CSC 133 Agenda

- Course Introduction
- Introduction to Codename One (CN1) and Assignment #0
- Student attendance and introduction
- Adding requests

CSc 133 Lecture Notes

1 – Course Introduction

Computer Science Department
California State University, Sacramento

Overview

- Classroom conduct
- Prerequisites
- Course topics
- Texts and references
- Grading: exams and programs
- Communication
- Workload
- Ethics
- Grading scheme for course assignments

Contacting Your Instructor

Dr. Doan Nguyen

Office: Riverside Hall 3002

Phone: (916) 278-7947

Office Hours: T/Th 10:30 –12:00 pm
and by appointment

Email: doan.nguyen@csus.edu

Webpage: http://ecs.csus.edu/~nguyendh

Classroom Etiquette

This course requires concentration and focus!

Out of respect for others in the room:

Cell Phones : off

and please refrain from:

browsing, facebooking, social networking, texting, instant messaging, tweeting, blogging, gaming, during class…

Prerequisites

- CSc 130 (Algorithms and Data Structures)
- CSc 131 (Intro. to Software Engineering)

… which implies:

- CSc 15 (Programming Methodology I)
- CSc 20 (Programming Methodology II)
- CSc 28 (Discrete Structures)
- Math 29 (Pre-calculus Math)

Prerequisites By Topic

Programming Experience (review "Java Basics" in Appendices)

- 3 semesters in Java, C++, or similar OOP.
- Object-based principles: class/object definitions, method invocation, public vs. private fields, etc.
- Algorithms/data structures: lists, stacks, trees, hashtables, recursion

Software Engineering Topics

- Life Cycle: requirements, design, implementation, testing
- UML: Class, use-case, sequence diagrams

Math Topics (review "Vector/Matrix Algebra" in Appendices)

- Polynomial equations, trigonometric functions, matrix operations
- Cartesian coordinates, vectors, coordinate transformations

Repeat Policy

- Repeating a course *for the third time* (i.e., taking it for a *fourth* – or greater – time) requires filing a *Repeat Petition*
  - Available at the CSc Dept. Office (RVR 3018) or at *http://www.ecs.csus.edu/wcm/csc/forms.html*
  - Requires *Instructor*, *Dept. Chair*, and *Dean's* signature

What is this course about ?

Two main topics:

Fundamentals of the "O-O" paradigm

Introduction to Computer Graphics

Also covers:

Mobile App Development

First topic: **Object-Oriented Paradigm**

We will focus on how to write programs correctly!

- Language implementation:
  - Abstraction
  - Encapsulation
  - Inheritance
  - Polymorphism

- Tools supporting OOA/OOD/OOP:
  - formalisms such as *UML*
  - ***design patterns (underlying theme of CSC 133!)***

Second topic: **Computer Graphics**

- Devices and color models
- User interface ("GUI") mechanisms
- Event-driven programming
- Basic line and polygon drawing
- Basic animation
- Object, World, Display coordinate systems
- Geometric transformations

Mobile App Development

Additional topic: **Mobile App Development**

- Introduction to Mobile App Development and CN1 (Codename One: Java-based, cross-platform mobile app development environment)

- Application of OOP and CG concepts to CN1:
  - CN1 code snippets will be provided in lectures
  - Assignments are required to be solved using CN1

Texts and References

- Required Texts:
  - CSc 133 Lecture Notes (Available weekly), available at the "Files" section of LMS (Canvas)
    - **Credits: Dr. Muyan-Ozcelik Pinar**
  - Codename One Developer Guide:

CN1 Developer Guide - Revision 3.6 (pdf is available at LMS (Canvas))

  - Codename One JavaDocs of APIs: https://www.codenameone.com/javadoc/index.html

Texts and References (cont.)

- Recommended Texts:
  - Object-Oriented Design & Patterns, 2nd Ed., Cay Horstmann, John Wiley & Sons, ISBN 0-471-74487-5
  - Schaum's Outlines: Computer Graphics, 2nd Ed., Xiang and Plastock, McGraw-Hill, ISBN 0-07-135781-5
- Supplemental material:
  - Basic Debugging With Eclipse: https://www.youtube.com/watch?v=PJWtO5wrptg

Grading

- Weighted Curve based on:
  - Programming Assignments (4) 40%
  - Midterm Exam 20%
  - Final Exam 25%
  - Attendance/Quizzes 15%
- Additional Criteria
  - Not to miss more than 1 week of class
  - Passing completion of :
    - Programming assignments (combined)
    - Exams (Midterm + Final combined)
    - Attendance/Quizzes

Grading (cont.)

Programming Assignments

- Required to be solved using CN1, submitted via LMS (Canvas)
- Important tips will be given in class!
- There will be four (4) programming assignments
- They will be ***cumulative!*** Don't try to skip one!
- Late assignments are accepted **up until 1 week** past due date
- Late penalty: 5% per day, weekend days and holidays are counted
- Submissions can be updated **only** prior to the due date**:**
  - The version submitted right before the due date will be graded
  - If no such version exists, the version submitted right after the due date will be graded (as late assignment)
- Must keep a *backup* (machine-readable) copy

Grading (cont.)

Exams

- Dates are noted on the outline
- Final Exam as scheduled by University
- Study Guides will be provided
  - Only one sample exam will be provided prior midterm exam but not the final exam.
  - *Only the course notes are complete!*
- Make-up exams only under extreme circumstances:
  - *generally requires prior arrangements*

Computers

- Work on any school machine or your machine which have CN1
- To install CN1:
  - Install latest version of Java SE JDK
  - Install latest version of Eclipse for Java Developers
  - Install CN1 as a plugin to the Eclipse

(installation instructions will be discussed in class)

Communication

- LMS (Canvas): **canvas.csus.edu**
  - assignments
  - announcements (via LMS (Canvas) with emails)
  - feedback and grades
- Check your SacLink email and LMS (Canvas) daily

Workload

- "Freshman Counseling":
  - 1 unit = 1 hr/wk in class + 2-3 hrs/wk outside,
    on average, University-wide
  - 3 units = 9-12 hrs/wk,
    on average, University-wide
  - 12 units = 36-48 hrs/wk,
    on average, University-wide
- Not all classes are "average"!
- This is a programming-intensive course

Ethics

- Submitting work *constitutes an agreement* that *the work is solely your own*
- Students who violate the University policy on academic honesty are:
  - **Automatically Failed**
  - **Referred to the Dean of Students**
- Detailed Ethics policies given in syllabus and posted on LMS (Canvas)

Ethics (cont.)

- You are allowed and encouraged to discuss assignments with other students in the class. Getting verbal advice/help from people who've already taken the course is also fine.
- Any reference to assignments from previous terms or web postings is unacceptable
- Any copying of non-trivial code is unacceptable
  - Non-trivial = more than a line or so
  - Includes reading someone else's code and then going off to write your own.

Grading scheme for course assignments

Concerned Areas	Points/Percent off
Submission File was not following zip file standardizations as mentioned in lecture.	-3 points
Jar file is not runnable from command line invocation.	-10 points
Major functionality was not implemented or not correctly executed.	-5 points for each area (Maximum -15 points)
Minor functionality was not implemented or not correctly executed.	-2 points for each area (Maximum -10 points)
Program raises error and aborted during execution. This required a restart.	-5 points
Coding Styles: Program documentation (comment), Variable Usage, Hardcoding, Unstructured code, Indentation, etc .	-2 points for each area (Maximum -10 points)
Correct UML Diagram: Class, Attribute, Method, Relationship, usage of proper design patterns	-3 points for each area (Maximum -15 points)
Late work	-5 percent for each day after the due date. 0 points after 1 week

Note: Also please see document in Week 1 for further details and justifications

CSC 133 resources

(I need help!)

- Visit Instructor Office Hours (T/Th: 10:30AM-12 noon)
- Utilize demonstration source codes (to be supplied along with lecture notes)
  - Need to change package name.
- Visit Tutor Center: (Old schedule – Fall 2017)

Computer Science Tutoring

Times:	Monday	Tuesday	Wednesday	Thursday	Friday
9-10	Justin Selke (9-2)	Matthew Roy (9-10)	Justin Selke (9-1)	Matthew Roy (9-10)	
10-11					
11-12					
12-1					
1-2			Daniel Rudy (1-3)		
2-3	Daniel Rudy (2-3)	Matthew Roy (2-4)		Matthew Roy (2-4)	
3-4					
4-5					
5-6					
6-7					

(Check http://www.ecs.csus.edu/wcm/student_resources/ECS_tutoring.html for new schedule or contact the department)

CSC 133 resources (Cnt)

- Canvas Section Collaboration
  - Questions regarding assignments
  - Suggested ideas to solve specific issues
  - Please: NO CODE SHARING PLEASE (Graders will check)

Questions?