

problem: graphics & GUI #1

brief

These are a suite of problem involving drawing simple 2D shapes, using variables and constructing some GUI components.

Java outcomes (see other notes for explanation)

- starting with Java (programming 101)
- using Netbeans
- exposure to API documentation
- variables & methods
- drawing on Java Graphics objects
- GUI components

stage 1

- download, unzip & open the introductory Netbeans project from the Java lecture series at www.agent-domain.org
- edit the *paint* method of *Paint1* to become familiar with the drawing & filling methods & their arguments;
- examine *Paint2*, experiment to understand the use of variables;

stage 2

- write your own "Paint3" JPanel & link it into Main.java using the *put* method on the *options* ClassMap;

stage 3

- examine Button1 & add a call to *clearRect* so the shape moves & displays correctly;
- add a second button so the shape can move left as well as right;

stage 4

- check the ScrollBar in the API. Use a scrollbar to set the step-size for moving the shape;
- add another scrollbar to adjust the size of the shape – the shape should change size as the scrollbar is manipulated (you will need to handle events on the scrollbar to achieve this);

stage 5

- wrap your work as an entry for your portfolio (this is a practice, you will receive feedback for this but it will not count towards your assessment);