

# Documentation: Registration Form

## Description of the study

The form collects user information such as username, password, email, and date of birth. It includes validation checks for ensuring that the entered information meets certain criteria, such as password length, email format, and valid date of birth in the specified format (YYYY-MM-DD).

## Benefits to the user

- **User-Friendly** - The form interface is clear and straightforward, making it easy for users to understand what information they need to provide.
- **Input Validation** - It checks for various errors such as empty fields, password length, password match, valid email format, and valid date format, ensuring that users enter correct and valid information.
- **Immediate Feedback** - If there are any errors in the form submission, it displays error messages immediately, allowing users to correct their mistakes promptly.
- **Security** - By prompting users to enter a password and confirm it, it helps ensure that users don't accidentally mistype their passwords, reducing the chances of authentication issues later.

## Objectives

This registration form code is designed with several objectives in mind. Firstly, it aims to efficiently gather essential user information such as username, password, email, and date of birth. Secondly, it implements robust input validation mechanisms to ensure that the provided information meets specified criteria: usernames must not be empty, passwords must be at least 8 characters long, emails must follow a standard format, and dates of birth must be valid and correctly formatted.

## Purpose of the code

This code simplifies the registration process for users, streamlining their interaction with the application and providing a smooth onboarding experience. Additionally, by enforcing validation rules, it helps maintain the integrity and security of user data within the system.

## Significance of the code / Features of the code

**Input Validation** - The form ensures that the user provides valid input for each field. It checks for:

Presence of a username

Password length of at least 8 characters

Matching passwords in the password and confirm password fields

Valid email format (containing "@" and ".")

Valid date format (YYYY-MM-DD)

**Error Handling** - If any of the validation criteria are not met, it displays an error message using Tkinter's messagebox module.

**Submission Handling** - Upon successful validation, it displays a success message and closes the window.

**Security measures** - By obscuring the password characters with asterisks (\*), it ensures that passwords are not visible as plain text.

## Code

```
1 import tkinter as tk
2 from tkinter import messagebox
3 import datetime
4
5 def submit_form():
6     username = entry_username.get().
7     strip()
8     password = entry_password.get()
9     confirm_password =
10    entry_confirm_password.get()
11    email = entry_email.get().strip()
12    date_of_birth = entry_date_of_birth.get().
13    strip()
```

```
13     if not username:
14         messagebox.showerror("Error",
15                                "Username is required")
16         return
17     if len(password) < 8:
18         messagebox.showerror("Error",
19                                "Password must be at least 8 characters")
20         return
21     if password != confirm_password:
22         messagebox.showerror("Error",
23                                "Passwords do not match")
24         return
25     if "@" not in email or "." not in email:
26         messagebox.showerror("Error", "Enter
27                                a valid email address")
28         return
29     if not valid_date(date_of_birth):
30         messagebox.showerror("Error", "Enter
31                                a valid date in format YYYY-MM-DD")
32         return
33     messagebox.showinfo("Success",
34                           "Registration successful!")
35     window.destroy()
36
37 def valid_date(date_str):
38     try:
39         datetime.datetime.strptime(date_str,
40                                     '%Y-%m-%d')
41         return True
42     except ValueError:
43         return False
```

```

40 window = tk.Tk()
41 window.title("Registration Form")
42 window.geometry('700x800')
43 |
44
45 frame = tk.Frame(window)
46 frame.pack(padx=10, pady=10)
47
48 label_username = tk.Label(frame,
49 text="Username:")
50 label_username.grid(row=0, column=0,
51 sticky="w")
52 entry_username = tk.Entry(frame,
53 width=30)
54 entry_username.grid(row=0, column=1)
55
56 label_password = tk.Label(frame,
57 text="Password:")
58 label_password.grid(row=1, column=0,
59 sticky="w")
60 entry_password = tk.Entry(frame,
61 width=30, show="*")
62 entry_password.grid(row=1, column=1)
63
64 label_confirm_password = tk.Label(frame,
65 text="Confirm Password:")
66 label_confirm_password.grid(row=2,
67 column=0, sticky="w")
68 entry_confirm_password = tk.Entry(frame,
69 width=30, show="*")
70 entry_confirm_password.grid(row=2,
71 column=1)

```

```

62
63 label_email = tk.Label(frame,
64 text="Email:")
65 label_email.grid(row=3, column=0,
66 sticky="w")
67 entry_email = tk.Entry(frame, width=30)
68 entry_email.grid(row=3, column=1)
69
70 label_date_of_birth = tk.Label(frame,
71 text="Date of Birth (YYYY-MM-DD):")
72 label_date_of_birth.grid(row=4, column=0,
73 sticky="w")
74 entry_date_of_birth = tk.Entry(frame,
75 width=30)
76 entry_date_of_birth.grid(row=4, column=1)
77
78 submit_button = tk.Button(frame,
79 text="Submit", command=submit_form)
80 submit_button.grid(row=5, column=0,
81 columnspan=2)
82
83 window.mainloop()

```

Registration Form

Username:

Password:

Confirm Password:

Email:

Date of Birth (YYYY-MM-DD):

Submit



## **Personal information :**

**Name:** Cyrill Kent A. Baybay

**Contact number:** 09706850108

**Email address:** cyrillbaybay@gmail.com

**Date of birth:** April 6, 2005

**Place of birth:** Caraga hospital

**Address:** P - 2 Brgy. Togbongon Surigao city

**Age:** 19

**Nationality:** Filipino

**Religion:** Roman Catholic

**Father's Name:** Victoriano C. Baybay

**Mother's Name:** Mansueta A. Baybay

## **Educational Background :**

**Elementary: J.E.Fernandez elem. School**

**Highschool: Surigao del Norte National High school**

**Senior Highschool: Surigao del Norte National High school**

**College: Surigao del Norte state university**