

1

DAYANANDA SAGAR COLLEGE OF ENGINEERING

COMPUTER SCIENCE & ENGINEERING

Minor Project- Report

Apr 2021-Jul 2021

Course Faculty: Dr. Vindhya M
Semester: 6 'E'

Course Name & Code: System Software (18CS6DCSSW)
Date: 17-8-2021

TITLE OF THE PROJECT	TEXT EDITOR USING PYTHON LANGUAGE			
STUDENT NAME	DIKSHA KUMARI	GAUTAM KUMAR	HARSHITHA BR	HIMANSHU SONWANI
USN	1DS18CS709	1DS18CS710	1DS18CS712	1DS18CS713
INDIVIDUAL CONTRIBUTION	Research, Implementation and Testing	GUI, Implementation and Testing	Research, Implementation and Testing	GUI, Implementation and Testing
GUIDE	Prof. Swetha M D			
PROJECT ABSTRACT :	<p>A simple Text Editor Application using Tkinter is built which is a very good beginner project for Tkinter. Text Editor Application is an application where you can write your text, open any text file, you can edit any text file and you can also save a file if you want. In this tutorial, we will build a Text Editor Application from scratch.</p> <p>This text editor GUI will consist of various menu like file and edit, using which all functionalities like saving the file, opening a file, editing, cut and paste can be done.</p> <p>Now for creating this text editor, Python 3 and Tkinter should already be installed in your system.</p>			
PLATFORM USED (H/W & S/W TOOLS TO BE USED)	Python 3 and Tkinter python package			

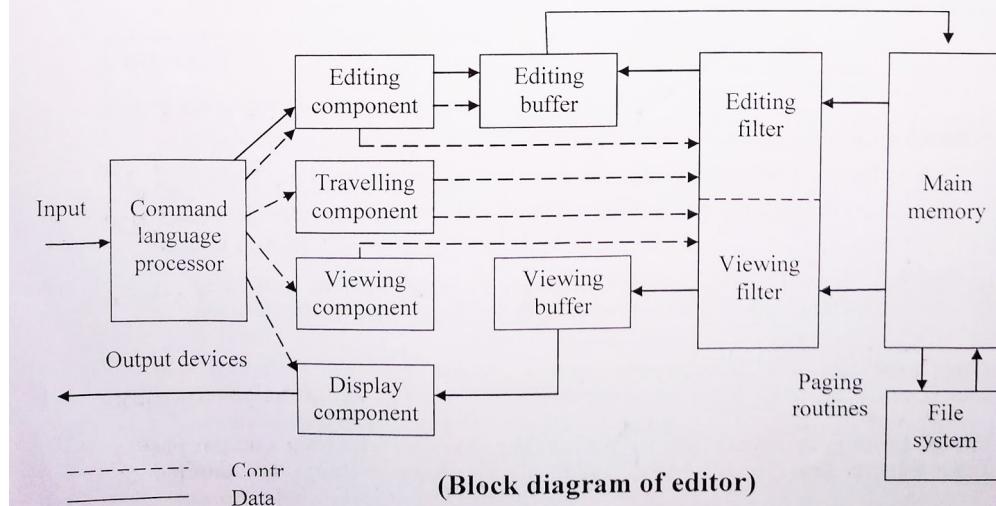
DAYANANDA SAGAR COLLEGE OF ENGINEERING

COMPUTER SCIENCE & ENGINEERING

INTRODUCTION	<p>Editors or text editors are software programs that enable the user to create and edit text files. In the field of programming, the term editor usually refers to source code editors that include many special features for writing and editing code. Notepad, Wordpad are some of the common editors used on Windows OS and vi, emacs, Jed, pico are the editors on UNIX OS. Features normally associated with text editors are — moving the cursor, deleting, replacing, pasting, finding, finding and replacing, saving etc.</p> <p>Types of Editors</p> <p>There are generally five types of editors as described below:</p> <ol style="list-style-type: none">1. Line editor: In this, you can only edit one line at a time or an integral number of lines. You cannot have a free-flowing sequence of characters. It will take care of only one line. Ex : Teleprinter, edlin, teco2. Stream editors: In this type of editors, the file is treated as continuous flow or sequence of characters instead of line numbers, which means here you can type paragraphs. Ex : Sed editor in UNIX3. Screen editors: In this type of editors, the user is able to see the cursor on the screen and can make a copy, cut, paste operation easily. It is very easy to use mouse pointer. Ex : vi, emacs, Notepad4. Word Processor: Overcoming the limitations of screen editors, it allows one to use some format to insert images, files, videos, use font, size, style features. It majorly focuses on Natural language.5. Structure Editor: Structure editor focuses on programming languages. It provides features to write and edit source code. Ex : Netbeans IDE, gEdit. <p>Tkinter is a Python Package for creating GUI applications. Python has a lot of GUI frameworks, but this is the only framework that's built into the Python standard library. It has several strengths; it's cross-platform, so the same code works on Windows, macOS, and Linux. It is lightweight and relatively painless to use compared to other frameworks. This makes it a compelling choice for building GUI applications in Python, especially for applications where a modern shine is unnecessary, and the top priority is to build something that's functional and cross-platform quickly.</p>

DAYANANDA SAGAR COLLEGE OF ENGINEERING

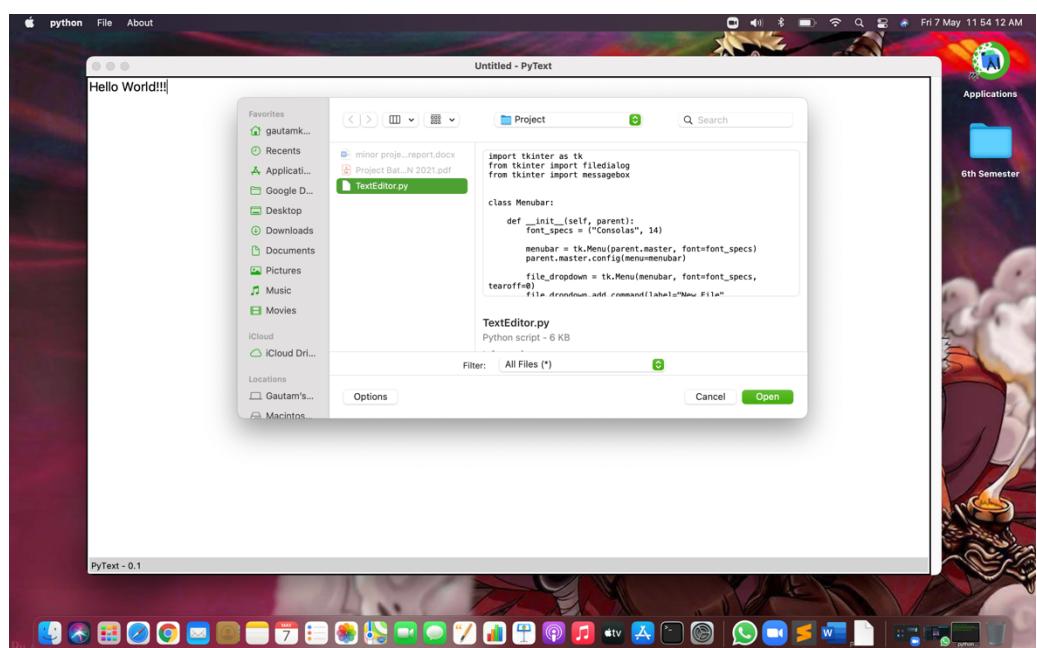
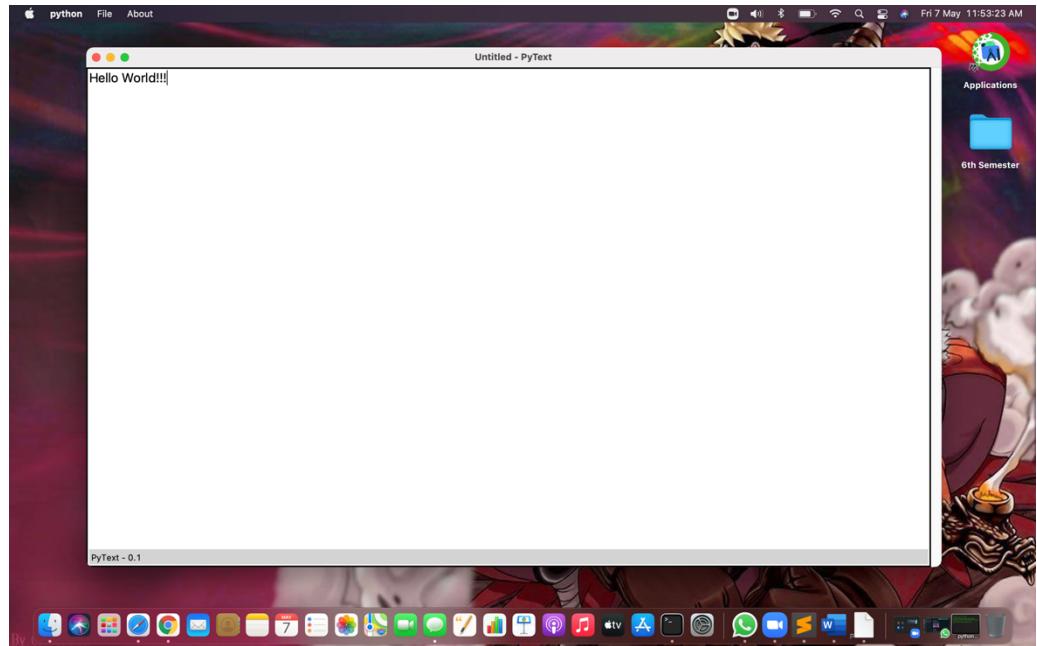
COMPUTER SCIENCE & ENGINEERING

DESIGN	 <p>The diagram illustrates the internal architecture of a text editor system. It features several components connected by arrows indicating data flow:</p> <ul style="list-style-type: none"> Input feeds into the Command language processor. The Command language processor has dashed arrows pointing to the Editing component, Travelling component, and Viewing component. The Editing component has solid arrows pointing to the Editing buffer and the Editing filter. The Editing filter has a solid arrow pointing to the Main memory. The Main memory has a solid arrow pointing to the Paging routines, which in turn point to the File system. The Editing buffer has a solid arrow pointing to the Editing component. The Editing component has a solid arrow pointing to the Travelling component. The Travelling component has solid arrows pointing to the Viewing component and the Editing filter. The Viewing component has solid arrows pointing to the Viewing buffer and the Editing filter. The Viewing filter has a solid arrow pointing to the Main memory. The Viewing buffer has a solid arrow pointing to the Display component. The Display component has a solid arrow pointing to the Output devices. A legend at the bottom left indicates that solid lines represent Data and dashed lines represent Control. <p style="text-align: center;">(Block diagram of editor)</p>
PROJECT SOURCE CODE LINK (GITHUB/ GOOGLE DRIVE)	https://github.com/gautamK007/Text-Editor
CONCLUSION /FUTURE ENHANCEMENT	<p>This project which we undertook , will give a big thrust to our technical knowledge as prospective Software professional. It will also be helped us to enhance our skills on the personal front.</p> <p>We will try to implement the text editor in a way that it may comprise all the features and functionality of the editor. Our text editor can create and revise a document, making sure that there is validity in input as well as functions. This full screen text editor is designed to satisfy most of the user requirements such as creating a new file, opening an existing file, saving a file, deleting a file. Editing a file is enabled by providing options for inserting or deleting a single character, word or line, as well as support for deleting multiple lines is also present.</p> <p>Future Enhancement</p> <ol style="list-style-type: none"> 1. Spell checker :- checks for misspellings in a text. 2. Find and replacement feature :- Helps you to find words or formats in a document and can let you replace all instances of a word or format. 3. Support for markup languages and some programming languages (to have the capability of a basic IDE). 4. Customizations :- Allowing user to change the appearance and operation of the editor. 5. Print feature :- Allowing user to print the contents of a Text Editor.

DAYANANDA SAGAR COLLEGE OF ENGINEERING

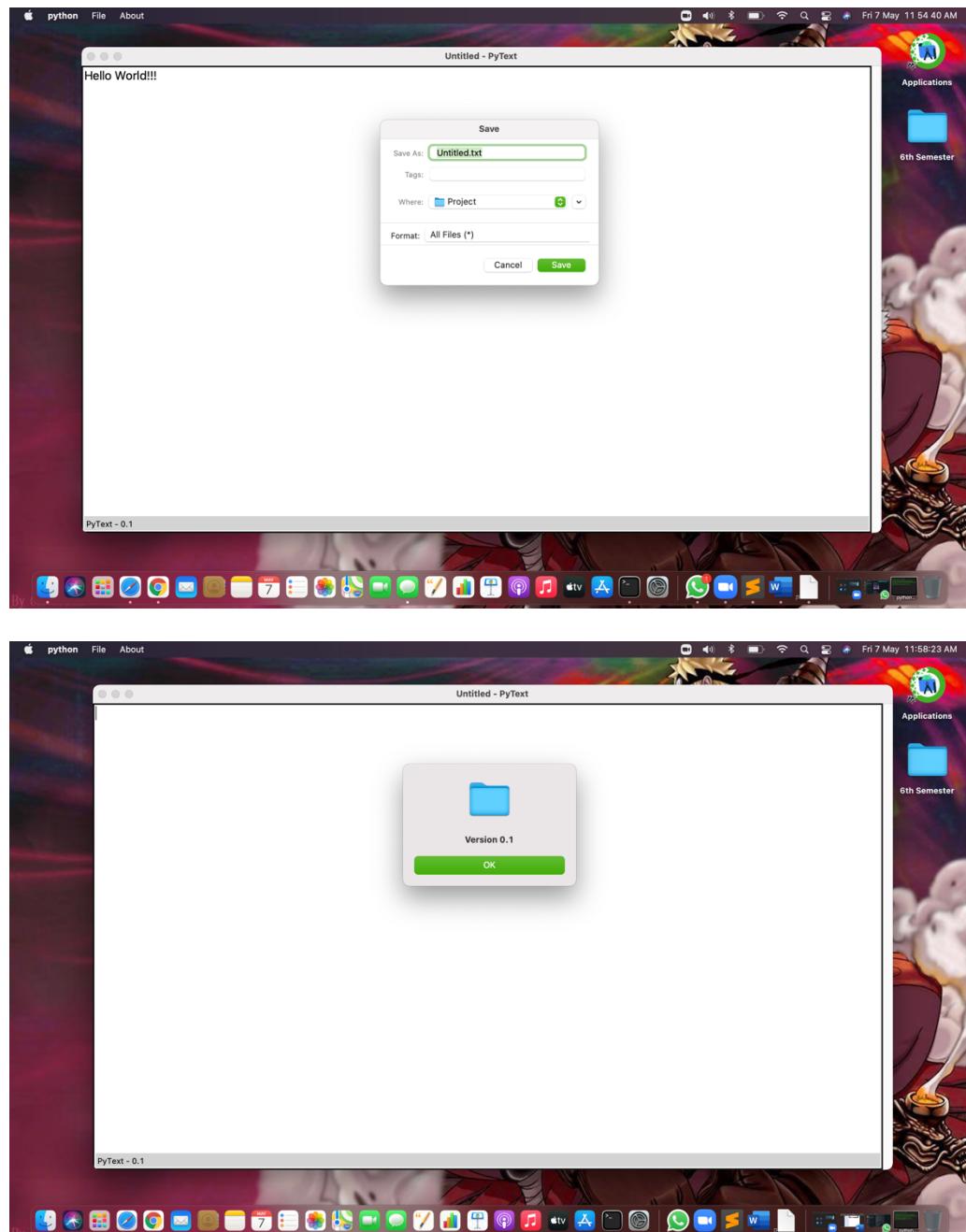
COMPUTER SCIENCE & ENGINEERING

UI SCREENSHOTS

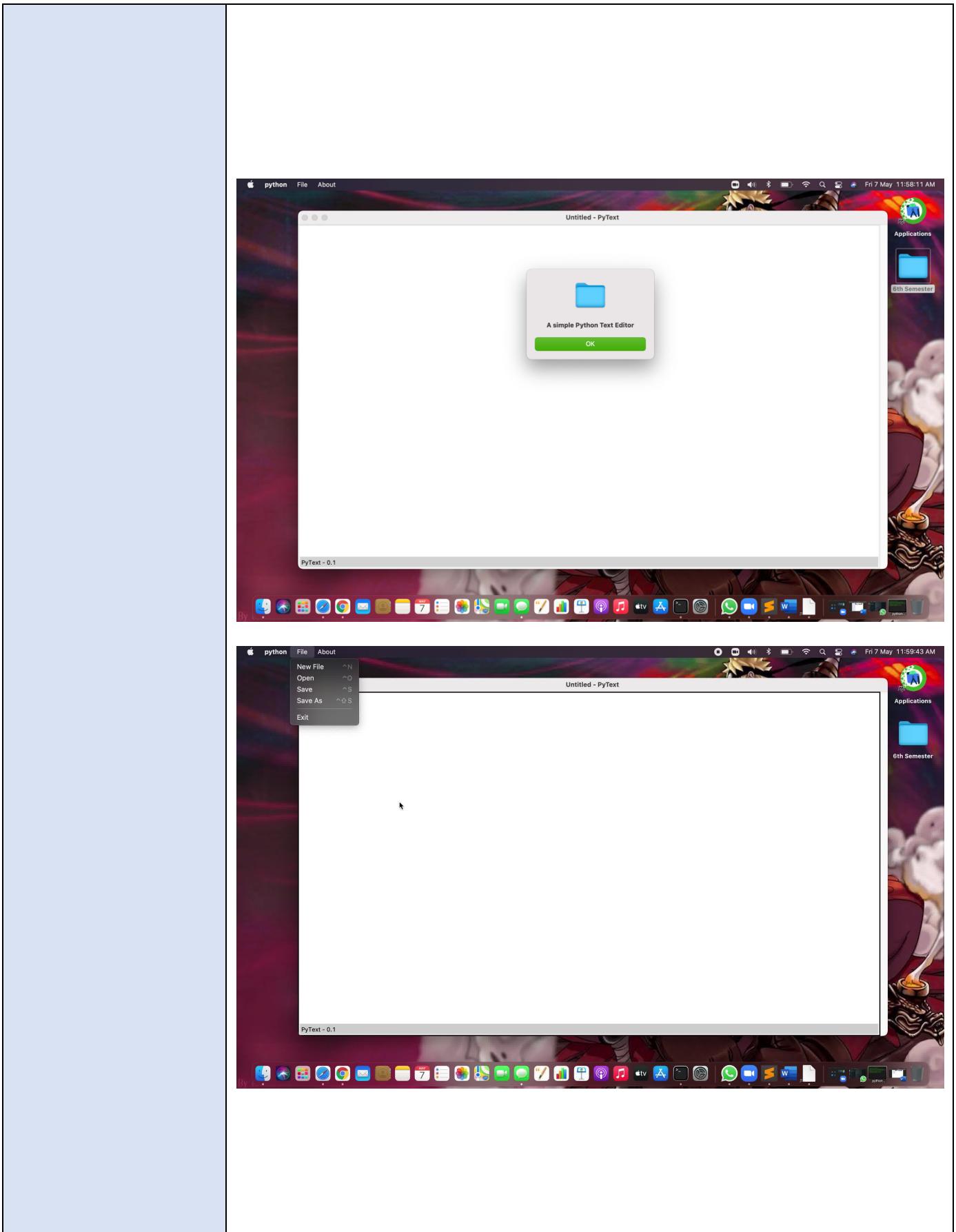


DAYANANDA SAGAR COLLEGE OF ENGINEERING

COMPUTER SCIENCE & ENGINEERING



**DAYANANDA SAGAR COLLEGE OF ENGINEERING
COMPUTER SCIENCE & ENGINEERING**



**DAYANANDA SAGAR COLLEGE OF ENGINEERING
COMPUTER SCIENCE & ENGINEERING**

