Paint for Kids Project FAQ

This document contains frequently asked question about the project. It is considered part of the project requirements document. So anything mentioned here is considered part of the requirements.

UNDO/REDO

- Which actions need not to be undone?
 - □ Save, Load, Select, Zoom, Copy and Cut
 - □ Paste action should be undone
 - No undo in Play mode.

Classes' responsibilities

- Can I get the SELECTED figures list and operate on it outside ApplicationManager class?
 - ☐ Yes but only for these Actions: Copy, Cut, Paste and Move
 - □ For all other actions, the ApplicationManager is the only class that can work on selected figures list.
- Is it possible to call Draw function for a certain figure in execute function of an action class?

In case you want to highlight a figure once it is selected, you may need to call ApplicationManager::UpdateInterface from inside Action::Execute. UpdateInterface can be made smarter by passing it a param to make it redraws only selected figures in some cases.

Zoom

- When the graph is zoomed, which actions should be supported?
 - □ Select, Change drawing or filling color for selected figure(s). Change background color, Zoom, Delete, Save, Load and Exit
 - □ Other action should either disappear from the menu or shown as dimmed.
- Can Zoom-in action make figures overlap?

No, because Zoom-in enlarges the distances between figures as well.

- Are the figures borders enlarged when zooming in?
 Yes
- Does the drawing border rule apply when zooming?

No, if the graph goes out of window borders, you can just draw figures clipped. Scroll is NOT required

 When Zooming, can I update the figures data but at the same time any actions (like Save) that need the original data will recalculate it before saving? Yes

File Format

Programming Techniques

- Should I store border width for each figure in the file?
 Yes
- Can I change the file format to store color as Red-Green-Blue components instead of color name?

Yes

User Input

Can I read some input from keyboard instead of mouse clicks?
 All user inputs (except filename) should be obtained through mouse clicks not keyboard typing. This is better to avoid typing errors and checks and also because the application targets kids so typing should be minimized.

Select Action

- If a rectangle is drawn inside another one what are the scenarios for selection?

The rectangle on the top is selected/deselected, which is by default the last one drawn, unless you send it to back (or bring to front).

Play Mode

For Pick by Area, can I consider Line area as it length?
 Yes

General questions

- What is the difference between "Change Border Width" and "Resize"? "Change border width" changes the thickness of a figure's border. "Resize" changes the size of a figure without affecting its border width. Each should have an icon and a corresponding action class.