I. <u>Project overview</u>

Healthcare Technology

Our project is about making healthcare accessible to almost everyone on the planet. This can be made possible through certain ways which include Technology as it can make a lot of things /activities /information possible and accessible by people even in healthcare.

HealthCare in Africa is lagging with a lot of gaps that might due to the wrong diagnosis, lack of adequate doctors, low ratio of patients to doctors, rural and inadequate number of hospitals. This has been going on for a while and we believe that technology can solve these problems.

Pluto Health is a software app that would be involved in filling a lot of gaps in the healthcare system in Africa, as it would be built based on the Collaboration of different Stakeholders such as Hospital Owners, Doctors, Nurses, Patients, Insurance Companies among others.

Pluto app would have different sections dedicated to different stakeholders; One for Hospitals, Private Doctors, for the patients, and for insurance companies.

The patients would be able to connect to the other stakeholders using this app. The Patients would be able to access a Doctor on Demand, book an appointment, pick an insurance Scheme, register with Hospitals among other features. Features that would benefit the Patients includes E-prescription, Daily Monitoring for patients with chronic disease, and accessibility to patient files.

The Hospital can register patients under their Companies and link them with an insurance company of their Choices, also send them ambulances for an urgent case regardless of their registered hospitals among other features.

Class Hospital:
   def __init__(self,Name,Location,Registration ID,Ownership,Insurance,Number of staff, ratings)
Methods
1) **def Add patient(self)**
      input("Kindly enter your name")
      input("Kindly enter your Age")
      input("Kindly enter your nationality")
      input("Do you have an insurance scheme")
            if answer== "yes":
                  input(Kindly enter the name)
            elif answer=="No":

```
            input("Would you like to register under our insurance")
                    if answer=="Yes"
                        print List.insurance
            In=input("Kindly enter your preferred insurance scheme from the
list")
                        print("Your chosen Scheme is in")
                    elif answer=="No"
                        print("You would be based on pay as you use")
                        print("You have been added to our patient list")
                        print("Your ID is 001")
```

2) **def remove()**

input("Why do you want to terminate our services with you")

print("Thanks for believing in us and we look forward to you relying on us again")

 print("Our services are always available")

Subclass

Class Doctor(Hospital):

```
    def __init__(self,Name,Location,RegistrationID,Ownership,Insurance,Number
of staff, ratings,Name, speciality,DoctorID)
super().__init__(Name,Location,RegistrationID,Ownership,Insurance,Number of
staff, ratings)
self.Name=Name
self.specialty=specialty
self.DoctorID=DoctorID
  List=[]
List.append(Doctor)
```

def View ():

```
    for x,y in List:
        print(x,y)
```

 def Specialty():

```
    Print (Doctor.specialty,Doctor.name)
```

class Private Doctor:

def innit(self,Name,ID,Qualification,gender,Clinic of work,Clinic ID,ratings)

```
self.Name=Name
self.ID=ID
```

```python
self.Qualification=Qualification
self.gender=gender
self.Clinic of work=Clinic of work
self.Clinic ID=Clinic ID
self.ratings=ratings
```

Methods

def Add private doctor():
```python
 input(What is your name)
    input(What is your job ID)
    input(kindly input your qualifications)
    input(Kindly input Your clinic of work)
    New Private doctor=Private Doctor(Name,Qualification,Gender,Clinic of work,Clinic
ID,ratings)
```

def Write Articles():
```python
   input("What is your Platform ID")
   input("What is your article based on")
   input("Kindly input your article")
   input("Are you ready to post your article)
    If input =="Yes"
       print("Post")
```


Class Patient
def__init__(self,Name,Age,Gender,Identification Number, Nationality,Occupation)
```python
self.Name=Name
self.Age=Age
self.Gender=Gender
self.Identification=Identification
self.Number=Number
self.Nationality=Nationality
self.Occupation=Occupation
```
Methods
def Add private patients()
```python
input("Kindly enter your name")
input("Kindly enter your age")
input("Kindly enter your ID number")
input("Kindly enter your Occupation")
input("Kindly enter your nationality")
New patient=Patient(Name,age,Occupation)
```

def Ambulance()
```python
input(Kindly enter your street Number)
print(You will be connected to hospitals close to you)
```
Test Cases

Class Hospital

Test ID	Test Scenario	Test Cases	Pre Condition	Test Steps	Test Data	Expected Result
001	Verify the login of Hospital admins	Enter the valid names of hospital and password	Need a valid pluto account to log into the Hospital Section	1)Enter the name of the Hospital 2)Enter the password	Valid Username and Valid password	Successful login
002	Verify the login of Hospital admins	Enter the valid names of hospital and Invalid password	Need a valid pluto account to log into the Hospital Section	1)Enter the name of the Hospital 2)Enter the password	Valid Hospital Name and Invalid password	Unsuccessful Login
003	Verifying Valid Login through registration Number	Enter the Valid registration Number which consists of Letters and Number	It must consist of a registration which starts with mixture of numeric and letters	1)Enter your registration Number 2)Enter your password	1)Valid Registration Number 2)Enter Valid Password	Successful login
004	Verifying	Enter the	It must	)Enter	1)Enter	Unsucc

	Valid Login through registration Number	Invalid registratio n Number which consists of Letters and Number	consist of a registrati on which starts with mixture of numeric and letters	your regist ra tion Number 2)Ent er your pass wo rd	the invalid Registr ati on with Only numeric figures 2)Enter your password	esful login

Test Cases
Private Doctor

Test ID	Test Scenario	Test Cases	Pre Conditio n	Test steps	Test Data	Expect ed result	Pa ss/ Fai l
001	Verifying valid log in through ID	Enter the name of doctor and	Need a valid pluto	1)En te r your Nam e	1)Valid Name	1)Succe ss ful login	Pa ss
	Number	registrati on Number	Registr ati on ID to log in	2)En te r your regi str atio n ID	2)Valid Registr ati on Number		

002	Verifying Valid Log in through ID Number	Enter the name of doctor and Registration Number	Need a valid pluto Registration ID to log in	1)Enter your Name 2)Enter your registration ID	1)Valid Name 2)Invalid Registration Number	Unsuccessful Login	pass
003	Verifying gender for Registration	Enter the gender in one letter either(M or F)	Needs to be registered on the portal on Pluto	1)Enter your Name 2)Enter Your Age 3)Enter your Gender	1)Valid Name 2)Numeric age 3)Valid One letter representation M or F	Successful Login	Pass
004	Verifying gender for Registration	Enter the gender in one letter either(M or F)	Needs to be registered on the portal on Pluto	1)Enter your Name 2)Enter Your Age 3)Enter your Gender	1)Valid Name 2)Numeric age 3)Invalid One letter representation apart from M or F	Unsuccessful Login	PASS

005	Test for Clinic ID	Enter the Clinic ID which is a combination of Letters and Numeric Figure	The Clinic ID must be accredited by Pluto	1)Enter your name 2)Enter the name of the hospital you work with 3)Enter the Clinic ID	1)Valid Name 2)Valid Hospital 3)Valid ID clinic(letter and Numeric	Successful registration	Pass

Class Patients

Test ID	Test Scenario	Test Case	Pre Condition	Test steps	Test Data	Expected result
001	Verifying valid log in through ID Number	Enter the name of Patients and registration Number	Need a valid pluto Registration ID to log in	1)Enter your Name 2)Enter your registration ID	1)Valid Name 2)Valid Registration Number	Successful Login

002	Verifying Valid Log in through ID Number	Enter the name of Patient and Registratio n Number	Need a valid pluto Registratio n ID to log in	1)Enter your Name 2)Enter your registrati on ID	1)Valid Name 2)Invalid Registra tion Number	Unsucces sful Login
003	Verifying gender for Registra tion	Enter the gender in one letter either(M or F)	Need to be on the registered portal on Pluto	1)Enter your Name 2)Enter Your Age 3)Enter your Gender	1)Valid Name 2)Numer ic age 3)Invalid One letter represe ntation	UnSucces sful Login

					apart from M or F	
004	Verifying gender for Registra tion	Enter the gender in one letter either(M or F)	Needs to be on the registered portal on Pluto	1)Valid Name 2)Numeri c age 3)valid One letter represent ation apart from M or F	1)Valid Name 2)Numer ic age 3)Invalid One letter represe ntation apart from M or F	UnSucces sful login

| 005 | Test for name | The name must be in letter | Needs to be on the registered portal on Pluto | Enter your Valid Name | Name must be in letters (between A-Z) | Successful login |