Change Request 2

Due date: 3/20/2018

1. Flip Horizontally and Vertically

Add a new capability that can flip the image horizontally and vertically. Existing flip/rotate/mirror methods and QTransform in Qt library are not allowed to use.

2. Triangle Tool

Add a new tool that can draw arbitrary triangles (supporting only isosceles triangles will get half credit).

3. Custom Colors

On the bottom of the application, there is a color tool-bar for choosing default colors. Add a new capability that a user can double-click mouse left button on the color to set the primary color by picking a new color from the color palette and double-click mouse right button on the color to set the secondary color by picking a new color from the color palette.

4. Cropping

Add a new capability that can crop out the selected area from the image.

5. Intuitive Pen Width

The pen width can be selected by changing the numbers from the left tool-bar. Change this to a more intuitive method in which the users can see the actual width directly from the tool.

6. Horizontal Line, 45-degree Line and Vertical Line

Add an additional capability to the line tool, which can be used to draw a strait horizontal or a vertical line or a 45-degree line (all kinds must be supported). The users should press shift to draw these special lines.

|  |  |
| --- | --- |
| Name | Change Number |
| John | 1 |
| Thomas | 4 |
| Leng | 3 |
| Amanda | 6 |
| Varmitha | 2 |
|  | 5 |

**List of deliverables:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **What** | **Where&When** | **Description** | **Points** |
| **1** | **Git push** | Git server, 3/20/2018, before the beginning of the lab | Before the due time, you are required to correctly push your source code to the assigned directory of the Git repository. Pushing to a wrong directory or ruining the baseline due to incorrect operations will result in a failing grade (0 points) for this part. Make sure you resolve any conflict prior to your push. | 50 |
| **2** | **Report,**  **1st version** | Blackboard,  3/6/2018,  before the beginning of the lab | You are required to submit an electronic copy of the report describing how you used the incremental change process to implement the change request, in the format defined by *Report\_Format.docx*.  You must do dependency search only this time.  1st version of your report must complete sections 1-3 at least. | 50 |
| **Final Report\*** | Blackboard ,  3/20/2018,  before the end of the lab | Complete the rest of your report. It should also contain the fragments of the source code files that were modified/added, with the code highlighted as specified. | 25 |
| File Name: **LastName\_FirstName\_Change#.docx** |
| **3** | **Group Meeting** | In lab,  3/6/2018 | As required in the report part, everyone must complete the impact analysis before the meeting. Discuss your estimated impact set with your teammates to find out all possible conflict files. The whole team then negotiates some deadlines before the final due time for pushing those files individually and submits the schedule to the repository. Anyone missing the group meeting will be considered as admitting the schedule decided by participated teammates. | 0 |
| **4** | **Team Demo\*\*** | In lab,  3/20/2018,  before the end of the lab | All group members will do a demonstration of the team project. Fail to demo your change in the class time will get 0 points for this part. In other words, later demo will lose all credit of the demo part. | 25 |

\* You are required to test your code by running it with some cases (i.e. functional testing). You should specify and record the cases you use in the verification section of your report (e.g. “After implementing the change request X, I drew a dashed line out of the canvas and failed to do so. Then I drew a dashed line inside the canvas successfully. So this capability worked correctly for my test cases.”). Refactoring is not required this time.

\*\* Repository and report parts still follow the late policy in the syllabus.

Do NOT push any redundant file to the repository (DLLs, binary files folder, etc.). Move the new source files in correct folders if you add them (inspect the folders in the 1st baseline of easyPaint to make sure).