

Programming I (COM 116)

Project #2, Part 1 (Animation without arrays) (5%)

Overview

Create 5 graphical applications in Java with animation of various objects on the screen. Use the `AnimationTemplate.java` as a base source file for every program. Inside, create variables to represent the state of your animated objects. Put your initialization code into the `void start()` method. Update parameters of the object that you want to animate every frame in the `void update()` method. Put your drawing code into the `void draw(Graphics g)` method.

Grading

Every program weights 1%. In total you can get up to 5% for the project.

Submission

Bring your works to the final examination. Be prepared to defend your project. During the defence you will be asked to rewrite parts of the programs from scratch without looking at the original source code.

Rules

Students are required to follow the rules of conduct of the Software Engineering Department and American University of Central Asia.

Teamwork is NOT encouraged. The same blocks of code or similar structural pieces in separate works will be considered as academic dishonesty and all parties will get zero for the task.

Program #1: Rectangles

Animate the color of two rectangles. Transition from black to red passing all the shades in between.

*Refer to the file **Program_1.m4v***

Program #2: Balls

Animate three balls of red, green, and blue colors following each other and bouncing off the walls.

*Refer to the file **Program_2.m4v***

Program #3: An Orbit

Draw a circle in the center of the screen. Put and animate another circle of different color orbiting it around.

*Refer to the file **Program_3.m4v***

Program #4: Bouncing Ball

Animate the ball movement in gravitational field.

*Refer to the file **Program_4.m4v***

Program #5: Clocks

Draw analog clocks with two animated clock hands.

*Refer to the file **Program_5.m4v***