DCMTK学习——Demo演示

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1. Dcm文件解析

DICOM数据字典

MediaStorageSOPClassUID： DcmTagKey(0x0002, 0x0002)

TranferSyntaxUID： DcmTagKey(0x0002, 0x0010)

1. 输出Dcm中的患者信息

#include "dcmtk/config/osconfig.h"

#include "dcmtk/dcmdata/dctk.h"

#include "dcmtk/dcmdata/dcistrmf.h"

#include <iostream>

// 读取Dcm文件的 Meta-Header三种方法

using namespace std;

int main()

{

OFCondition status;

const char\* filePath = "C:\\Users\\Administrator\\Desktop\\VsProject\\C++\\Dicom\\DCMTKTest\\Test1\\Data\\1.dcm";

/\* 方法一 使用DcmFileFormat类 \*/

DcmFileFormat fileformat;

OFCondition oc = fileformat.loadFile(filePath);

if( oc.good() )

{

OFString patientName;

if( fileformat.getDataset()->findAndGetOFString(DCM\_PatientName, patientName).good() )

{

cout<<"Patient Name:"<<patientName.data()<<endl;

}

}

system("pause");

return 0;

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

/\* 方法二 使用DcmMetaInfo类 \*/

DcmMetaInfo metaInfo;

status = metaInfo.loadFile(filePath);

if( status.good() )

{

OFString sopClassUID, xferUID;

if( metaInfo.findAndGetOFString( DCM\_MediaStorageSOPClassUID, sopClassUID).good() )

COUT<<"SOP class UID:"<<sopClassUID<<OFendl;

if( metaInfo.findAndGetOFString( DCM\_TransferSyntaxUID, xferUID).good() )

COUT<<"Transfer Syntax UID"<<xferUID<<OFendl;

metaInfo.print(COUT);

}

system("pause");

return 0;

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

/\* 方法三 使用DcmFileFormat类 \*/

DcmFileFormat fileformat;

DcmInputFileStream fileStream(filePath);

status = fileStream.status();

if( status.good() )

{

fileformat.setReadMode(ERM\_metaOnly);

fileformat.transferInit();

status = fileformat.read( fileStream );

if( status.good() )

{

OFString sopClassUID, xferUID;

if( fileformat.getMetaInfo()->findAndGetOFString( DCM\_MediaStorageSOPClassUID, sopClassUID).good() )

COUT<<"SOP Class UID:"<<sopClassUID<<OFendl;

if( fileformat.getMetaInfo()->findAndGetOFString( DCM\_TransferSyntaxUID, xferUID).good() )

COUT<<"Transfer Syntax UID:"<<xferUID<<OFendl;

if( sopClassUID == UID\_SecondaryCaptureImageStorage )

{

fileformat.setReadMode(ERM\_autoDetect);

status = fileformat.read( fileStream );

if( status.good() )

{

fileformat.print( COUT );

}

}

}

fileformat.transferEnd();

}

system("pause");

return 0;

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

}