

Przykładowy kod pełnej aplikacji:

```
# Dodanie do repozytorium pracy z aplikacją PySimpleGUI i `Commit/Push` a37
# uwaga na ilość uruchomień: 100 request ogólnie, później:
# {'error': {'code': 'usage_limit_reached', 'message': 'Your monthly usage
limit has been reached. Please upgrade your Subscription Plan.'}}
# wczytujemy niezbędne elementy
import sys
import requests
import PySimpleGUI as sg
from time import sleep

def get_flight_information(api_key: str):
    returned_text = "No planes data."

    params = {
        'access_key': api_key,
        'flight_status': 'active',
    }

    data_get = requests.get(
        f"http://api.aviationstack.com/v1/flights", params)
    data_json = data_get.json()

    # sprawdzamy, czy nie pojawia się jakiś błąd
    if "error" in data_json:
        return data_json["error"]["message"]

    # jeśli błędnie podamy api_key
    if data_get.status_code == 401:
        return data_json["error"]["message"]

    # dane o lotach – w wersji FREE 100 rekordów
    flights = data_json["data"]
    if flights:
        returned_text = "Data for flights: \n"
        for flight_info in flights:
            output_line = ""
            airline = flight_info["airline"]
            flight = flight_info["flight"]
            departure = flight_info["departure"]
            arrival = flight_info["arrival"]
            live = flight_info["live"] # dostępne tylko dla części lotów

            output_line += f"Flight number {flight['iata']} by
{airline['name']} - from {departure['airport']} to {arrival['airport']}\n"
            if live:
                output_line += f"On {live['altitude']} meters with
{live['speed_horizontal']} km/h.\n"

            output_line += "-----\n"
        returned_text += output_line
```

```

        return returned_text

# definiujemy wygląd aplikacji
app_layout = [
    [sg.Text("Please enter API KEY"), sg.Input("api_key"), sg.Button("Check
today's flights")],
    [sg.Text("_" * 100)],
    [sg.Output(size=(100, 40), key="-OUTPUT-")],
    [sg.Button("Clear -OUTPUT-"), sg.Exit()],
]
window = sg.Window("Checking planes in air.", app_layout,
enable_close_attempted_event=True)
# używamy pętli nieskończonej, która działa aż do słowa kluczowego `break`
# pamiętajmy o PEP-8, wcięciach i bloku kodu -
https://www.python.org/dev/peps/pep-0008/#indentation
while True:
    # poniższe wywołanie otwiera okno i wczytuje dane
    event, values = window.read()
    # inny sposób sprawdzania - tu x nie spowoduje zniknięcia okna
    if event in (sg.WINDOW_CLOSE_ATTEMPTED_EVENT, "Exit") and
sg.popup_yes_no('Do you really want to exit?') == 'Yes':
        print("Break and EXIT")
        break

    # dodajemy sprawdzenie wciśniętego przycisku
    if event == "Check today's flights":
        # sprawdzamy lot
        print("Checking...")
        api_key = values[0]
        plane_info = get_flight_information(api_key)
        print(plane_info)

    # sprawdzamy naciśnięte przyciski
    if event == "Clear -OUTPUT-":
        window['-OUTPUT-'].update(value='')

# koniec programu
window.close()
print("End of application")
sys.exit()

```

Jeśli któraś z grup nie będzie w stanie samodzielnie stworzyć kodu, można popowiedzieć jej ten kod. Wynikiem będzie aplikacja, która pozwoli pokazać informacje o samolotach *w powietrzu*.

Checking planes in air.

Please enter API KEY

Checking....

Data for flights:

Flight number O36873 by SF Airlines - from Tianhe International to Shenzhen
On 8412.48 meters with 731.54 km/h.

Flight number CI614 by China Airlines - from Hong Kong International to Taiwan Taoyuan International (Chiang Kai Shek International)

Flight number O37303 by SF Airlines - from Shenzhen to Hangzhou

Flight number CK263 by China Cargo - from Shanghai Pudong International to Hong Kong International

Flight number EK7525 by Emirates - from Auckland International to Christchurch International

Flight number CAO1083 by Air China Cargo - from Beijing Capital International to Nanjing Lukou International Airport

Flight number HZ5653 by Aurora - from Irkutsk to Novyy

Flight number ET1303 by Ethiopian Airlines - from Singapore Changi to Tullamarine

Flight number LH9777 by Lufthansa - from Tullamarine to Singapore Changi

Flight number OZ742 by Asiana Airlines - from Suvarnabhumi International to Seoul (Incheon)
On 7414.26 meters with 734.832 km/h.

Flight number SQ218 by Singapore Airlines - from Tullamarine to Singapore Changi

Flight number UK8218 by Vistara - from Tullamarine to Singapore Changi

Flight number TK9311 by Turkish Airlines - from Tullamarine to Singapore Changi

Flight number NZ401 by Air New Zealand - from Auckland International to Wellington International

Flight number SQ8524 by Singapore Airlines - from Singapore Changi to Taiwan Taoyuan International (Chiang Kai Shek International)

Flight number UK8255 by Vistara - from Singapore Changi to Brisbane International

Flight number DL7691 by Delta Air Lines - from Singapore Changi to Seoul (Incheon)