

MIDTERM PROJECTS

WINDOWS PROGRAMMING

Exercise 1: Paint application (Individual)

Develop a Paint application allowing users are able to create graphic objects, with following functions:

a) Basic functions:

- + Draw graphic objects: Line, Ellipse, Filled ellipse, rectangle, filled rectangle, circle, filled circle, Arc, polygon, filled pollygon.
- + Develop other functions allowing users are able to adjust Pen properties (color, width, dashstyle), and Brush properties (color, style).
- + Select and drag the graphic objects.
- + Zoom in and zoom out to change the size of the objects.

b) Advanced functions

- + Remove one or many selected objects (Using Ctr + mouse click to select many objects)
- + Group and ungroup the objects.

Exercise 2: (Work in group of 2-3 students, register with class's monitoer before 23/03/2019)

Proposing and developing a Game using .NET framework only (For example, Mario, Flappy Bird, Tank games,...)

HOW TO SUBMIT THE EXERCISES:

Each exercise's results must contain:

1. A folder **Source code**: Contain source codes of the project
2. A folder **Exe**: Contain .exe file of this application
3. A folder **Docs**: Contain a file introducing of the application, and images which illustrating for all functions of the application (with explanation below the images).
4. **For exercise 1**, giving a folder **Video** containing videos to demo the application.

Deadline: 20/4/2019, submitting on lms.hcmute.edu.vn