

PRESENTATION

PAINT APPLICATION

Subject : RPPOOP
Guided By : Trishna mam



A paint Application is a program written in python using tkinter GUI that allows the user to draw, color and save images on a computer.





Packages and classes used

- **tkinter**
- **filedialogue**
- **scale**
- **Image**

- **PIL**
- **ImageGrab**

● Tkinter

- Tkinter is the standard GUI library for Python. It is a standard Python interface to the Tk GUI toolkit shipped with Python.
- **Filedialogue** : filedialog provides functions for creating file/directory selection windows.
- **Scale** : The Scale widget is used to implement the graphical slider to the python application so that the user can slide through the range of values shown on the slider and select the one among them.

● PIL

- Python Imaging Library is the image processing package for Python language. That aids in editing, creating and saving images.
- **ImageGrab** : The ImageGrab can be used to copy the contents of the screen or the clipboard to a PIL image memory.

Overview

- We have created class (**Paint**) in which we have defined the different function for different operation.
- **__init__ constructor**: Creates the main window of the application ,menu bar and different buttons to choose different shapes (rectangle, oval, line) and colors.
- All the buttons and the layout of the canvas is made inside this constructor.
- A **Canvas** is made which is a rectangular area intended for drawing pictures or other layouts.
- Menubar is made which has "Color" , "Options" and "File" as menu.
- "Color" option allows to change the drawing element's color, also to change background color
- "File" allows to "save" the made drawing, and "exit" to exit the application.

Functions used:

```
def choice_disp(self):...  
  
def _createRectangle(self):...  
  
def startRect(self, event):...  
  
def movingRect(self, event):...  
  
def stopRect(self, event):...  
  
def _createOval(self):...  
  
def startOval(self, event):...  
  
def movingOval(self, event):...  
  
def stopOval(self, event):...
```

```
def _createLine(self):...  
  
def startLine(self, event):...  
  
def movingLine(self, event):...  
  
def stopLine(self, event):...  
  
def _createArrowLine(self):...  
  
def startArrowLine(self, event):...  
  
def movingArrowLine(self, event):...  
  
def stopArrowLine(self, event):...  
  
def _pencil(self):...  
  
def _pencilArrow(self):...
```

```
def clear(self):...
```

```
def paint(self, event):...
```

```
def reset(self,e):...
```

```
def select_color(self, col):...
```

```
def eraser(self):...
```

```
def brush_color(self):...
```

```
def canvas_color(self):...
```



THANK YOU

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