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Project2 Part1 Documentation

To compile:

```
g++ ECGraphicViewImp.cpp test-gv.cpp Command.cpp ShapesModel.cpp Shape.cpp  
ECRealObserver.cpp MouseFunction.cpp -lallegro -lallegro_font -lallegro_primitives  
-lallegro_main -lallegro_image -lallegro_main -o editor
```

To run:

./editor

Features Implemented:

Edit Mode:

- opens by default
- allows user to select shapes that have been drawn
- clicking inside a shape makes it selected
- if there are multiple shapes in the same area, then the most recently placed shape gets selected
- once a shape is selected, it can be moved across the screen
- when a user keeps their mouse held down after selecting a shape, they can move the shape; the original shape maintains its place, but a new cyan shape is shown moving with the user's cursor; once the cursor is released, the original selected shape is moved to match the new position.

Switching modes:

- user can press space to toggle between modes

Insert Mode:

- when clicking the mouse and holding down, when user moves cursor, a pink shape is shown on screen that adjusts size with the user's mouse
- when releasing the mouse, the shape is placed with opposite corners at the original mouse down event location and the mouse up event location

Deleting:

- user can delete shapes with the "D" key

Undo/Redo:

- user can undo/redo any command (insert, delete, move) with "Z"/"Y" keys respectively

Bugs: There are no known bugs at present.

This design uses MVC, Command Pattern, and Observer Pattern.

A screen recording of the editor working is attached in the submission.