National Taipei University of Technology

Communication Software Design (Fall, 2013)

Project 4

(Due: 2014/12/30, Monday before PM11:59)

(I) Project Descriptions:

You have to apply UI in this project, and implement two functions. The first is load, and the second is exit.
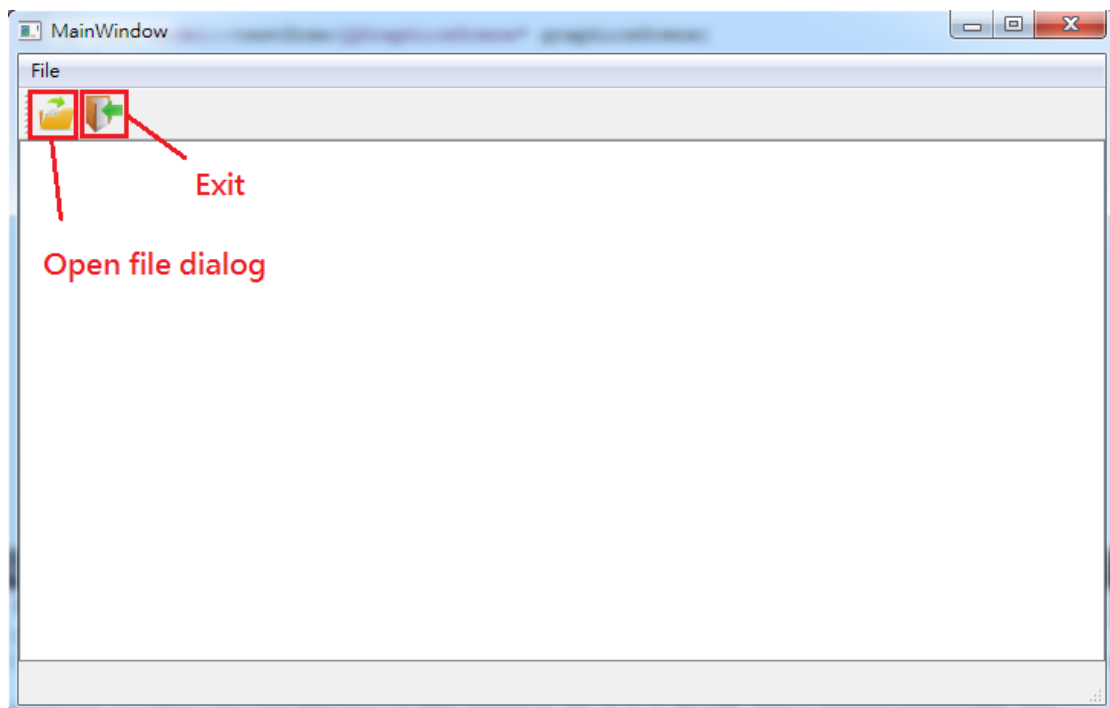

Figure 1.

There will be two items in main tool bar. The first should be open, thus load file. The second is exit.
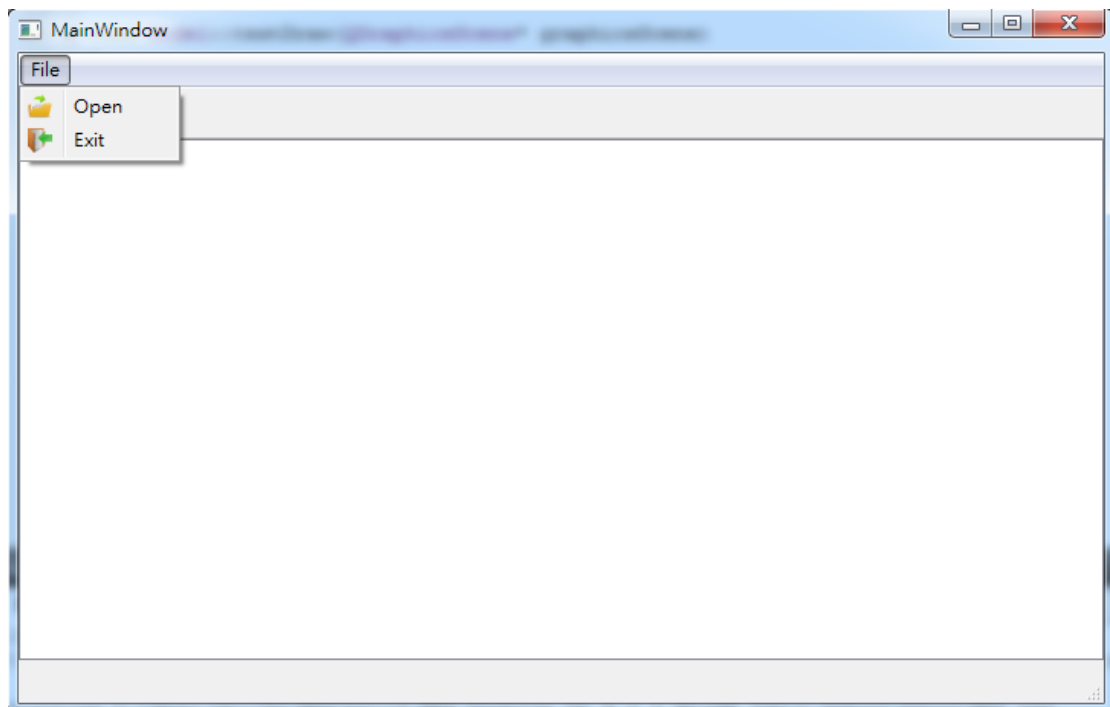
Figure 2.
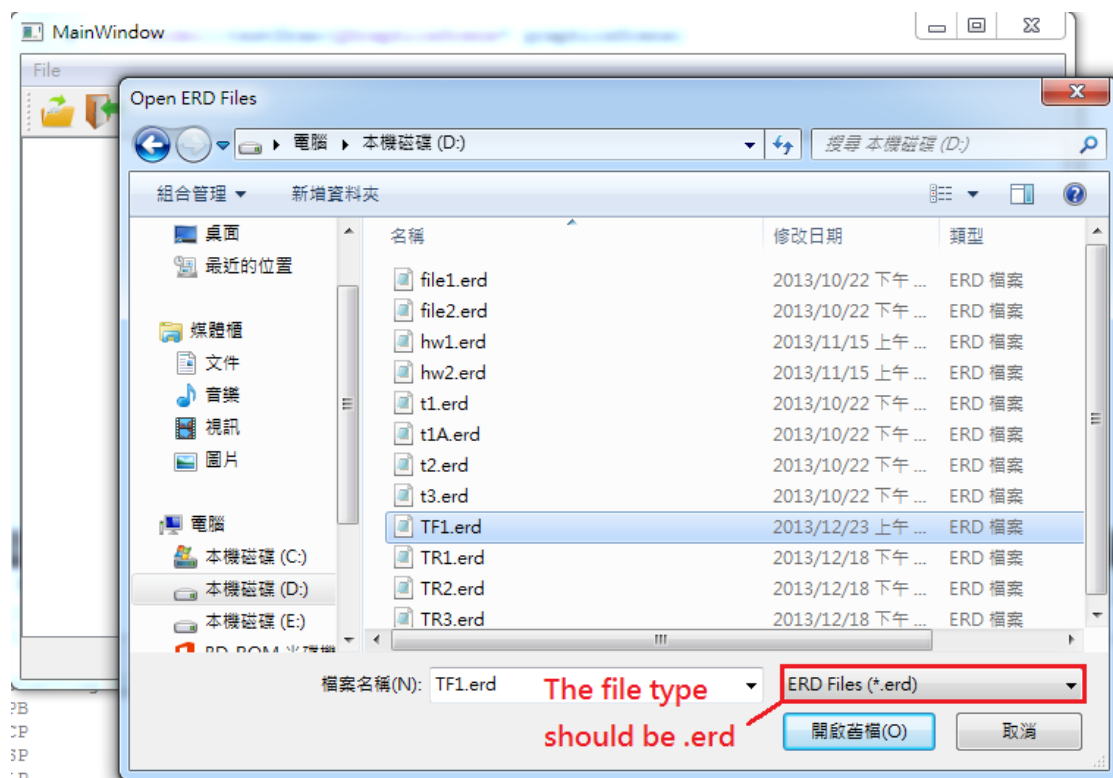
In the menu bar also exist these two items.

Figure 3.

A file dialog should open after click the open item, and should only

show .erd files. (Load the record produced by your previous program, and erd should be the file type of your record)
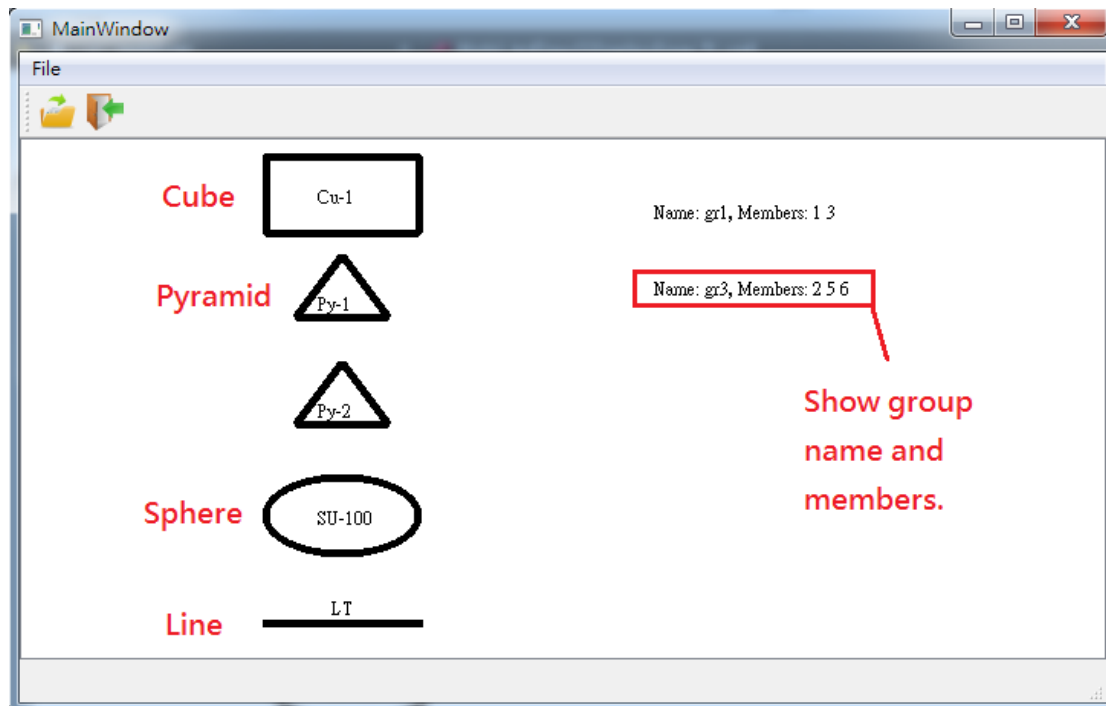

Figure 4.

After open correct file, your program should draw the graphics and show information of groups.

The following shows the sample record file, contains space rather than tab. Your program must be able to load this file, or there will be no score to your load function. You can get this record from course FTP or e-learning.

```
<GMS>
     <Components>
          <Node>
               <ID>1</ID>
               <Name>Cu-1</Name>
               <Type>Cube</Type>
          </Node>
          <Node>
               <ID>2</ID>
```

```xml
                    <Name>Py-1</Name>
                    <Type>Pyramid</Type>
            </Node>
            <Node>
                    <ID>3</ID>
                    <Name>Py-2</Name>
                    <Type>Pyramid</Type>
            </Node>
            <Node>
                    <ID>5</ID>
                    <Name>SU-100</Name>
                    <Type>Sphere</Type>
            </Node>
            <Node>
                    <ID>6</ID>
                    <Name>LT</Name>
                    <Type>Line</Type>
            </Node>
    </Components>
    <Group>
            <Node>
                    <ID>1</ID>
                    <Name>gr1</Name>
                    <Member>1, 3</Member>
            <Node>
            <Node>
                    <ID>3</ID>
                    <Name>gr3</Name>
                    <Member>2, 5, 6</Member>
            <Node>
    </Group>
</GMS>
```

(II) Homework Report:

You have to write a report for this homework that should include the following items:

(1) The features that you finished in this homework.
(2) Write comment for each function. (Just be concise.)
(3) Snapshots of program execution.
(4) Measure the time that you spent in this homework. Please record the time
precisely in the following table.

homework#1(total: 18 hours)			
Date	Start	Stop	Comment
20131001	19:30	22:00	New / Load a XML record
20131002	19:00	21:45	Display current components
20131004	13:10	15:25	New / Load a XML record
20131007	14:55	17:30	Add component

Total hours: 10

(III) Homework Grading:

(1) Previous functions(10%)
(2) Open (30%)
(3) Graphics movable(15%)
(3) Exit (5%)
(5) Class diagram(10%)
(3) Coding style and code quality (20%)
(4) Report (10%)
You should avoid use QT function due to this course's object is to teach

you C++, not QT. If it is necessary to use QT function (Ex. Qt GUI program will need to use QT function), just do it.

(IV) Homework Submission:

Please zip your homework before upload to e-learning.
And you must include:
(1) Your source code (the entire project)
(2) Report (both word and PDF)
If you failed to finish and upload your homework before limit, submit it to late homework folder or email it to me. There will be a discount for late work, and no score for late work after three days.

TA's email: t8820310@ntut.org.tw