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NIM : 10201009 **A**

Prodi : Sistem Informasi Tugas : PBO PRA - UAS

Tugas!

Kerjakan:

1. Kreasikan Fitur/Modul/Desain pada Text Editor yang telah diberikan!!!

Jawab

A. Source Code

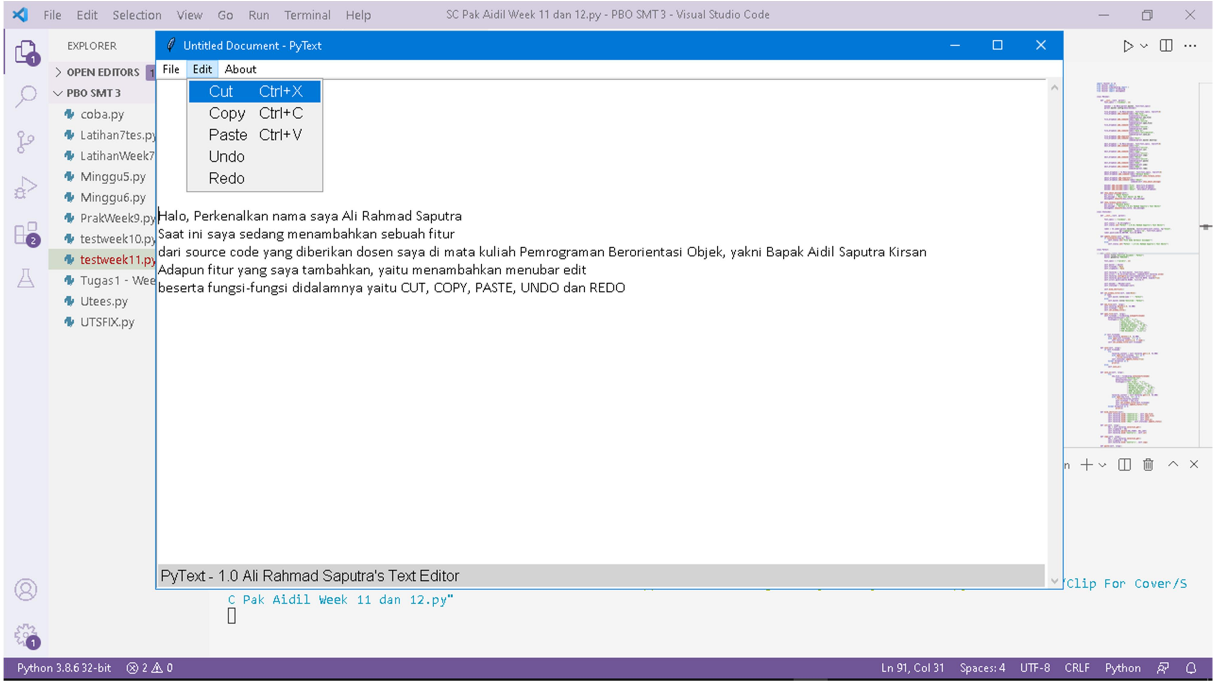
```
import tkinter as tk
from tkinter import *
from tkinter.simpledialog import *
from tkinter import filedialog
from tkinter import messagebox


class Menubar:

    def __init__(self, parent):
        font_specs = ("windows", 13)

        menubar = tk.Menu(parent.master, font=font_specs)
        parent.master.config(menu=menubar)

        file_dropdown = tk.Menu(menubar, font=font_specs, tearoff=0)
        file_dropdown.add_command(label="New File",
                                  accelerator="Ctrl+N",
                                  command=parent.new_file)
        file_dropdown.add_command(label="Open File",
                                  accelerator="Ctrl+O",
                                  command=parent.open_file)
        file_dropdown.add_command(label="Save",
                                  accelerator="Ctrl+S",
                                  command=parent.save)
        file_dropdown.add_command(label="Save As",
                                  accelerator="Ctrl+Shift+S",
                                  command=parent.save_as)
        file_dropdown.add_separator()
        file_dropdown.add_command(label="Exit",
                                  command=parent.master.destroy)

        edit_dropdown = tk.Menu(menubar, font=font_specs, tearoff=0)
        edit_dropdown.add_command(label="Cut",
                                  accelerator="Ctrl+X",
                                  command=parent.cut)
        edit_dropdown.add_command(label="Copy",
                                  accelerator="Ctrl+C",
                                  command=parent.copy)
        edit_dropdown.add_command(label="Paste",
                                  accelerator="Ctrl+V",
                                  command=parent.paste)
        edit_dropdown.add_command(label="Undo",
                                  command=parent.undo)
        edit_dropdown.add_command(label="Redo",
                                  command=parent.redo)

        about_dropdown = tk.Menu(menubar, font=font_specs, tearoff=0)
        about_dropdown.add_command(label="Release Notes",
                                    command=self.show_release_notes)
        about_dropdown.add_separator()
        about_dropdown.add_command(label="About",
                                    command=self.show_about_message)

        menubar.add_cascade(label="File", menu=file_dropdown)
        menubar.add_cascade(label="Edit", menu=edit_dropdown)
        menubar.add_cascade(label="About", menu=about_dropdown)

    def show_about_message(self):
        box_title = "About PyText"
        box_message = "Mini Text Editor by PBO A"
        messagebox.showinfo(box_title, box_message)

    def show_release_notes(self):
        box_title = "Release Notes"
        box_message = "Version 1.0 Ali Rahmad Saputra's Text Editor"
        messagebox.showinfo(box_title, box_message)

class Statusbar:

    def __init__(self, parent):

        font_specs = ("windows", 12)

        self.status = tk.StringVar()
        self.status.set("PyText - 1.0 Ali Rahmad Saputra's Text Editor")

        label = tk.Label(parent.textarea, textvariable=self.status, fg="black",
                        bg="lightgrey", anchor='sw', font=font_specs)
        label.pack(side=tk.BOTTOM, fill=tk.BOTH)

    def update_status(self, *args):
        if isinstance(args[0], bool):
            self.status.set("File Anda berhasil disimpan!")
        else:
            self.status.set("PyText - 1.0 Ali Rahmad Saputra's Text Editor")
```

```
class PyText:

    def __init__(self, master,):
        master.title("Untitled Document - PyText")
        master.geometry("960x540")

        font_specs = ("calibri", 12)

        self.master = master
        self.filename = None
        self.clipboard = None

        self.textarea = tk.Text(master, font=font_specs)
        self.scroll = tk.Scrollbar(master, command=self.textarea.yview)
        self.textarea.configure(yscrollcommand=self.scroll.set)
        self.textarea.pack(side=tk.LEFT, fill=tk.BOTH, expand=True)
        self.scroll.pack(side=tk.RIGHT, fill=tk.Y)

        self.menubar = Menubar(self)
        self.statusbar = Statusbar(self)

        self.bind_shortcuts()

    def set_window_title(self, name=None):
        if name:
            self.master.title(name + " - PyText")
        else:
            self.master.title("Untitled - PyText")

    def new_file(self, *args):
        self.textarea.delete(1.0, tk.END)
        self.filename = None
        self.set_window_title()

    def open_file(self, *args):
        self.filename = filedialog.askopenfilename(
            defaultextension=".txt",
            filetypes=[("All Files", "*.*"),
                        ("Text Files", "*.txt"),
                        ("Python Scripts", "*.py"),
                        ("Markdown Document", "*.md"),
                        ("JavaScript Files", "*.js"),
                        ("HTML Documents", "*.html"),
                        ("CSS Documents", "*.css")])

        if self.filename:
            self.textarea.delete(1.0, tk.END)
            with open(self.filename, "r") as f:
                self.textarea.insert(1.0, f.read())
            self.set_window_title(self.filename)
```

```
def save(self, *args):
    if self.filename:
        try:
            textarea_content = self.textarea.get(1.0, tk.END)
            with open(self.filename, "w") as f:
                f.write(textarea_content)
            self.statusbar.update_status(True)
        except Exception as e:
            print(e)
    else:
        self.save_as()


def save_as(self, *args):
        try:
            new_file = filedialog.asksaveasfilename(
                initialfile="Untitled.txt",
                defaultextension=".txt",
                filetypes=[("All Files", "*.*"),
                            ("Text Files", "*.txt"),
                            ("Python Scripts", "*.py"),
                            ("Markdown Document", "*.md"),
                            ("JavaScript Files", "*.js"),
                            ("HTML Documents", "*.html"),
                            ("CSS Documents", "*.css")])
            textarea_content = self.textarea.get(1.0, tk.END)
            with open(new_file, "w") as f:
                f.write(textarea_content)
                self.filename = new_file
                self.set_window_title(self.filename)
                self.statusbar.update_status(True)
        except Exception as e:
                print(e)

def bind_shortcuts(self):
        self.textarea.bind('<Control-n>', self.new_file)
        self.textarea.bind('<Control-o>', self.open_file)
        self.textarea.bind('<Control-s>', self.save)
        self.textarea.bind('<Control-S>', self.save_as)
        self.textarea.bind('<Key>', self.statusbar.update_status)

def cut(self, *args):
        SEL = self.textarea.selection_get()
        self.clipboard = SEL
        self.textarea.delete(SEL_FIRST, SEL_LAST)
        self.textarea.bind('Control-x', self.cut)

def copy(self, *args):
        SEL = self.textarea.selection_get()
        self.clipboard = SEL
```

```
            self.textarea.bind('Control-c', self.copy)

    def paste(self, *args):
            SEL = self.textarea.insert(INSERT, self.clipboard)
            self.textarea.bind('Control-v', self.paste)

    def undo(self, *args):
            self.textarea.edit_undo()

    def redo(self, *args):
            self.textarea.edit_redo()



if __name__ == "__main__":
    master = tk.Tk()
    pt = PyText(master)
    master.mainloop()
```

B. Output



File Edit Selection View Go Run Terminal Help
SC Pak Aidil Week 11 dan 12.py - PBO SMT 3 - Visual Studio Code
EXPLORER
OPEN EDITORS
PBO SMT 3
coba.py
Latihan7tes.py
LatihanWeek7
Minggu5.py
Minggu6.py
PrakWeek9.py
testweek10.py
testweek11.py
Tugas1 - Wee
Utees.py
UTSFIX.py
Untitled Document - PyText
File Edit About
Cut Ctrl+X
Copy Ctrl+C
Paste Ctrl+V
Undo
Redo
PyText - 1.0 Ali Rahmad Saputra's Text Editor
/Clip For Cover/S
C Pak Aidil Week 11 dan 12.py"
Python 3.8.6 32-bit
Ln 91, Col 31 Spaces: 4 UTF-8 CRLF Python

Halo, Perkenalkan nama saya Ali Rahmad Saputra
Saat ini saya sedang menambahkan sebuah fitur
dari source code yang diberikan dosen saya di mata kuliah Pemrograman Berorientasi Objek, yakni Bapak Aidil Saputra Kirsan
Adapun fitur yang saya tambahkan, yaitu menambahkan menubar edit
beserta fungsi-fungsi didalamnya yaitu CUT, COPY, PASTE, UNDO dan REDO