**NATIONAL INSTITUTE OF TECHNOLOGY PUDUCHERRY**



**(An Institution of National Importance under MoE, Govt. of India)**

**KARAIKAL – 609 609**

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Semester: 4 (FOURTH) Class: CSE

Subject Code: CS210 Subject Name: Python Programming Laboratory

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**PYTHON MINI – PROJECT REPORT**

**TITLE: Speed Typing Test**

**Objective**

**The main objective of speed typing test is to measure individual’s typing ability to type a sentence in a quick time.This can be helpful to improve the typing skills of each and every people.**

**Motivation:**

**The motivation of the project is to serve as a mini plattform to test individuals typing speed skills and accordingly increasev their speed by practising using the environment provided**

**Scope:**

**The scope of this project is to improve typing skills and build typing skills in the funny game manner**

**Problem Statement:Lack of an objective measure of typing proficiency: Without an objective measure of typing speed and accuracy, it can be challenging to evaluate an individual's typing skills accurately. This can lead to inaccurate assessments of typing proficiency and result in suboptimal productivity in the workplace.**

**The project aims to address the following other problems:**

1. Difficulty in identifying areas of improvement: Without a way to measure typing speed and accuracy, individuals may have difficulty identifying areas where they need to improve their typing skills. This can make it challenging to implement effective training programs or strategies to improve typing proficiency.
2. Limited availability of typing practice resources: Many individuals may not have access to sufficient resources to practice typing and improve their skills. A speed typing test project can provide a platform for individuals to practice typing and track their progress over time.
3. Inconsistency in typing assessments: Typing assessments can be subjective and inconsistent, depending on the evaluator. A speed typing test project provides an objective measure of typing proficiency that is consistent across different individuals and evaluators.

**Product Features:**

**->It provides a good friendly environment to type**

**->Measures the speed sccurately**

**->Provides the user to compare his/her speed with other contestants**

**->Provides data visualization of results to make it clear**

**Requirements:**

**->User friendly interface to type**

**->Proper performance potraying**

**->Randomizing sentences to make it interesting**

**->Creating a funny environment with helpful features**

**Concepts Used:**

**->Normal txt file accessing methods**

**->Graphical user interface using Tkinter**

**->Concept of storing and retreving data using pickling**

**->Using different modules like random,time etc**

**->Using the concept of data visualization**

**->Using the concept of object oriented programming**

**Implementation:**

**Implementation phase including designing of user interface ,retreiving the name of each student to the title of the GUI window.Creating an environment to type where the sentence to type is randomized and displayed to the window.Then it is storing results and comparing it to annunce the winners using different functions inside a class**

**Test Cases:**

**->Speed mesurement – Verifying that the platform calculates the time accurately inorder to calculate speed**

**->Correct sentence check- Verfying the platform throws an error message when the typed sentence is wrong**

**->Proper data visualization- Verfying that the platform shows the result proper in a pictorial way**

**->Correct User ->Verfying the correct user is typing according to order saved in txt file**

**Project Outcomes:**

**->Improves typing skill**

**->People can showcase their typing skills here**

**->Competition with motivation**

**->Access the position of each individual in the competition**

**Future Scope:**

**->Can be used to asess typing speed more accurately and user encrypted useing AI**

**->People can use in mobile to asess their own typing skills from home**

**->Can be used to test multi lingual typing**

**->With the growing popularity of virtual assistants such as Siri and Alexa, future speed typing test projects can integrate with these platforms to provide more immersive and interactive learning experiences.**

**Conclusion:**

**In conclusion, a speed typing test project is a valuable tool for users to improve their typing skills, increase their productivity, and achieve their personal and professional goals.**