COMS W4115 Programming Languages and Translators
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Project Proposal
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EGUI – EASY GRAPHICAL USER INTERFACE LANGUAGE

MOTIVATION

As an electrical controls engineer, working in automation and controls industry for last 10 years, I have spent a considerable amount of time building GUI for wide range of systems in water/waste water, power, food & beverage and pharmaceutical industries. There are a lot tools out there to build GUI, but I always found a need of one to be faster, more efficient and easy to use.

INTRODUCTION

EGUI or Easy Graphical User Interface Language will be used to create graphics in a faster and efficient way. It will be designed to create with equal ease graphics from scratch as well as building upon pre-made graphical objects from its library set. This library set includes a numerous graphical representation of widely used real life objects. One can manipulate or build upon these pre-made library objects as per their need. At this time EGUI is designed to create 2D graphical objects.

BUILT IN FUNCTIONALITY & FEATURES

- Draw Geometrical Objects:
  Point, Line, Poly-line, Arc.
  Square, Rectangle, Triangle, Circle, Ellipse, Polygon.
- Color
- Color blink
- Scale
- Rotate
- Move
- Align (Right, Left, Center)
- Space (Vertical, Horizontal)
- Draw Order (Send to Back, Bring to Front)
- Copy, Cut, Paste
- Visibility
- Build library objects
- Modify pre-made library objects

SYNTAX

- SINGLE LINE COMMENT: Line starting with character ' is considered a comment, a new line not preceded by character ' terminates the comment.

- MULTI-LINE COMMENTS: Any characters followed by /* and preceded by */ are considered comments including new lines.

- DATATYPES: Integers, Floating point, Character, Character strings, Boolean.