MA**DHAV INSTITUTE OF TECHNOLOGY AND SCIENCE, GWALIOR (M.P.)**

(A Govt. Aided UGC Autonomous & NAAC Accredited Institution Under RGPV, Bhopal)

Project Report

on

"UTILITY SMARTPHONE"

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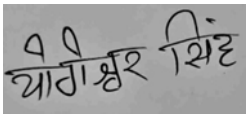
CERTIFICATE

This is to certify that MAYANK MISHRA and YUKTA PACHORI minor project, " UTILITY SMARTPHONE " is a genuine record of a project completed under our supervision and guidance in partial fulfilment of the requirements for the award of a Bachelor of Technology in Information Technology in the Department of Information Technology, Madhav Institute of Technology and Science, Gwalior.

(Prof.Vikas Sejwar)

Mentor



(Prof. YOGESHWAR SINGH)

Mentor

Abstract

There are a lot of apps in smartphone which are repetitive and are not required by a student. There is a need to optimize these smartphones and apps in-order to streamline the working of student and take away excessive resources that are not required by them such as dating apps. This proposed work uses application based user interface for using services that are the the basic necessity for a common student, and

daily to daily need fulfilling apps that reduces the burden of a student from desk work and let them focus on their prime job ie. to gain knowledge. This serves as a very handy and feasible resource for students as well as common man as it provides ease of accessing and updating information.

Chapter 1. Introduction

The Project works with the making of a centralized digital utility application for a student. Unique digital IDs or passwords can be provided to a single entity. Th ese apps will be independent from the other student and can be used as a private property.

This project is an app which takes in the input by **the users as input, processes it-saves the password and then** gives a result according the input provided.

11.1 Project aims and objectives

The purpose of the whole project is to streamline the process of excess use of smartphones and to reduce the burden from the shoulders of parents in order to keep a check on his/her child.

Chapter 2. System Analysis

System Objectives

The main objective of our application is to optimize the repetitive use of services that are not beneficial for students in any sort with the help of Graphical User Interface enabled working app. The application also aims at providing individuals facility to keep the data and informations independent from the other users using the same facility.

System Architecture

For front end, tkinter,time,PIL and other packages have been used and for back end python has been used.

Chapter 3. System Specifications

3.1 Hardware Specification

Since the hardware's are the important part while developing an erxe app, its necessary to find hardware requirements.

Processor–

The minimum level of required processor for this platform is Intel® Core(TM) i3-4030U CPU @ 1.90GHz processing speed. Since the time taken for processing the instruction depends on the processor power, so it is very important to choose the required processor

RAM–

For higher speed of the processing, it also depends on the memory. Therefore, for better performance minimum RAM should be 50 MB.

Hard disk–

Low size of hard disk is requiredfor the storage of the processed data

Cache Memory–

The app doesn’t require a cache memory and is still very fast.

3.2 Software Specification

Our system should meet following minimum specifications

OS — Windows 8

We will be using Python technologies. It is necessaryto have python installed on the system and modules of python suchas Tkinter and PIL installed on it

Though after converting this app into an executable ,app doesn't require anything other then itself to launch.

Chapter 4. Software Architecture

4.1 Architecture Overview

This application uses Python language. Front end is designed in python with the help of Tkinter framework. In Tkinter we have used different libraries like Tkinter, ttk, fielddialog,Tkinter.messagebox etc.For creating a game pygame has been used along with its various libraries.

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4.2 Process Modules

The functionalities of the system are divided and then assigned to components as described below.

Chapter 5. System Design Details

5.1 GUI Name and Description

Front end is designed in python with the help of Tkinter framework. Interactive user interface is provided by the Tkinter as well.

In Tkinter we have used different libraries of Tkinter framework. In Tkinter we have used different libraries like Tkinter , ttk, fielddialog , Tkinter.messagebox etc.

5.2 Design Details

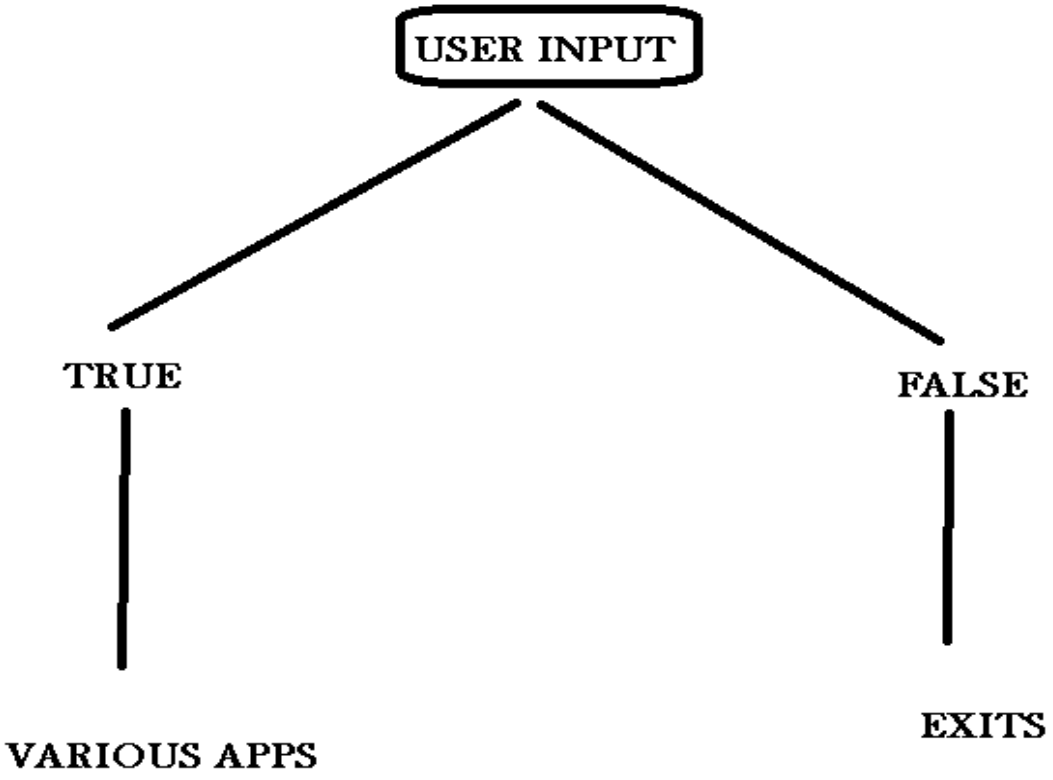
a) Processing within module

We have to develop the user interface for the application through which the user interacts with the application.

b) Error Checking

Errors occurring due to internet connection problems. Error can alsooccur if the file does not contain images and icons that are required by the application.

5.3 Flow Diagram


USER INPUT
TRUE
FALSE
VARIOUS APPS
EXITS

Chapter 6. Testing

Testing of program is done to find error in the given program. It is one of the major steps in the software development process. It is the **final step in the software development lifecycle**

6.1 Testing Objectives

Testing of program is done to find error in the given program. It is one of the major steps in the software development process. Various type of testing includes system testing, integration testing, unit **testing. Each of the testing process test some specific features of the** software.

6.2 Integration Testing

We have multiple modules in the application after combining them we complete testing of the module and do the integration testing. It checks the co-ordination between various modules of the application.

6.3 System testing

System testing is to test the execution of whole software. It answers *"Is whole software is running & performing well".*

System testing is usually coming with verification and validation. Verification is the checking of items, including software, for conformance and consistency with the associated specifications. Software testing is just like verification, and also uses the techniques **such as reviews, analysis, inspections and walkthroughs. Validation is the process of checking that what user actually wants**.

Validation: Are the job which is

being done is right?

Verification: Are we performing the

right job?

There are three different types of system testing which are: -

1. Logical Testing: In this type of testing, we check our software with the extreme cases.

2. Functional Testing: - In this testing we check whether the web service application is functional.

3. System Testing: - After the whole application is completed, we input test cases to check whether there isn't any error in application.

Chapter 7. System Implementation and Maintenance

7.1 Implementation

To ensure the success of the system the implementation step is carried out. If the system is not properly implemented the well-defined system can fail. To transform information system to operational **system implementation activities are used.**

7.1.1 Hardware Software and Services:

The hardware and software used in the web application is:

1. Hardware: Dell PC
2.Software: Pycharm, Python

7.2 Maintenance

When the system is fully implemented, its maintenance is done. System maintenance is done to check whether the software system is performing well or not. If there is any error then we have to remove it.

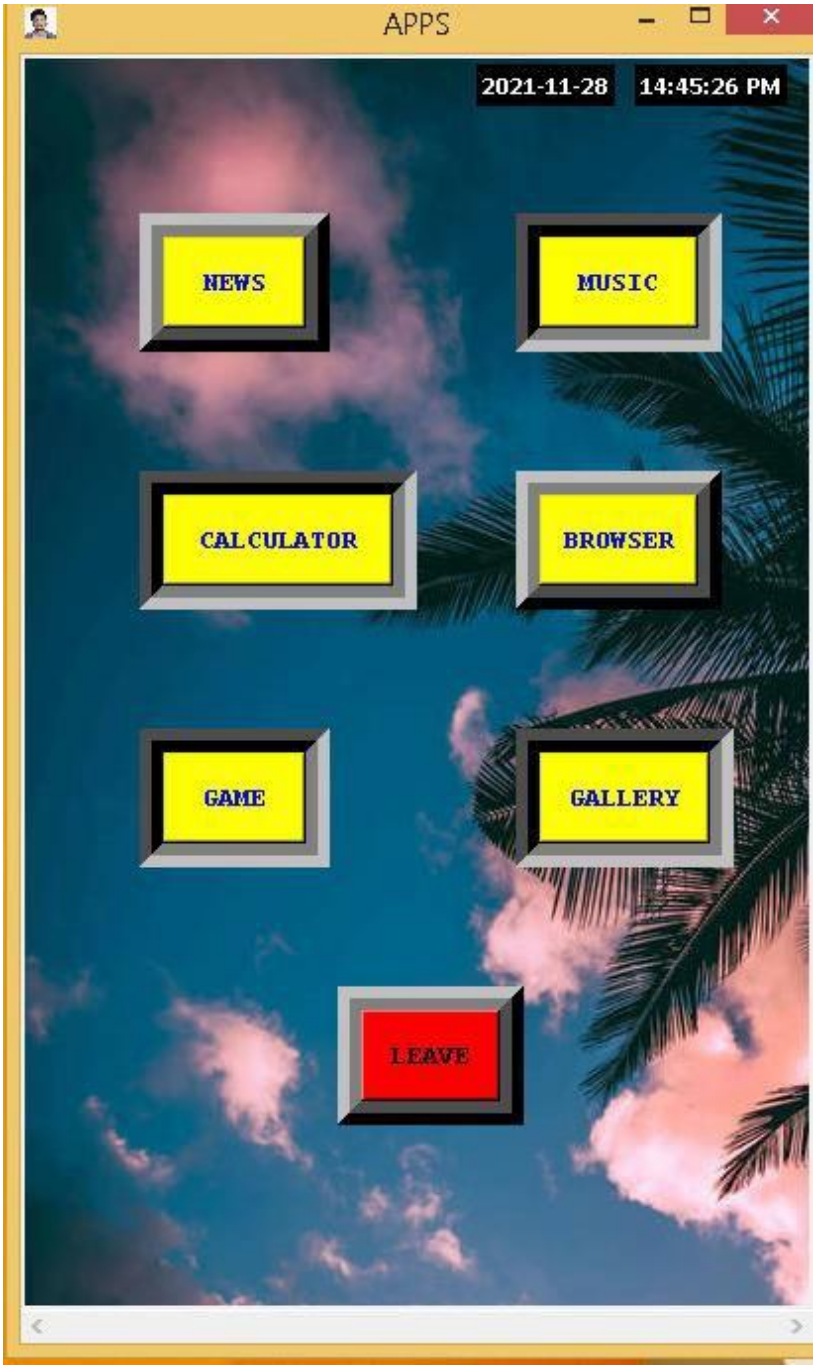
Chapter 8. Output

APP ICON CREATED

MAIN WINDOW

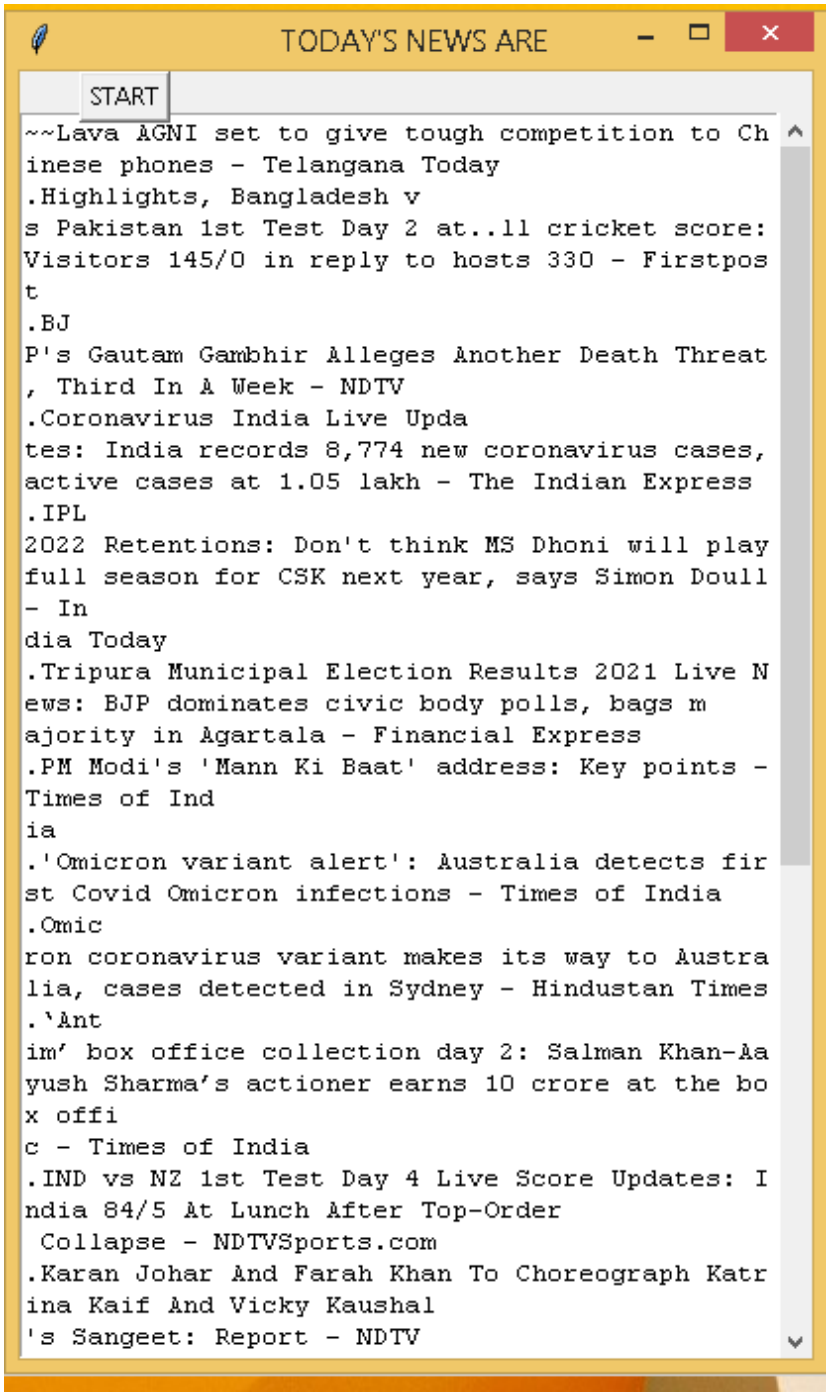

MAYANK x YUKTA
WHAT'S YOUR NAME ?
hello
GET ME IN
2021-11-28
14:44:43 PM
CHANGE WALL PAPER
ABOUT
EXIT
READY

INNER WINDOW



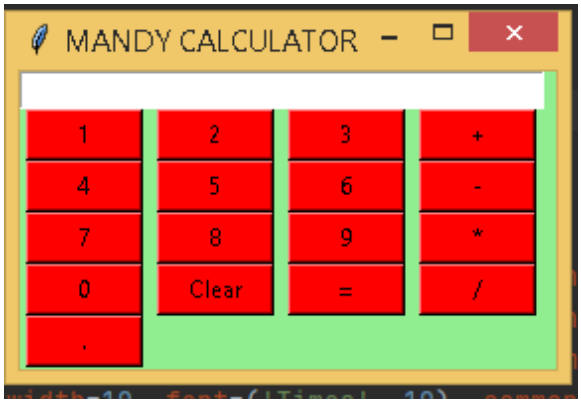
VARIOUS APPS

-NEWS



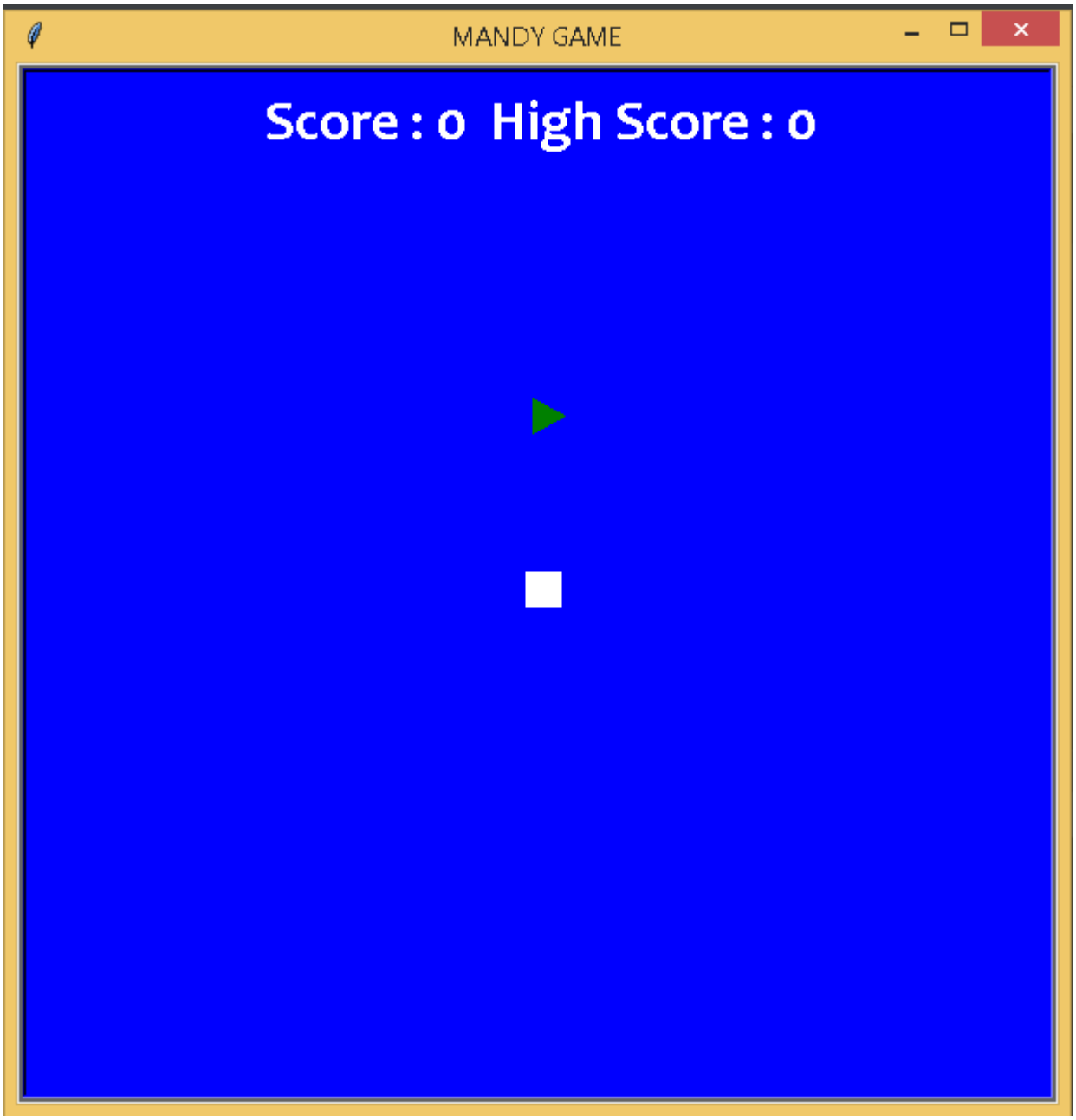
-BROWSER

-CALCULATOR

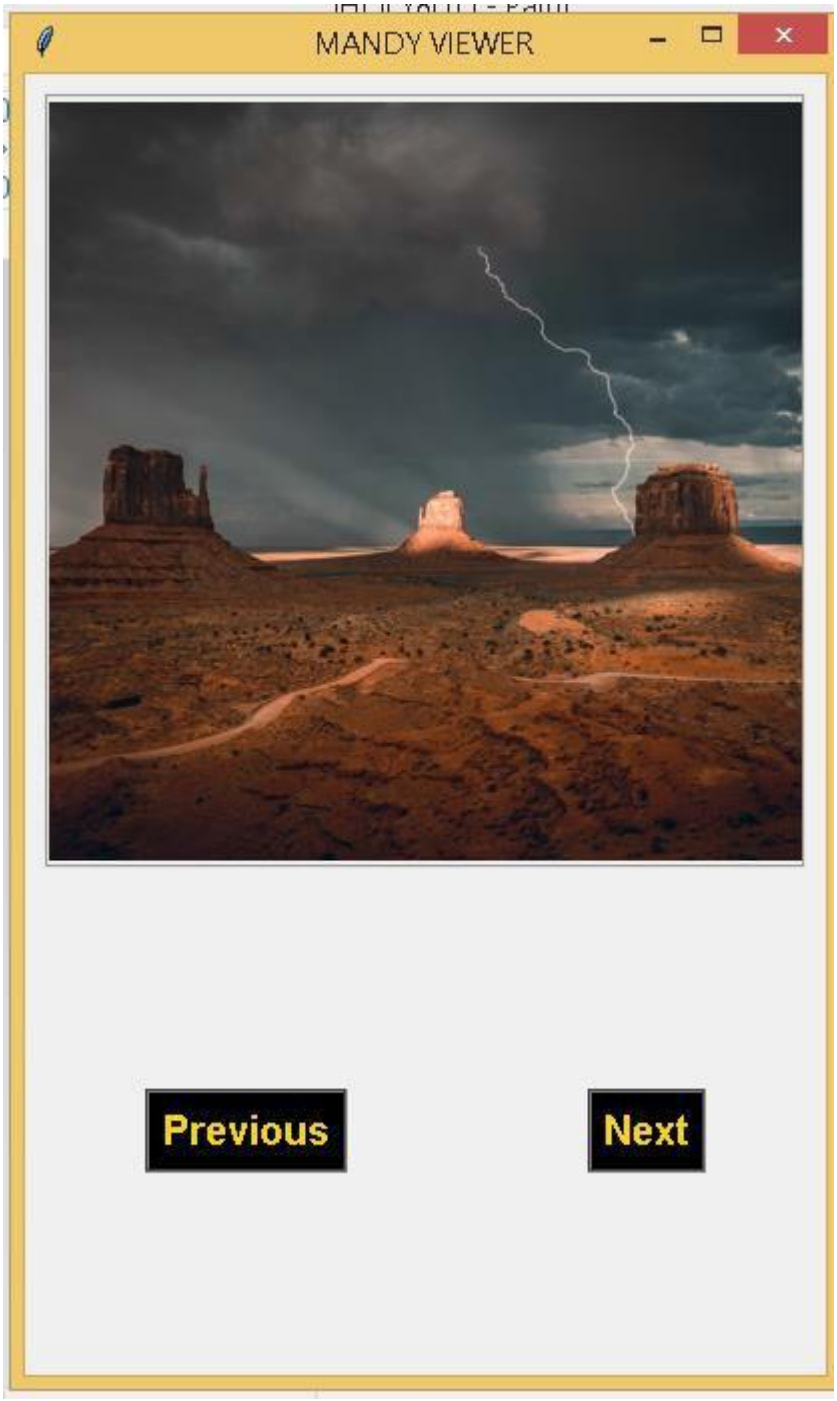


-MUSIC PLAYER

-SNAKE GAME



-GALLERY



Chapter 9. Conclusion

While making this project, ease of accessibility and user-friendliness were kept in mind so that the project can be implemented on the ground. We made sure that everybody is able to glide through the interface smoothly.

Chapter 10. Future Work

A very important future aspect of this project can be seen in implementing it on ground as it will greatly help parents keeping check on their child

It will greatly reduce work load, decrease paper work, save time andas a by-product increase the overall efficiency. Moving on, this project will include various utility srvices such as notepad etc for the students.Also keeping security in mind steps would be taken to implement more security for the user.