

PROFESSIONAL TRAINING REPORT
at
Sathyabama Institute of Science and Technology
(Deemed to be University)

Submitted in partial fulfillment of the requirements for the award
of Bachelor of Technology Degree in Information Technology

By
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SCHOOL OF COMPUTING
SATHYABAMA INSTITUTE OF SCIENCE AND
TECHNOLOGY
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CHENNAI – 600119. TAMILNADU
JANUARY 2021



SATHYABAMA

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SCHOOL OF COMPUTING

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the Bonafide work of who carried out the project entitled "DIGITAL CLOCK" under our supervision from November 2020 to January 2021

Internal Guide

Ms.Indira.K

Head of the Department

Dr. R. Subhashini M.E., Ph.D.,

Submitted for Viva voce Examination held on _____

Internal Examiner

External Examiner

DECLARATION

I Vaishnavy.P hereby declare that the Project Report entitled "DIGITAL CLOCK" done by me under the guidance of Ms.Indira.K, at Sathyabama Institute of Science and Technology (Deemed to be University), Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai - 600119 is submitted in partial fulfillment of the requirements for the award of Bachelor of Technology degree in Information Technology.

DATE:

Place: Chennai

SIGNATURE OF THE CANDIDATE

ACKNOWLEDGEMENT

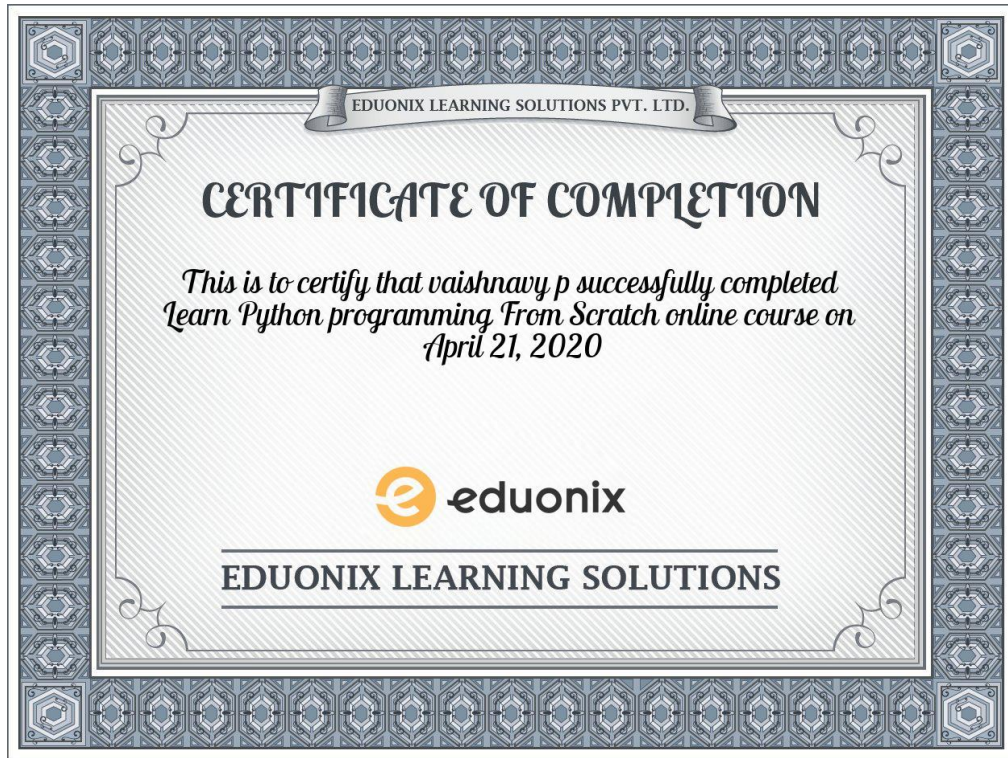
I am pleased to acknowledge our sincere thanks to Board of management of **SATHYABAMA** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

I convey our thanks to **Dr. T. SASIKALA M.E., Ph.D., Dean, School of Computing** and **Dr. R. SUBHASHINI M.E., Ph.D., Head of the Department, Department of Information Technology** for providing us the necessary support and details at the right time during the progressive reviews.

I would like to express our sincere and deep sense of gratitude to our Project Guide **MS.Indira.K** for her valuable guidance, suggestions and constant encouragement paved way for the successful completion of my project work.

I wish to express our thanks to all Teaching and Non-teaching staff members of the Department of **INFORMATION TECHNOLOGY** who were helpful in many ways for the completion of the project.

TRAINING CERTIFICATE



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TO WHOMSOEVER IT MAY CONCERN

This is to certify that **VAISHNAVY P** student of **SATHYABAMA UNIVERSITY, BTECH/IT** has undergone the Internship Training through in our concern entitled **PYTHON** from **12th Oct 2020** to **17th Oct 2020** in relevant departments related to their academic studies.

During the above period, the performance was good & we wish great success in all your future endeavours.

Technology drives the world. We are the people who are behind the technology.

Authorised Signature



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ABSTRACT

DIGITAL CLOCK

As we know Tkinter is used to create a variety of GUI (Graphical User Interface) applications. In this article we will learn how to create a Digital clock using Tkinter. Python consists of some very innovative libraries such as date time and Tkinter which help us to build the project using the current time. The Python time module provides many ways of representing time in code, such as objects, numbers, and strings. It also provides functionality other than representing time, like waiting during code execution and measuring the efficiency of your code. This project is simple way for understanding and as well as Learning

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CHAPTER 1

INTRODUCTION

1.1 GENERAL

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. ... Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse. Tkinter is a Python binding to the Tk GUI toolkit. It is the standard Python interface to the Tk GUI toolkit, and is Python's de facto standard GUI. Tkinter is included with standard Linux, Microsoft Windows and Mac OS X installs of Python. The name Tkinter comes from Tk interface.

1.2 OUTLINE OF THE PROJECT

We use create a cross-platform graphical user interface (**GUI**) using **Python** and the wxPython toolkit. A graphical user interface is an application that has buttons, windows, and lots of other widgets that the user can use to interact with our application (Digital Clock).

CHAPTER 2

AIM AND SCOPE

2.1 AIM

This is a simple project to get started with Tkinter, which is a built-in package that comes with Python. Tkinter is basically a graphical user interface package. It has great features that can be used to create simple applications. And we created our digital clock.

2.2 PROBLEM STATEMENT

This program is simple and easy but it just needs more upgraded for further because this basic for a python and tkinter .They have many features for every application so it needs to be some more advanced and usage of some other language like Rasbarry -PI Etc.

2.3 SCOPE

As said before it's an easy program. So if we do like this project, we need to go next level like built calendar and alarm etc. If we enter into tkinter field it easy to do graphical applications and by learning Java or C++ we can enter into a game industry (PUBG)

CHAPTER 3

SYSTEM ANALYSIS

3.1 PROGRAMMING LANGUAGES USED

PYTHON

Python is a general-purpose coding language—which means that, unlike HTML, CSS, and JavaScript, it can be used for other types of programming and software development besides web development. That includes back-end development, software development, data science and writing system scripts among other things. More Productive. First and foremost, reason why Python is much popular because it is highly productive as compared to other programming languages like C++ and Java. ... Python is also very famous for its simple programming syntax, code readability and English-like commands that make coding in **Python** lot easier and efficient ...

TKINTER

Tkinter is the standard GUI library for Python. Python when combined with Tkinter provides a fast and easy way to create GUI applications. Tkinter provides a powerful object-oriented interface to the Tk GUI toolkit. As Tk and Tkinter are available on most of the Unix platforms as well as on the Windows system, developing GUI applications..

3.2 PROJECT DESCRIPTION

The great part of building digital clock is every one can customize it as their own wish. From text font to background color, all the features are available to be customized. We will use two libraries in this project. And both of them come with Python, which means we don't have to install them. This kind of libraries is called Python built-in packages. If we are working on an application project, functions are the best way to make things work. Functions are also great because they make the program more structured and easier to understand. Alright, let's define our digital clock function then: Python is a very powerful language and things we can create with python is limitless. It is all about thinking about an idea and making it work. Working on hands-on programming projects like this one is the best way to sharpen coding skills.

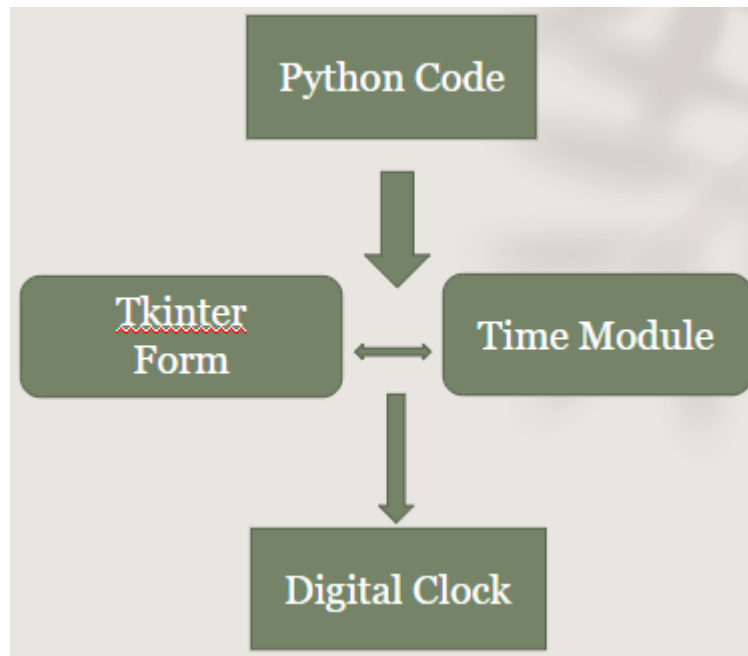
CHAPTER 4

RESULTS AND DISCUSSION

4.1 SYSTEM REQUIREMENTS

- Operating System: Windows/Mac
- RAM: 4GB
- Processor: 64x 1.0Ghz processor
- ROM: 8GB

4.2 Flow Chart of Clock Using Python



CHAPTER 5

5.1 CONCLUSION

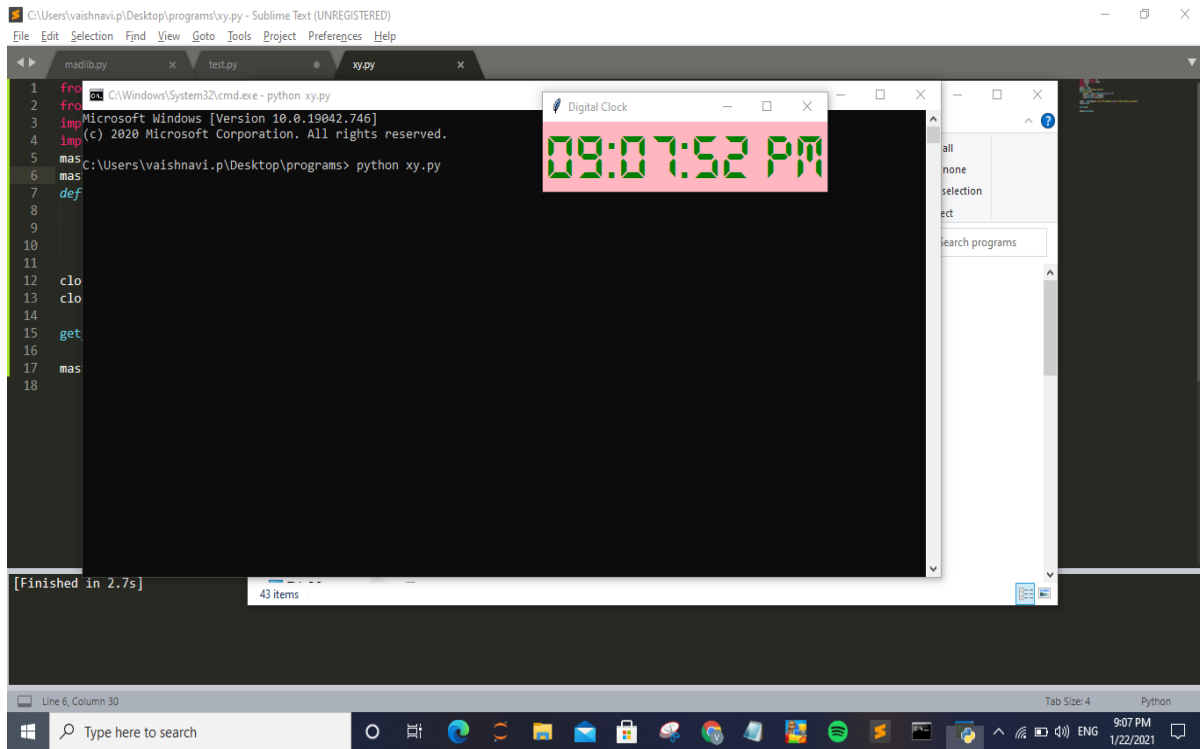
- This is a simple project to get started with Tkinter
- It has great features that can be used to create simple applications. And today we created digital clock.
- The great part of building own digital clock with customize as our wish.
- This Program will be use full for upcoming New ideas

5.2 REFERENCES

1. [GeeksforGeeks.org](https://www.geeksforgeeks.org/)

APPENDIX

A. SCREENSHOTS



B. SOURCE CODE

```
from tkinter import Tk
from tkinter import Label
import time
import sys
master = Tk()
master.title("Digital Clock")
def get_time():
timeVar = time.strftime("%I:%M:%S %p")
clock.config(text=timeVar)
clock.after(200,get_time )
```

```
clock = Label(master, font=("ds-digital",50),bg="light pink",fg="green")  
clock.pack()
```

```
get_time()
```

```
master.mainloop()
```