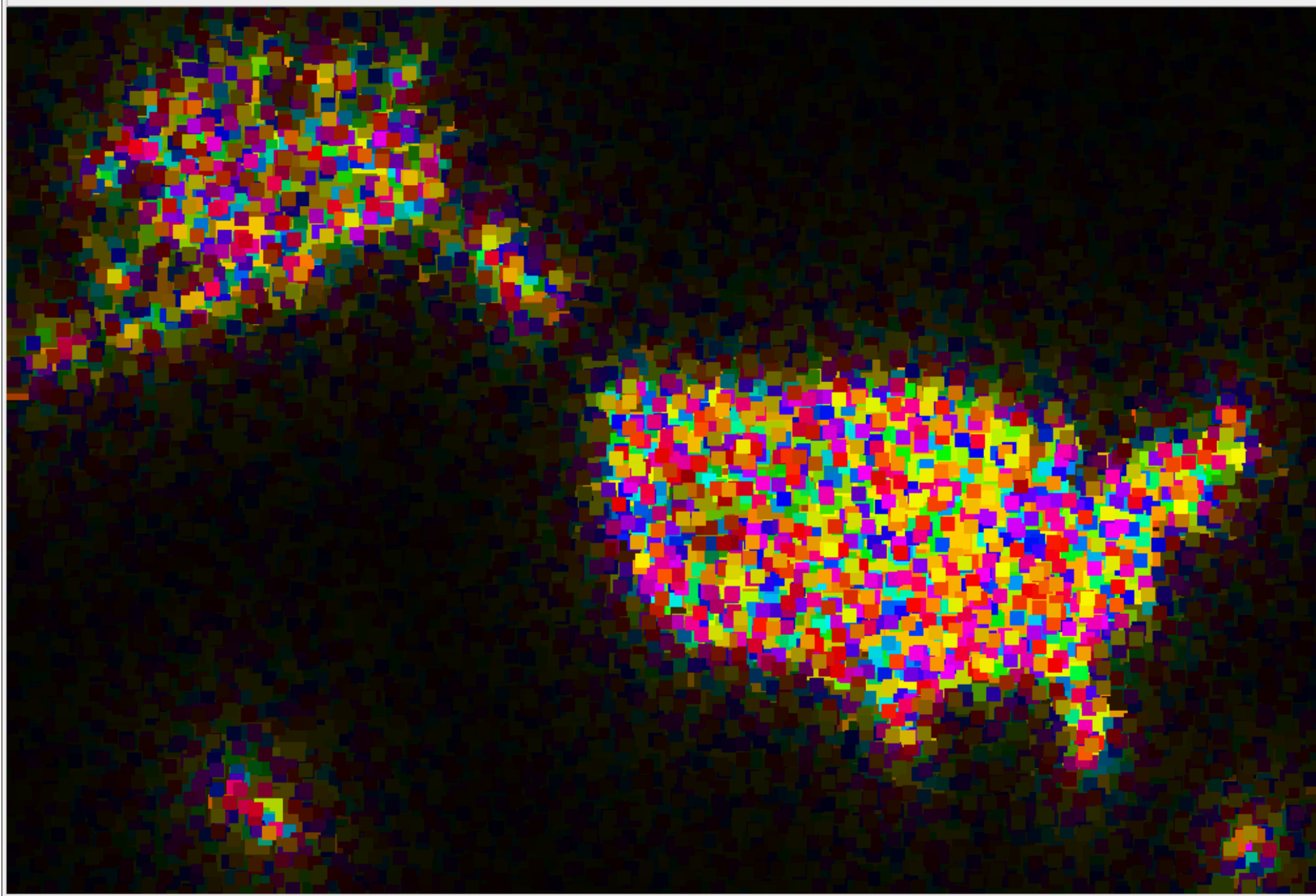




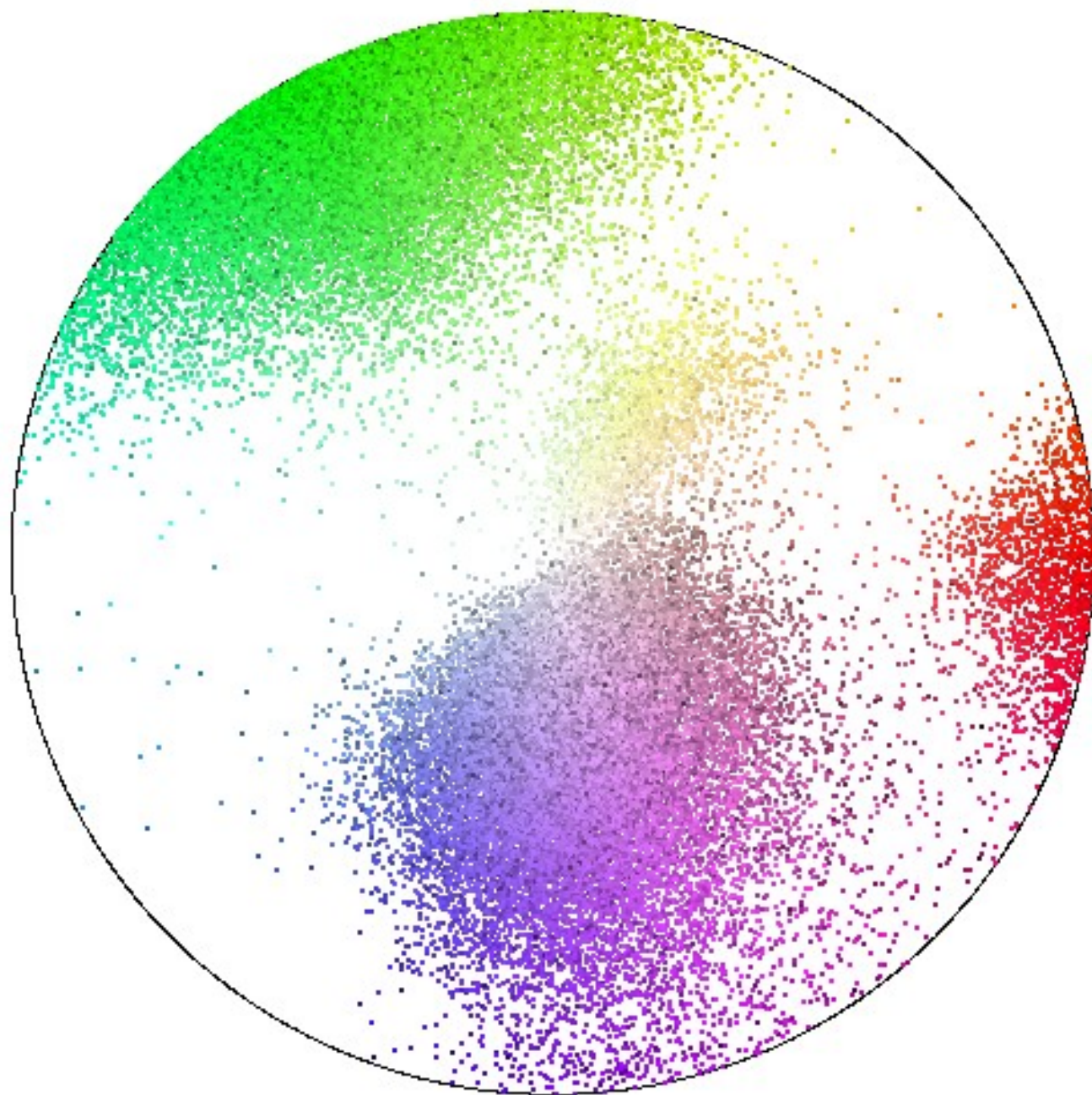
SeeTheUS



File Edit



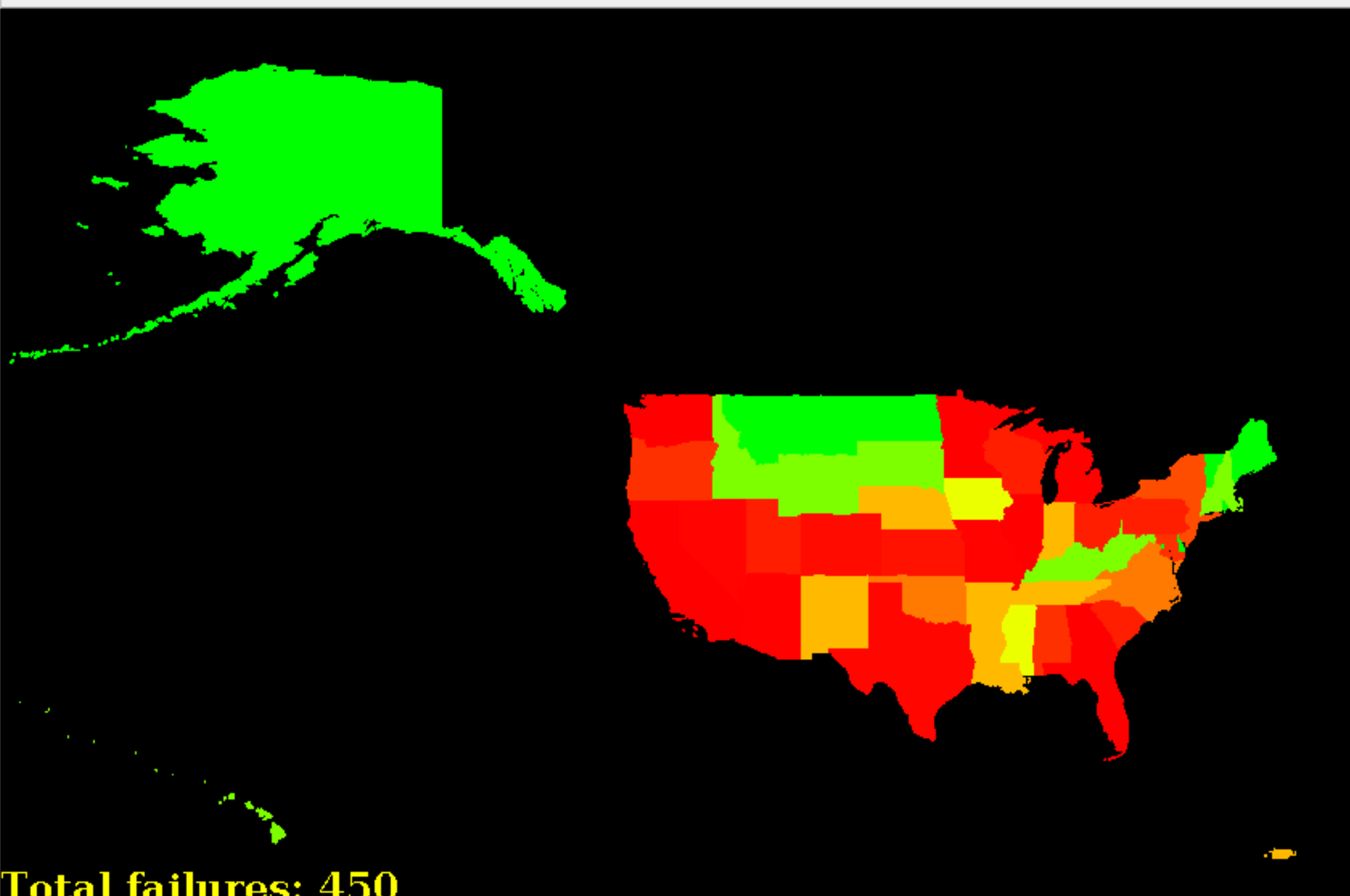
File



Enter color:



File Edit



Total failures: 450

October, 2000

February, 2012



Read 1097670 articles.

Read 32486853 links.

1: United States

2: United Kingdom

3: France

4: England

5: Canada

6: World War II

7: English language

8: Germany

9: Australia

10: India

11: London

12: Italy

13: China

14: Latin

Where We've Been

- Variables
- Methods
- Loops
- Statements
- Graphics
- Strings
- Classes
- Files
- Arrays
- **ArrayList**
- **HashMap**
- Collections
- Images
- Interactors
- Graphs
- Networking

Where We've Been

Variables

Arrays

Methods

ArrayList

Loops

HashMap

Statements

Collections

Graphics

Images

Strings

Interactors

Classes

Graphs

Files

Networking

Where We've Been

- **Learn how to harness computing power to solve problems.**
- To that end:
 - Explore fundamental techniques in computer programming.
 - Develop good software engineering techniques.
 - Gain familiarity with the Java programming language.

Where We're Going: CS106B

- **Learn to model and solve larger and more complex problems.**
- To that end:
 - Explore common abstractions for modeling problems in software.
 - See how to combine simple concepts into entirely new structures.
 - Learn standard algorithms for solving problems and how to analyze them.

Another Option: CS106X

- “Honors” version of CS106B.
- Covers material from CS106B in more depth, plus some extra topics.

Another Option: CS106X

- “Honors” version of CS106B.
- Covers material from CS106B in more depth, plus some extra topics.
- Taught by this guy:

Another Option: CS106X

- “Honors” version of CS106B.
- Covers material from CS106B in more depth, plus some extra topics.
- Taught by this guy:



Computer science is no more about computers than astronomy is about telescopes, biology is about microscopes or chemistry is about beakers and test tubes. Science is not about tools, it is about how we use them and what we find out when we do.

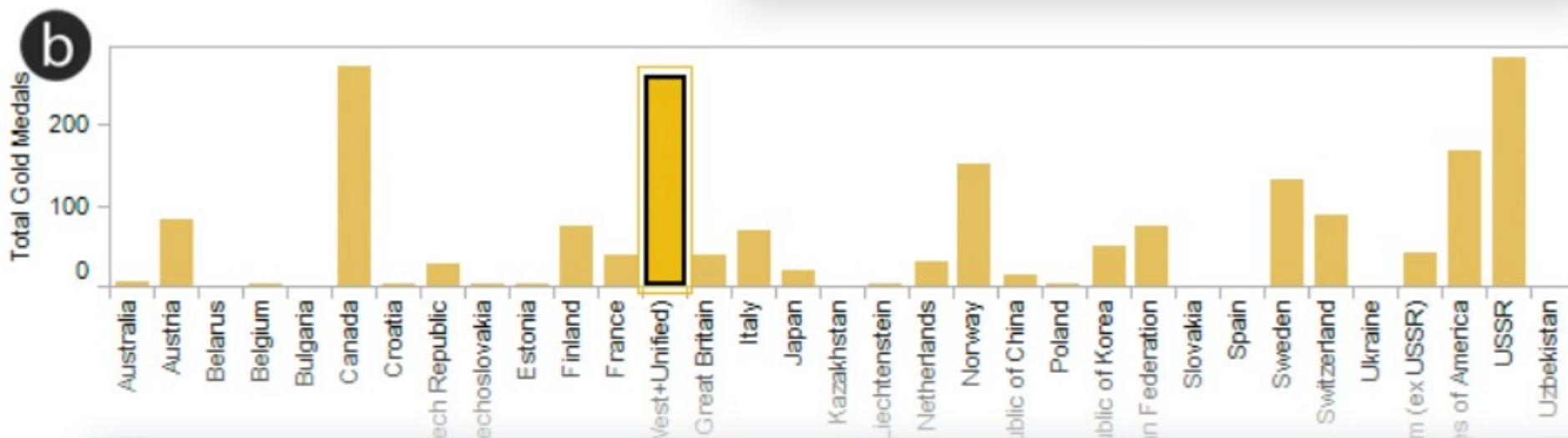
- Michael Fellows and Ian Parberry,
“SIGACT trying to get children excited about CS”

Computer science is no more about computers than astronomy is about telescopes, biology is about microscopes or chemistry is about beakers and test tubes.

Science is not about tools, it is about how we use them and what we find out when we do.

- Michael Fellows and Ian Parberry,
“SIGACT trying to get children excited about CS”





“Germany has only been absent from two of the Winter Olympic games, 1924 and 1948. They have [won]128 Gold medals which is the third highest ranking number of gold Medals. **Since Germany was not always one unit they are different from the other groups because they have combined all of the information into one line on the graph.**”

Reference: http://www.socialstudiesforkids.com/.../winter_olympics_first1.htm

All of these projects occurred
in the past three months.

All of these projects occurred
as you took CS106A.

Who's Here Today?

- Aeronautical Engineering
- Anthropology
- Art
- Biochemistry
- Biology
- Biophysics
- Business Administration
- Chemical Engineering
- Chemistry
- Civil Engineering
- Classics
- Communication
- Comparative Literature
- Computational and Mathematical Science
- Computer Science
- Drama
- Earth Systems
- Economics
- Education
- Electrical Engineering
- Energy Resources Engineering
- English
- Environmental Engineering
- Film Studies
- Genetics
- Geological Science
- Human Biology
- International Relations
- Law
- Materials Science
- Mathematics
- Mechanical Engineering
- Medicine
- Management Science and Engineering
- Music
- Physics
- Political Science
- Psychology
- Race and Ethnicity
- Religious Studies
- Science, Technology, and Society
- Statistics
- Symbolic Systems
- Urban Studies

You have the skills necessary to
fundamentally improve and
transform the world we live in.

You have the skills necessary to
fundamentally improve and
transform the world we live in.

It's up to you to decide
what to do with them.