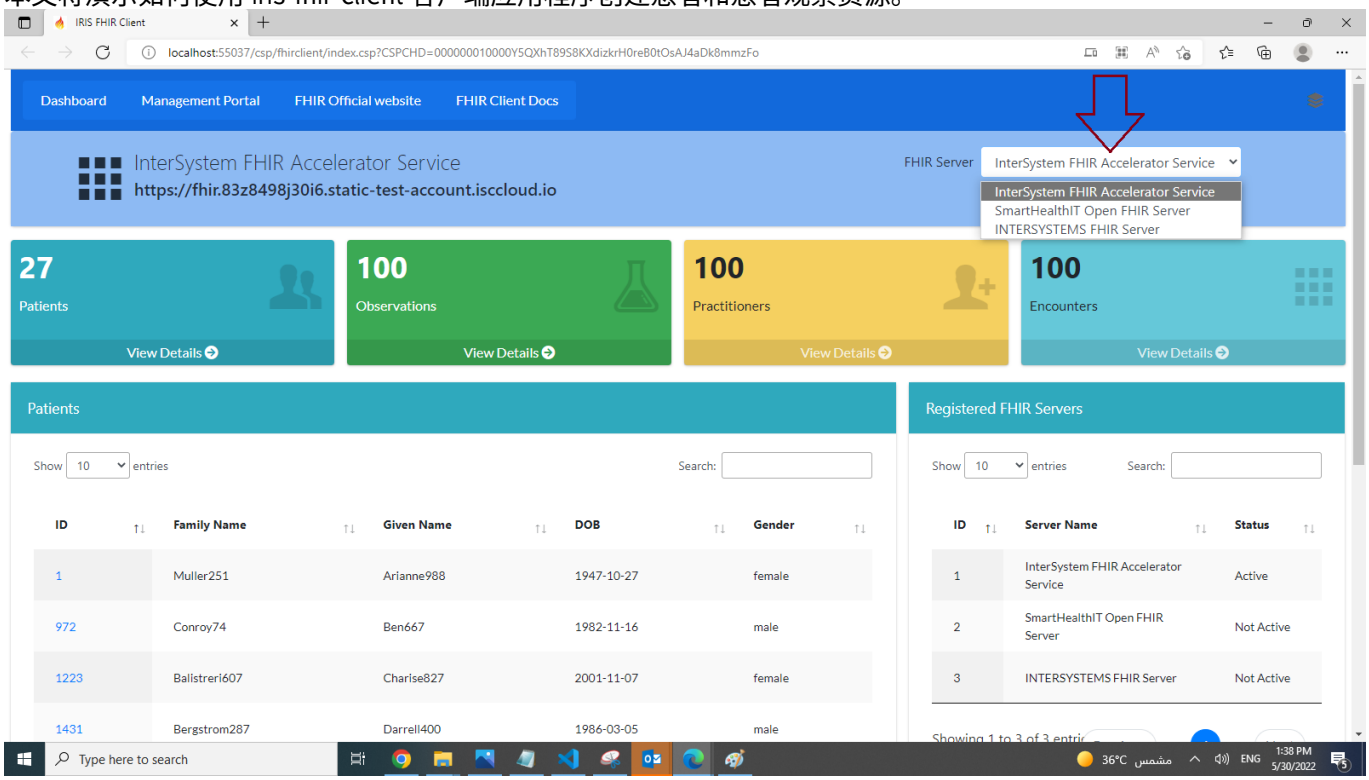
文章
Muhammad Waseem · 八月 11, 2022 阅读大约需 3 分钟

Open Exchange

使用 iris-fhir-client 应用程序创建患者和患者观察

Hi 社区，

本文将演示如何使用 iris-fhir-client 客户端应用程序创建患者和患者观察资源。



建议在开始阅读本文之前可以先读一下我的 **第一篇** 关于这个应用程序的文章和观看 **Youtube 视频**。

让我们开始吧：

1-创建患者资源

下面 dc.FhirClient 的 CreatePatient() 函数可用于创建患者资源

```
ClassMethod CreatePatient(givenName As %String, familyName As %String, birthDate As %String,gender As %String)
```

函数需要 giveName，failyName，birthDate 和性别来创建患者资源

下面的命令将创建病人

```
do ##class(dc.FhirClient).CreatePatient("PatientGN","PatientFN","2000-06-01","male")
```

```
USER>do ##class(dc.FhirClient).CreatePatient("PatientGN","PatientFN","2000-06-01","male")
Patient Created Successfully
```

下面是 irisfhirclient.py 文件中的 python 函数，它将创建患者：

```
import json
from fhirpy import SyncFHIRClient
from tabulate import tabulate
from fhirpy.base.searchset import Raw
import requests

def CreatePatient(givenName,familyName,birthDate,gender,url,api_key):
    headers = {"Content-Type":contentType,"x-api-key":api_key}
    client = SyncFHIRClient(url = url, extra_headers=headers)

    patient = client.resource("Patient")
    patient['name'] = [
        {
            'given': [givenName],
            'family': familyName,
            'use': 'official'
        }
    ]

    patient['birthDate'] = birthDate
    patient['gender'] = gender
    try:
        patient.save()
    except Exception as e:
        print("Error while creating Patient:" +str(e))
        return
    print("Patient Created Successfully")
```

2- 创建患者观察资源

让我们针对我们新创建的患者资源创建观察

以下 dc.FhirClient 的 CreateObservatoin() 函数可用于创建患者观察

```
ClassMethod CreateObservation(patientId As %String, loincCode As %String, ObrCategory
 As %String, ObrValue As %Integer, ObrUOM As %String, effectiveDate As %String)
```

参数

- patientId 是患者的 ID
- LioncCode 是Loinc Code，详情可查 **这里**
- ObrCategory 是观察类别，详情可查 **这里**
- ObrValue 是观察值
- ObrUOM 是观察单元
- EffectiveDate

以下命令将创建患者生命体征观察

```
do ##class(dc.FhirClient).CreateObservation("8111","8310-5","vital-
```

```
signs",96.8,"degF","2022-01-22")
```

```
USER>do ##class(dc.FhirClient).CreateObservation("8111","8310-5","vital-signs",96.8,"degF","2022-01-22")
Patient Observation Created Successfully
```

让我们列出患者的观察结果

```
do ##class(dc.FhirClient).GetPatientResources("Observation","8111")
```

```
USER>do ##class(dc.FhirClient).GetPatientResources("Observation","8111")
  ID  Category     Code      Value  UOM    Date        Patient
 ---- ------------ ------ ------- ----- ---------- ------------
 8114 vital-signs  8310-5     96.8 degF   2022-01-22  Patient/8111
```

下面是 irisfhirclient.py 文件中的 python 函数，它将创建患者：

```
import json
from fhirpy import SyncFHIRClient
from tabulate import tabulate
from fhirpy.base.searchset import Raw
import requests

#?????????
def CreateObservation
(patientId,loincCode,ObrCategory,ObrValue,ObrUOM,effectiveDate,url,api_key):
    headers = {"Content-Type":contentType,"x-api-key":api_key}
    client = SyncFHIRClient(url = url, extra_headers=headers)
    observation = client.resource(
    'Observation',
    status='preliminary',
    category=[{
        'coding': [{
            'system': 'http://hl7.org/fhir/observation-category',
            'code': ObrCategory
        }]
    }],
    code={
        'coding': [{
            'system': 'http://loinc.org',
            'code': loincCode
        }]
    })
    observation['effectiveDateTime'] = effectiveDate

    observation['valueQuantity'] = {
    'system': 'http://unitsofmeasure.org',
    'value': ObrValue,
    'code': ObrUOM
    }

    #????
    patient = client.resources('Patient').search(_id=patientId).first()
    observation['subject'] = patient.to_reference()

    try:
        observation.save()
    except Exception as e:
        print("Error while creating observation :"+ str(e))
```

```
        return
    print("Patient Observation Created Successfully")
```

谢谢！

##嵌入式 Python #FHIR #InterSystems IRIS for Health
在 InterSystems Open Exchange 上检查相关应用程序

源 URL:https://cn.community.intersystems.com/post/%E4%BD%BF%E7%94%A8-iris-fhir-client-%E5%BA%94%E7%94%A8%E7%A8%8B%E5%BA%8F%E5%88%9B%E5%BB%BA%E6%82%A3%E8%80%85%E5%92%8C%E6%82%A3%E8%80%85%E8%A7%82%E5%AF%9F