

# Thinking 2D

This software has genuinely been developed by me, **Mayank Malik** -3<sup>rd</sup> Year (B.E.)

**Delhi College of Engineering**. I started off with learning Visual C++ around the end of December '99 and this is the first project I have done ( completely myself - without any external help other than a few books & MSDN help). Well... not bad for starters.

If for any reason u are not able to publish it please tell me ways to improve this software so that it comes up to your Standards.

Some of the salient features are given below . However I recommend all users to first run the application once before reading this text file so that they get a feel of the software.

- It has been built using the **Visual C++ Programming Environment**.(Version 6)
- This Software finds extensive use for students of **Engineering** , **Architects** , **Fashion designers** , and school students with Machine Drawing in their syllabus.
- All the basic drawing tools which are required in a 2D CAD software are available for the user like **line** , **rectangles** , **arcs** , **ellipses** , **chords**, **pies** etc. Various **Filling Styles** ,**Pen Styles** and **colors** can be chosen at runtime along with these tools .User can also add custom **text** and choose any font.
- The biggest advantage of the software is the **fully functional undo / redo** feature with which u can erase steps to the beginning . Also if u save a file and after some days u realize that u have made some errors and want to undo a particular line u can easily do that.
- Files are saved in the "**\*.2d** " file format and can be opened by double clicking on them from the windows explorer.
- Variable **grid sizes** are displayed and the user can choose the most suitable grid size for him ( 4 grid sizes available ) . Also user can turn off displaying the grids and also choose **free motion grid** in which the mouse motion is independent of the grid.
- On the Status Bar the current (**X** , **Y**) coordinates are displayed when moving the mouse .Also when mouse is dragged the current (**dX** , **dY**) coordinates are displayed along with the angle of inclination.
- After the drawing is complete the user can choose the **Measuring Line** with which the default distance comes in the dialog box and can be changed to any text by the user.
- On **Right Clicking** the mouse it starts acting like a scroll bar. For this to work you'll have to stop MouseLmp if it is installed on your computer.
- Another advantageous feature is that it displays center of figures like rectangles , arcs etc. which makes it easier to draw concentric objects and measure distances.
- With the copy tool the **client screen is copied to the clipboard** and can be retrieved as a bitmap using your favorite image software. This helps to make this software compatible with various image handling softwares.
- Exceptionally good **tips** provide the user with all the help required to start off with this application .Users can also add their own tips in the tips file.
- The programming environment used is 32 bit and full use of **OOPS** features like classes ,polymorphism , inheritance , virtual functions derived classes and overloaded functions have been made.
- I have to do some additional work on this software like→
  1. Making it compatible with the DXF file format that is an industry standard.

2. *Porting a version for LINUX and MAC (a lot of help is req. in this area)*
- *Anyone who can help in the further development of this project is most invited .They can contact me at [malikmayank@usa.net](mailto:malikmayank@usa.net). This software is a freeware and it's source code is available for enhancing / modifying it.*

*P. S. ->*

*2.To see the sample files open the Files in the software and*

*(I). Press the GOTO the LAST STEP button*

*(ii). Press the PLAY ANIMATION button and enjoy!!!*

*3.If u have just done (step 2) then u'll realize that **I'm giving a FREEWARE product** (which is true ☺)*