**AI Based Campus Automation Bot**

**Code**

import ipywidgets as widgets

from IPython.display import display, clear\_output

# Data

schedule = {

"Monday": "9AM - Math, 11AM - Physics, 2PM - Programming",

"Tuesday": "10AM - English, 12PM - Electronics",

"Wednesday": "9AM - Programming, 1PM - Lab",

"Thursday": "10AM - Communication Skills, 2PM - Seminar",

"Friday": "9AM - Engineering Drawing, 12PM - Physics"

}

contacts = {

"Dr. Sharma": "sharma@university.edu",

"Prof. Ramesh": "ramesh@university.edu",

"Ms. Priya": "priya@university.edu"

}

# Widgets

menu = widgets.Dropdown(

options=[

('Select an option', ''),

('1. Show Class Schedule', '1'),

('2. Campus News', '2'),

('3. Faculty Contact', '3'),

('4. Exit', '4')

],

description='Choose:',

style={'description\_width': 'initial'},

layout=widgets.Layout(width='60%')

)

output\_box = widgets.Output()

# Actions

def show\_schedule():

with output\_box:

clear\_output()

print("📅 Class Schedule")

day\_selector = widgets.Dropdown(options=list(schedule.keys()), description='Day:')

confirm\_button = widgets.Button(description="Show Schedule")

def on\_confirm\_clicked(b):

clear\_output()

print(f"Schedule for {day\_selector.value}:")

print(schedule[day\_selector.value])

display(menu)

confirm\_button.on\_click(on\_confirm\_clicked)

display(day\_selector, confirm\_button)

def campus\_news():

with output\_box:

clear\_output()

print("\n📢 Campus News:")

print("- Mid-semester exams start next Monday.")

print("- TechFest registrations open!")

print("- Library will be closed on Friday.\n")

display(menu)

def faculty\_contact():

with output\_box:

clear\_output()

print("👨‍🏫 Faculty Contact Info")

faculty\_selector = widgets.Dropdown(options=list(contacts.keys()), description='Faculty:')

confirm\_button = widgets.Button(description="Get Contact")

def on\_confirm\_clicked(b):

clear\_output()

name = faculty\_selector.value

print(f"Contact for {name}: {contacts[name]}")

display(menu)

confirm\_button.on\_click(on\_confirm\_clicked)

display(faculty\_selector, confirm\_button)

def on\_menu\_change(change):

if change['new'] == '':

return

choice = change['new']

if choice == '1':

show\_schedule()

elif choice == '2':

campus\_news()

elif choice == '3':

faculty\_contact()

elif choice == '4':

with output\_box:

clear\_output()

print("Goodbye! Have a great day! 👋")

menu.disabled = True # Prevent further input

menu.observe(on\_menu\_change, names='value')

# Launch Bot

print("Hi! I'm your Campus Automation Bot 🤖")

print("How can I assist you today?")

display(menu, output\_box)