



PROGRAMMING SKILL CHECKER



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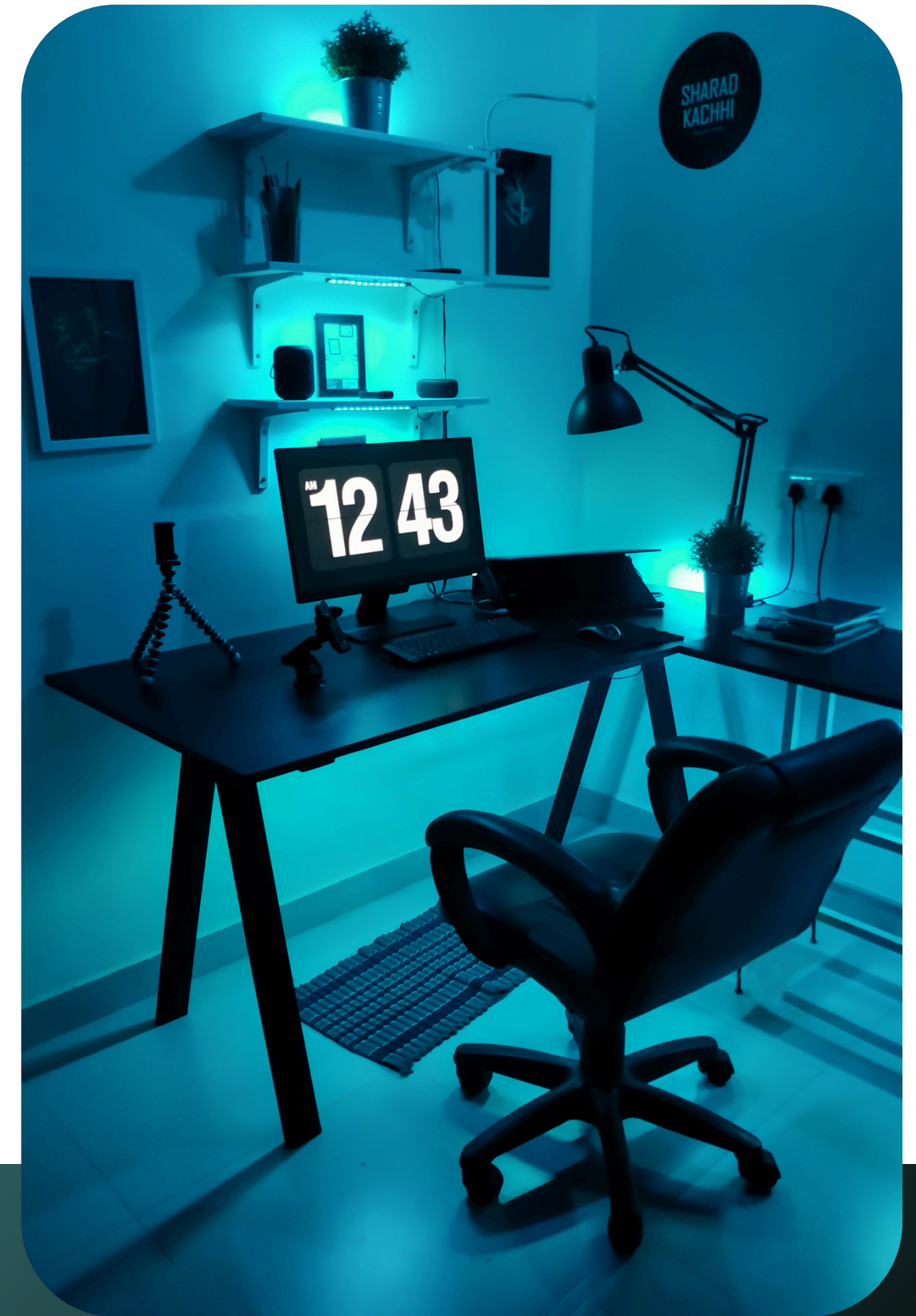
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Introduction

The Programming Skill Checker helps learners and job seekers focus on the most in-demand technical skills by identifying key priorities, ensuring they stay competitive and fully maximize their potential in the field.



Project Objectives

Skill Verification

Provide a simple interface for checking.

Ease of Use

Develop a user-friendly tool using Python and Tkinter .

Customization

Allow the skill list to be easily updated to reflect industry trends.

Project Description

01 The Programming Skill Checker operates as follows:

- Users input a programming skill in a text box.
- The program compares the input against a predefined list of required skills.
- A message box displays whether the skill is in demand or not.

02 Key Features:

- Customizable skill list.
- Interactive graphical user interface.
- Immediate feedback to the user.

03 Skills Supported (initial list):

Python, Java, HTML, CSS, JavaScript, SQL, Git, React.js.

Code Overview

The program is developed in Python and employs the Tkinter library for its GUI. Below are key snippets:

Skill Verification Function:

```
def check_skills():  
    skill = skill_entry.get().lower()  
    if skill in ['python', 'java', 'html',  
                'css', 'javascript', 'sql']:  
  
        messagebox.showinfo("Result",  
                             f"{skill.capitalize()} is a required  
                             skill!")  
    else:  
  
        messagebox.showwarning("Result", f"{skill.capitalize()} is not  
                                     listed as a required skill.")
```

User Interface Setup:

```
app = tk.Tk()  
app.title("Skill Checker")  
tk.Label(app, text="Enter the  
programming skill:").pack(pady=5)  
skill_entry = tk.Entry(app, width=30)  
skill_entry.pack(pady=5)  
check_button = tk.Button(app,  
                          text="Check Skill",  
                          command=check_skills)  
check_button.pack(pady=10)  
app.mainloop()
```



Results

The tool successfully identifies required and non-required skills based on the predefined list. Below are sample outcomes:

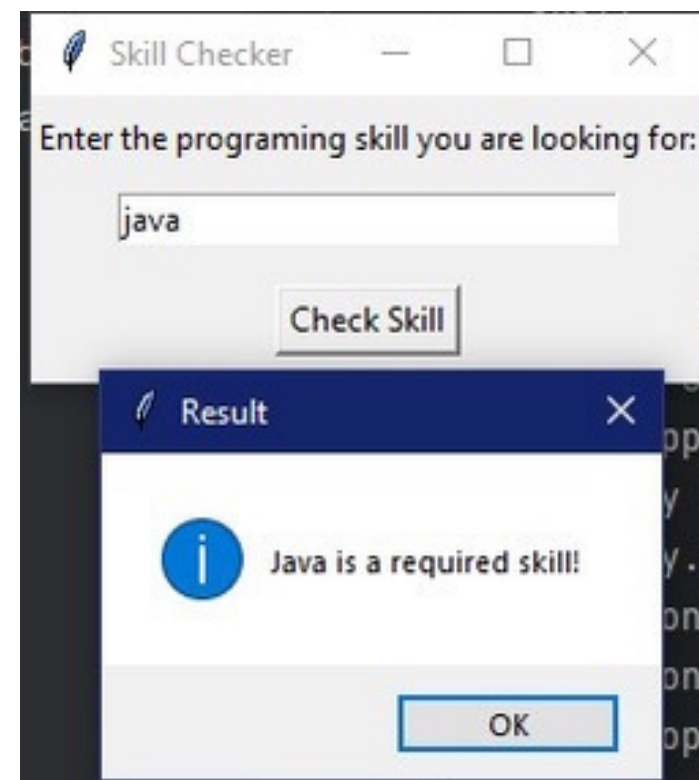
1. Input: Python → Output: “Python is a required skill!”
2. Input: Ruby → Output: “Ruby is not listed as a required skill.”

Program in Action

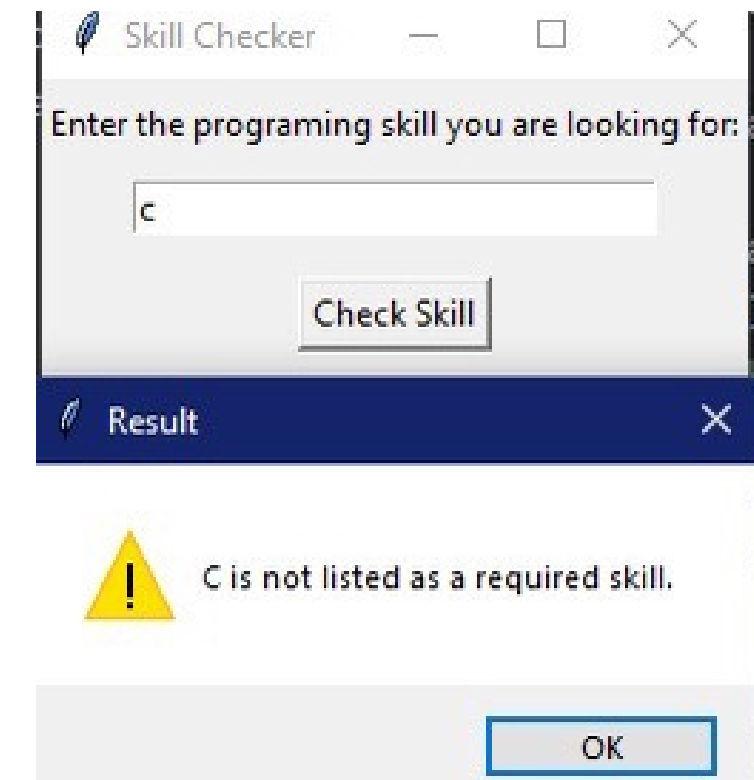
screenshots of the program

```
import tkinter as tk
from tkinter import messagebox
def check_skills():
    skill = skill_entry.get().lower()
    if skill in ['python', 'java', 'html', 'css', 'javascript', 'ruby', 'c++', 'PHP', 'swift', 'c#', 'react.js', 'sql', 'network se
    messagebox.showinfo(title="Result", message=f"{skill.capitalize()} is a required skill!")
    else:
        messagebox.showwarning(title="Result", message=f"{skill.capitalize()} is not listed as a required skill.")
app = tk.Tk()
app.title("Skill Checker")
tk.Label(app, text="Enter the programing skill you are looking for:").pack(pady=5)
skill_entry = tk.Entry(app, width=30)
skill_entry.pack(pady=5)
check_button = tk.Button(app, text="Check Skill", command=check_skills)
check_button.pack(pady=10)
app.mainloop()
```

Input of a required skill and displaying "Skill is required."



Input of a skill not listed and displaying "Skill is not required."



Algorithm

1. Start

- Open the GUI window.

2. Input

- User enters a skill in the text field.

3. Process

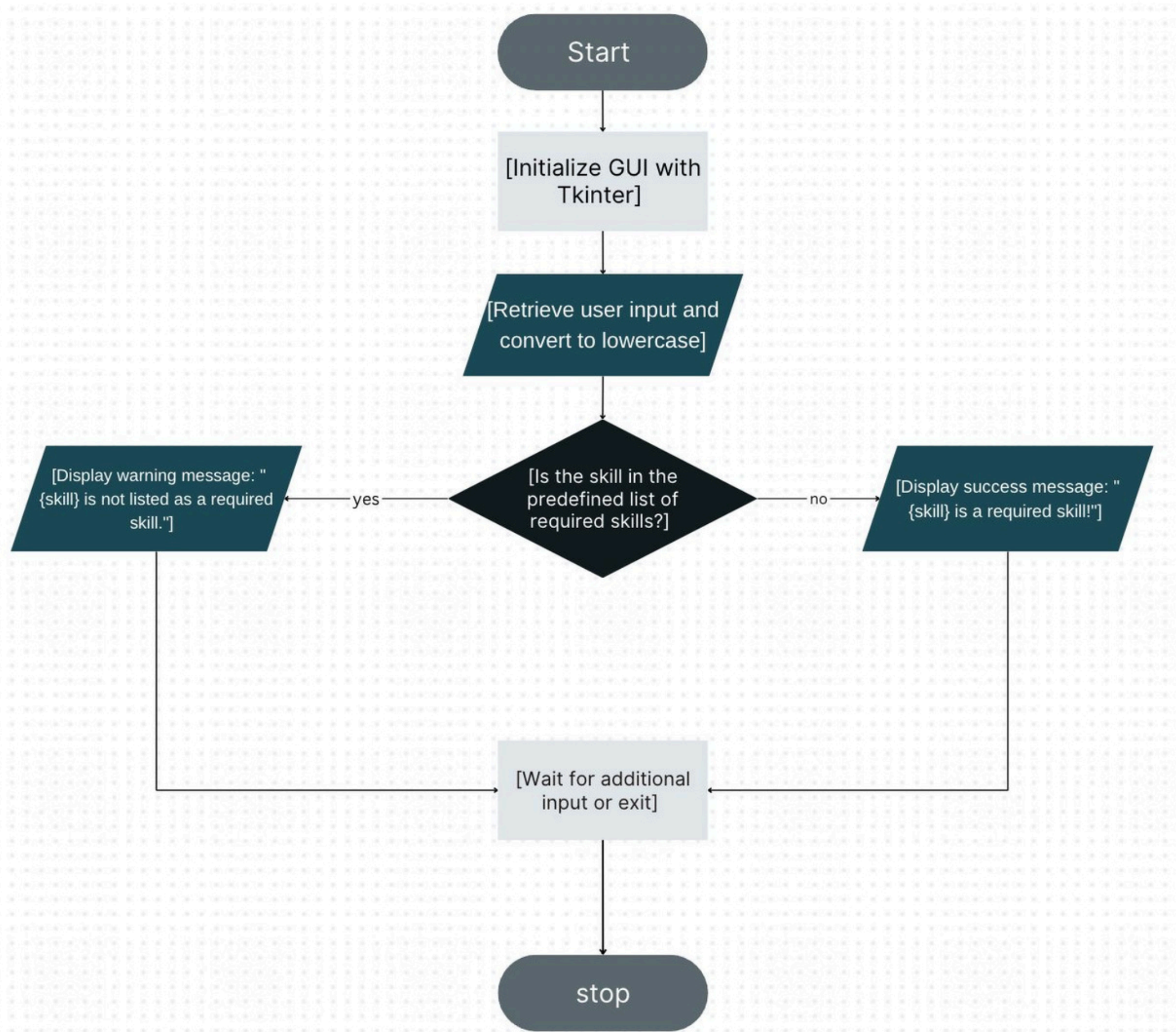
- * The program fetches the input and converts it to lowercase.
- * Checks if the skill exists in the predefined list.

4. Output

- * Show a success message if the skill is found.
- * Show a warning message if the skill is not found.

5. Repeat

- Wait for the next input or close the application.



References

1

Python Documentation: <https://docs.python.org>

2

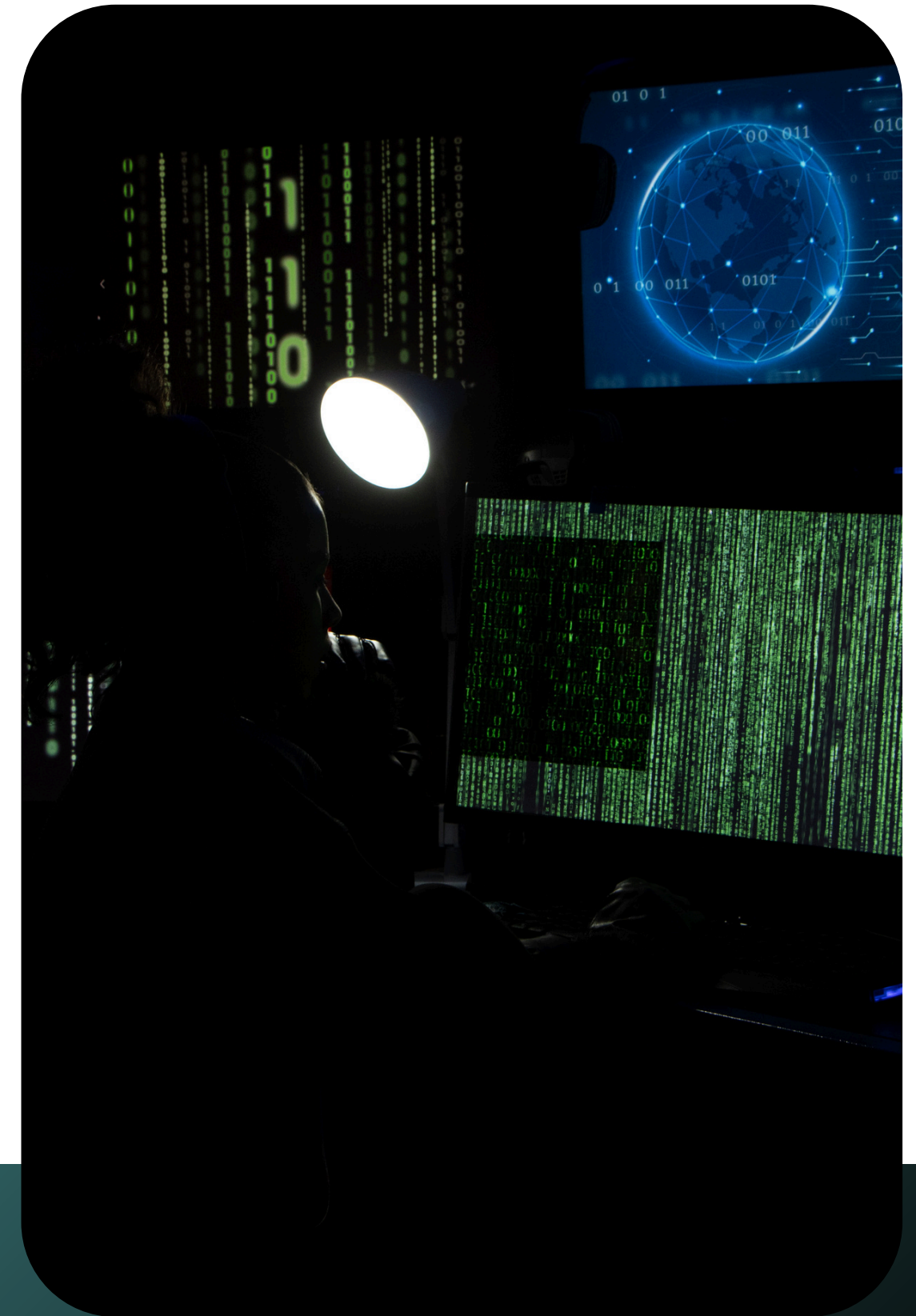
Tkinter GUI Programming: Tkinter Documentation

3

Programming Skills in Demand: [Insert Resource]

Abstract

This report presents the Programming Skill Checker, a Python-based tool using Tkinter that helps users verify the demand for specific programming skills. It provides immediate feedback, making it valuable for learners and job seekers in the tech industry.



Conclusion

The Programming Skill Checker is a valuable tool for learners and job seekers, offering a simple interface and customizable features. Future improvements could include dynamic updates and integration with job market data.



Thank you