Program 6

August 30, 2023

Imagine you are creating a form(Admission form/Registration Form, Booking Form, etc.,.) relevant to your domain. Create a function using the 're' module to verify the following. 1. The input string is correct or not (name and dot) 2. Input has only digit(Register number, phone number) 3. Verify the email ID 4. Verify date of birth 5. Payment option 6. All the above

[ ]:
```
import re
def verify_input(input_string, input_type):
  pattern = reg(input_type)
  if not re.match(pattern, input_string):
    return False

  return True

def reg(input_type):
  if input_type == "name":
    return r"^[a-zA-Z]+[\._]?[a-zA-Z]+$"

  elif input_type == "register number":
    return r"^[0-9]{7}$"

  elif input_type == "email":
    return r"^[a-zA-Z0-9_.+-]+@[a-zA-Z0-9-]+\.[a-zA-Z]+$"

  elif input_type == "date of birth":
    return r"^\d{4}-\d{2}-\d{2}$"

  else:
    return r"^[a-zA-Z0-9_.+-]+$"


print(verify_input("Yash", "name"))
print(verify_input("1234567", "register number"))
print(verify_input("Yashtolani@gmail.com", "email"))
print(verify_input("2001-05-08", "date of birth"))


for input_type in ["name", "register number", "email", "date of birth"]:
  print(f"Verifying input type '{input_type}'")
```

```
  for input_string in ["Yash", "1234567", "Yashtolani@gmail.com", "2001-05-08"]:
    print(f"\tInput string: '{input_string}'")
    print(f"\tValid: {verify_input(input_string, input_type)}")
```

```
True
True
True
True
Verifying input type 'name'
        Input string: 'Yash'
        Valid: True
        Input string: '1234567'
        Valid: False
        Input string: 'Yashtolani@gmail.com'
        Valid: False
        Input string: '2001-05-08'
        Valid: False
Verifying input type 'register number'
        Input string: 'Yash'
        Valid: False
        Input string: '1234567'
        Valid: True
        Input string: 'Yashtolani@gmail.com'
        Valid: False
        Input string: '2001-05-08'
        Valid: False
Verifying input type 'email'
        Input string: 'Yash'
        Valid: False
        Input string: '1234567'
        Valid: False
        Input string: 'Yashtolani@gmail.com'
        Valid: True
        Input string: '2001-05-08'
        Valid: False
Verifying input type 'date of birth'
        Input string: 'Yash'
        Valid: False
        Input string: '1234567'
        Valid: False
        Input string: 'Yashtolani@gmail.com'
        Valid: False
        Input string: '2001-05-08'
        Valid: True
```

1. Related to the identi

ied domain search for the dataset using the below-mentioned

links(not limited to), and enter the required details in the shared sheet. https://www.dataquest.io/blog/free-datasets-for-projects/ https://www.kaggle.com/datasets https://archive.ics.uci.edu/ml/datasets.php

2. Dataset selection should be unique, and relevant to the selected domain.
3. The dataset should contain a minimum of 10 features (columns) and 100 instances (rows).
4. Minimum 5 numeric, 4 categorical(2 Nominal and 2 ordinal) features should be there in the identi

ied dataset

5. Submit the file in .csv format

[ ]:
```
import pandas as pd
df=pd.read_csv('collegePlace.csv')
df
```

[ ]:

	Age	Gender	Stream	Internships	CGPA	Hostel	HistoryOfBacklogs	PlacedOrNot
0	22	Male	Electronics And Communication	1	8	1	1	1
1	21	Female	Computer Science	0	7	1	1	1
2	22	Female	Information Technology	1	6	0	0	1
3	21	Male	Information Technology	0	8	0	1	1
4	22	Male	Mechanical	0	8	1	0	1
…	…	…	…	…	…	…	…	…
2961	23	Male	Information Technology	0	7	0	0	0
2962	23	Male	Mechanical	1	7	1	0	0
2963	22	Male	Information Technology	1	7	0	0	0
2964	22	Male	Computer Science	1	7	0	0	0
2965	23	Male	Civil	0	8	0	0	1

[2966 rows x 8 columns]