

# Python-Class-24-11-2020-Healthcare-Project

November 25, 2020

## 1 A project on healthcare service process

### 1.1 Ch -1: Introduction

#### 1.1.1 About Python

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.

#### 1.1.2 About healthcare industry

India has a universal healthcare model that is mostly administered at the state level rather than the federal level. The public system is essentially free for all Indian residents except for small, often symbolic co-payments in some services. In 2019, the total net government spending on healthcare was \$ 36 billion or 1.23 % of its GDP.[3] The Indian Constitution makes the provision of healthcare in India the responsibility of the state governments, rather than the central federal government. It makes every state responsible for “raising the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties”. Since the country's independence, the public healthcare system has been entirely funded through general taxation.

#### Services in healthcare industry

## 2 Ch 2: SDLC

### 2.1 planning

This project requires Python 3.6

### 2.2 Analysis

Roles & Relationships

who is a Doctor? role

who is patient? role

## 2.3 Development

```
[221]: def get_the_letter(word, idx):  
        idx = idx - 1  
        for l in word.split():  
            return l[idx]
```

```
[222]: get_the_letter('kama', 1)
```

```
[222]: 'k'
```

```
[223]: import random  
        random.randint(1, 1000)
```

```
[223]: 784
```

```
[224]: class Doctor:  
        qual = []  
        spl = []  
  
        def __init__(self, qual, spl):  
            self.qual = qual  
            self.spl = spl  
  
        def getInfo(self):  
            import random  
  
            self.rnd = random.randint(1, 100)  
            self.docId = f'{self.rnd}-{self.qual}-{self.spl}'  
            print(self.docId)
```

```
[225]: class Patient:  
  
        dental_patients = []  
        padiatric_patients = []  
  
        def __init__(self, fname, lname, illness):  
  
            self.fname = fname  
            self.lname = lname  
            self.illness = illness  
  
        def getInfo(self):  
            import random  
            rnd = random.randint(1, 1000)
```

```

        firstlettersofname = get_the_letter(self.fname, 1) +
        ↪get_the_letter(self.lname, 1)
        self.fullname = f'{self.fname } {self.lname}'
        self.patid = f'{firstlettersofname}-{rnd}'
        return {'fullname': self.fullname, 'patient_id': self.patid}

    def append_patients(self):
        if self.illness == "dental":
            self.dental_patients.append(self.fullname)
        else:
            self.padiatric_patients.append(self.fullname)

```

## 2.4 Implementation

```

[226]: doc1 = Doctor(qual = "mbbs", spl = "padiatrician")
       doc2 = Doctor(qual = "bds", spl = "surgeon")

       print(doc1.qual, doc1.spl, doc1.getInfo())
       print(doc2.qual, doc2.spl, doc2.getInfo())

```

```

44-mbbs-padiatrician
mbbs padiatrician None
97-bds-surgeon
bds surgeon None

```

```

[227]: pat = Patient(fname="kamakshaiah", lname="musunuru", illness = "dental")
       pat2 = Patient(fname="vinod", lname="datta", illness = "padiatric")

```

```

[228]: print(pat.getInfo()['fullname'])
       print(pat2.getInfo()['fullname'])

```

```

kamakshaiah musunuru
vinod datta

```

```

[229]: pat.append_patients()
       pat2.append_patients()

```

```

[230]: pat.dental_patients

```

```

[230]: ['kamakshaiah musunuru']

```

```

[231]: Patient.padiatric_patients

```

```

[231]: ['vinod datta']

```

```

[ ]:

```