

Date: 28 Oct 2007

Java Task: Sketching (Contour Tracing)

1. (Offline application) – Based on Andro's Tracer to enhance the interface and in particular:
 - a. Default file browsing is the current code directory.
 - b. Change the cursor to a "point" or "circle" or "cross".
 - c. Allow zoom-in/out of the loaded image.
 - d. Allow to color the region after defining the contour.
 - e. An input function to read a text file containing a list of points represented by the "x y" coordinates in each row. The number of total points is printed at the beginning of the file.

2. (Web application) – Based on the screen standard used by your crossword puzzle and provide the following functionalities:
 - a. Allow a student to sketch an object, e.g. the silhouette of an animal or the sketeton representation of a horse.
 - b. The 2D points generated by (a) is recorded.
 - c. The interface should be able to call an executable (C/C++ code) and pass the set of points as input parameters.
 - d. The executable will pass back the processed result for the interface to display.