



PART 1

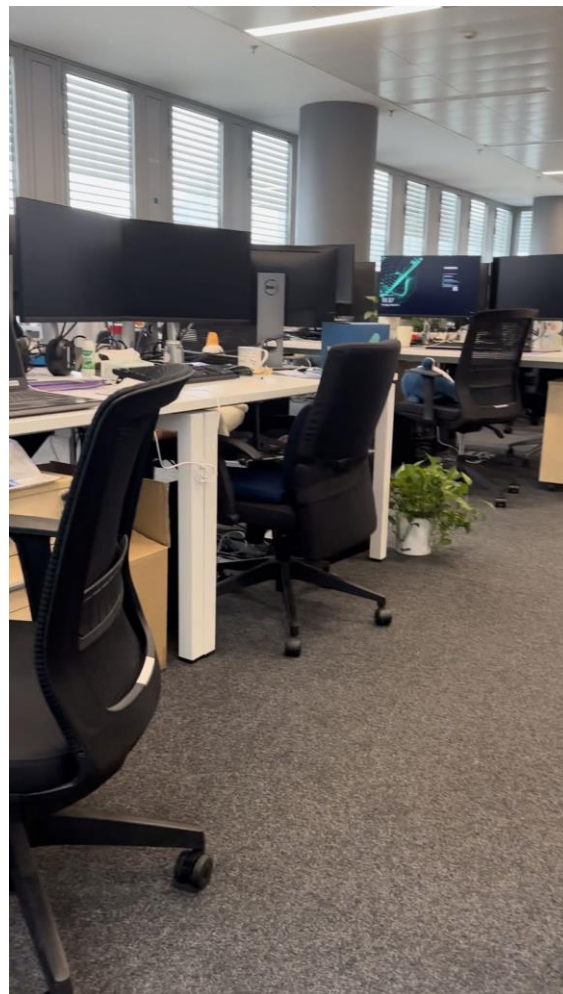
公司及项目简介

西门子（中国）有限公司上海分公司

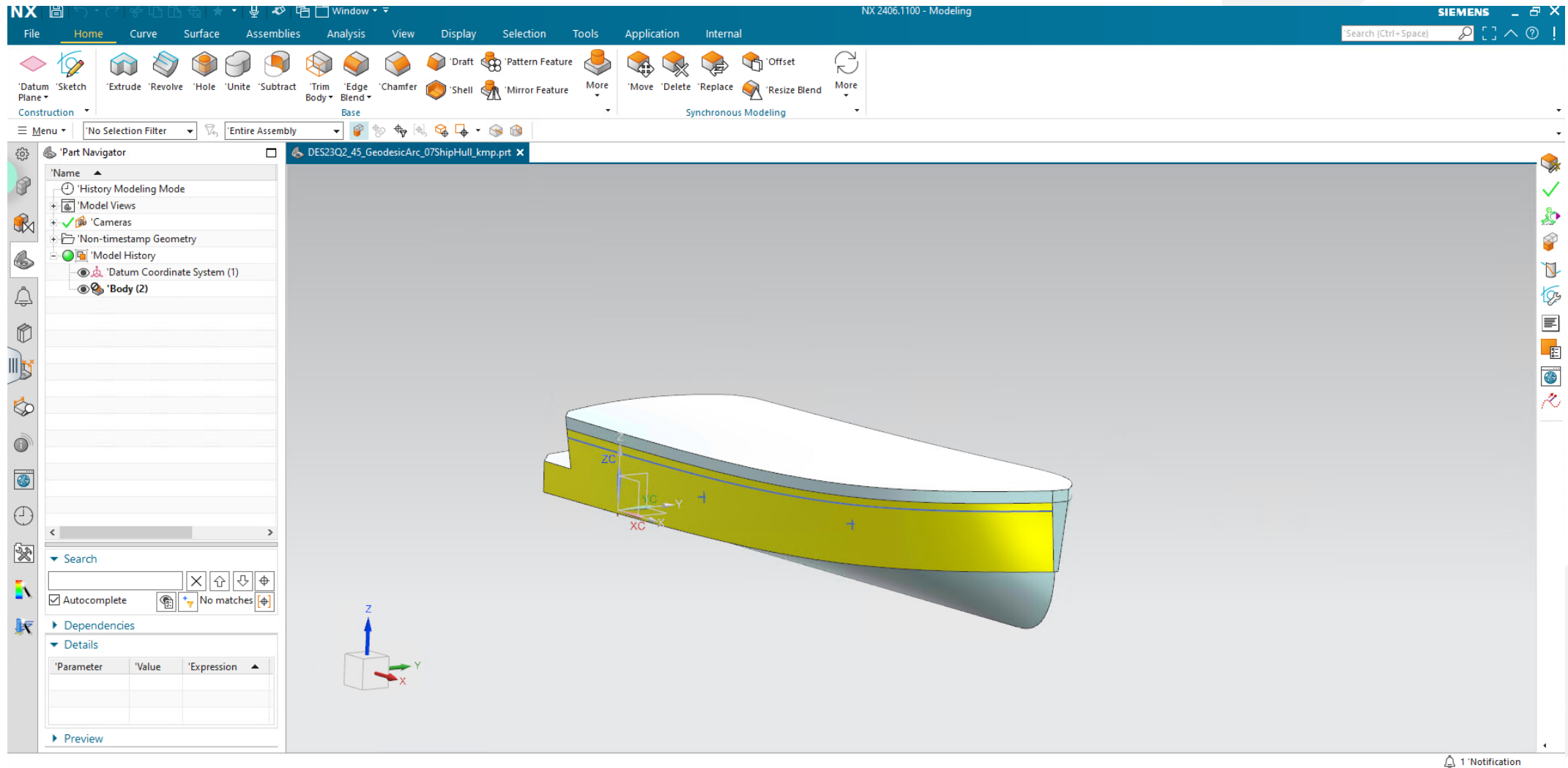
公司外貌



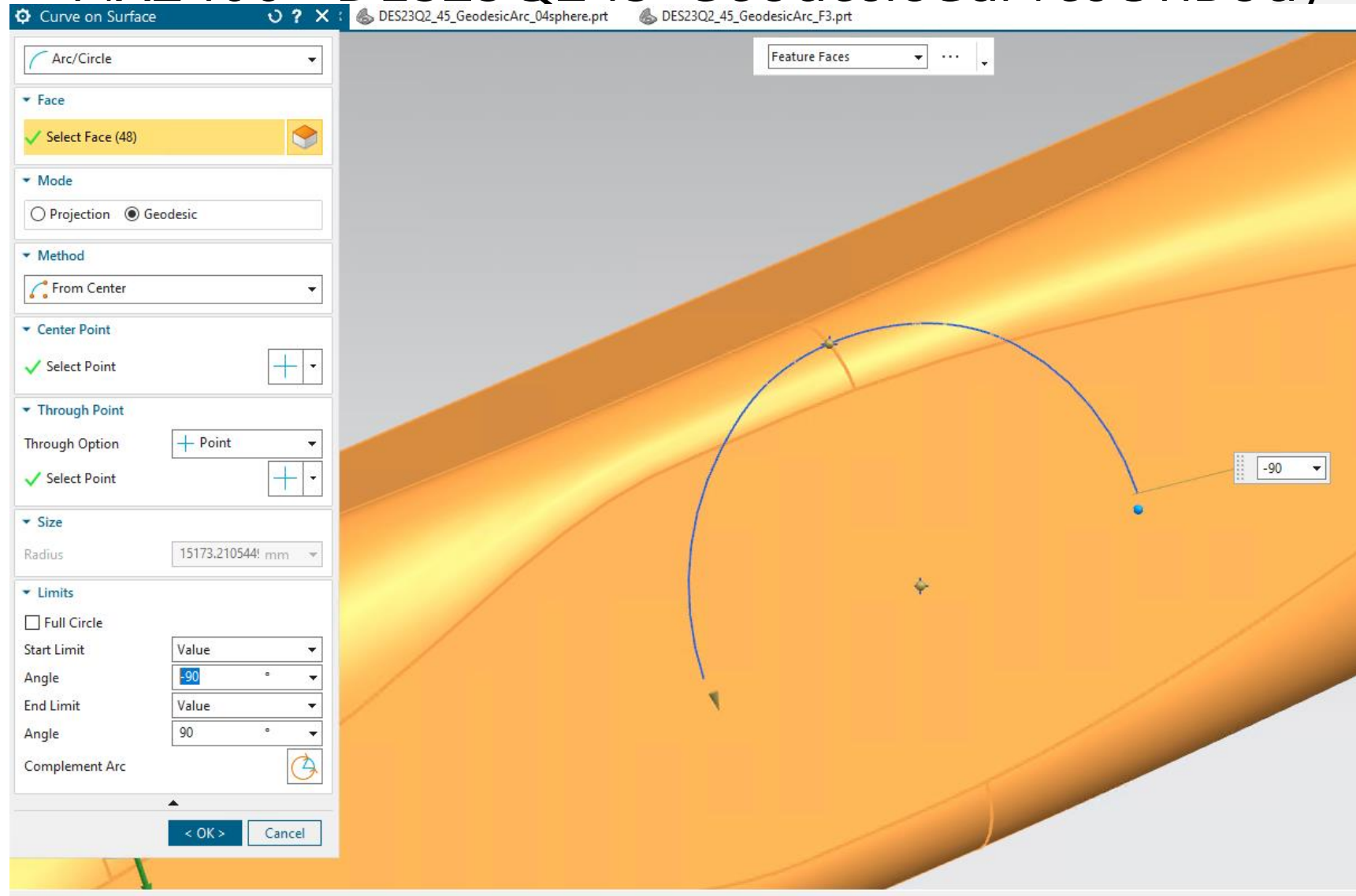
工作环境



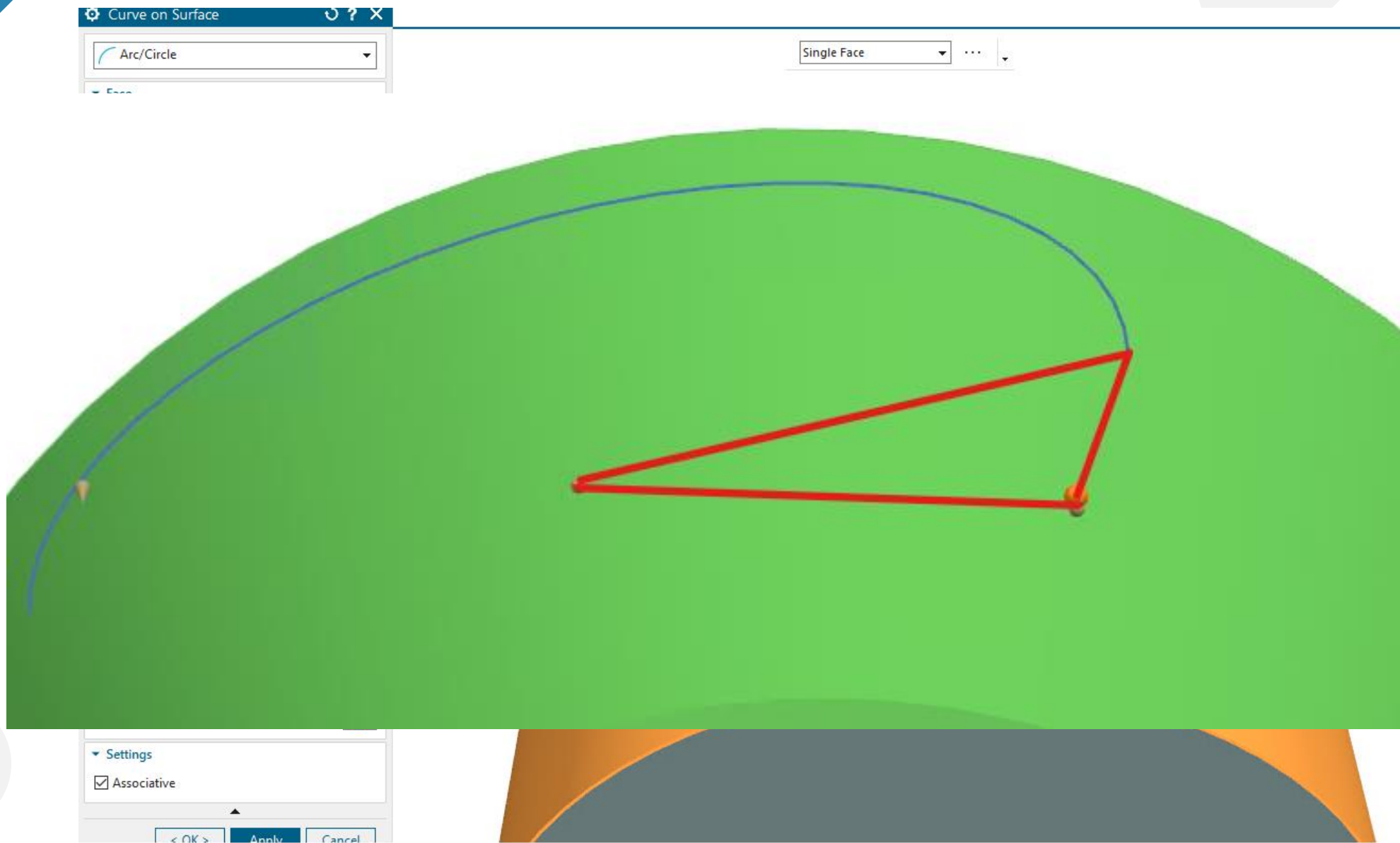
UG NX软件



NX2406 DES23Q245 GeodesicCurvesOnBody



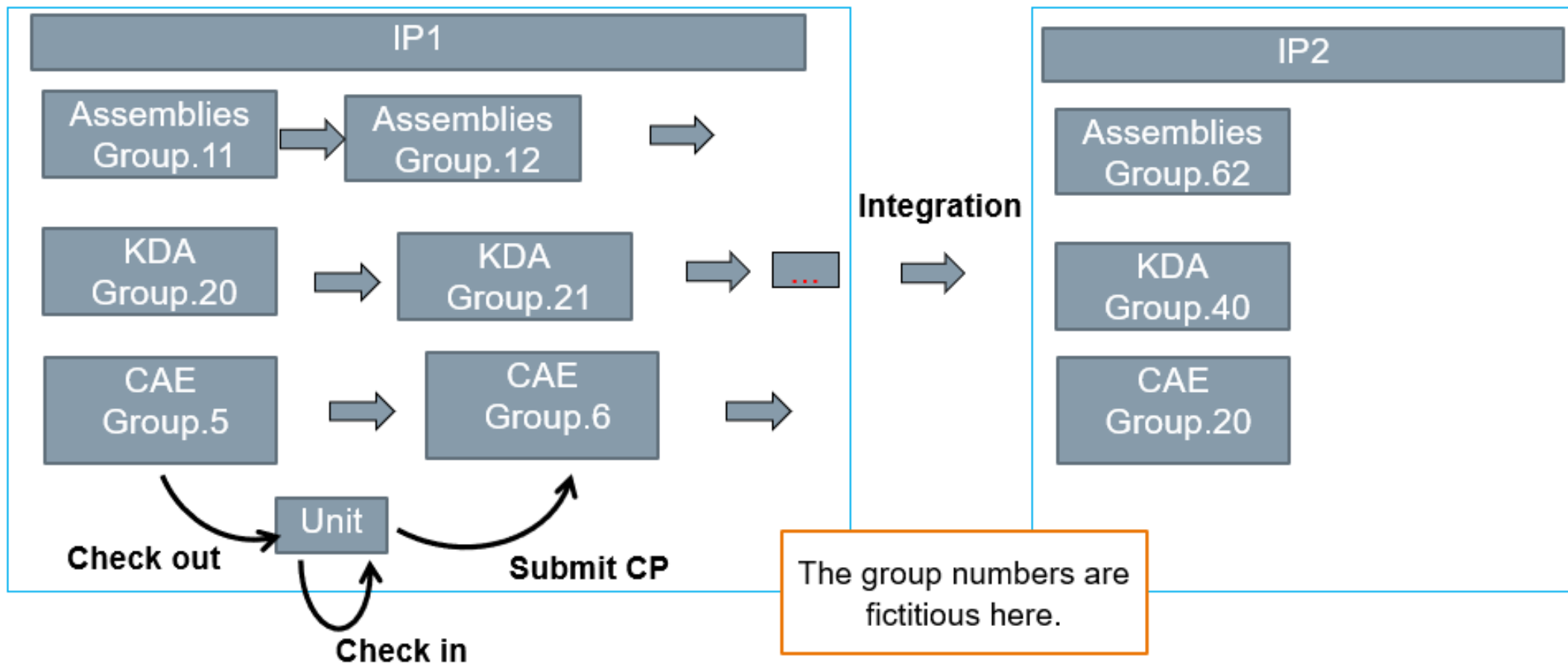
NX2406 DES23Q245_GeodesicCurvesOnBody



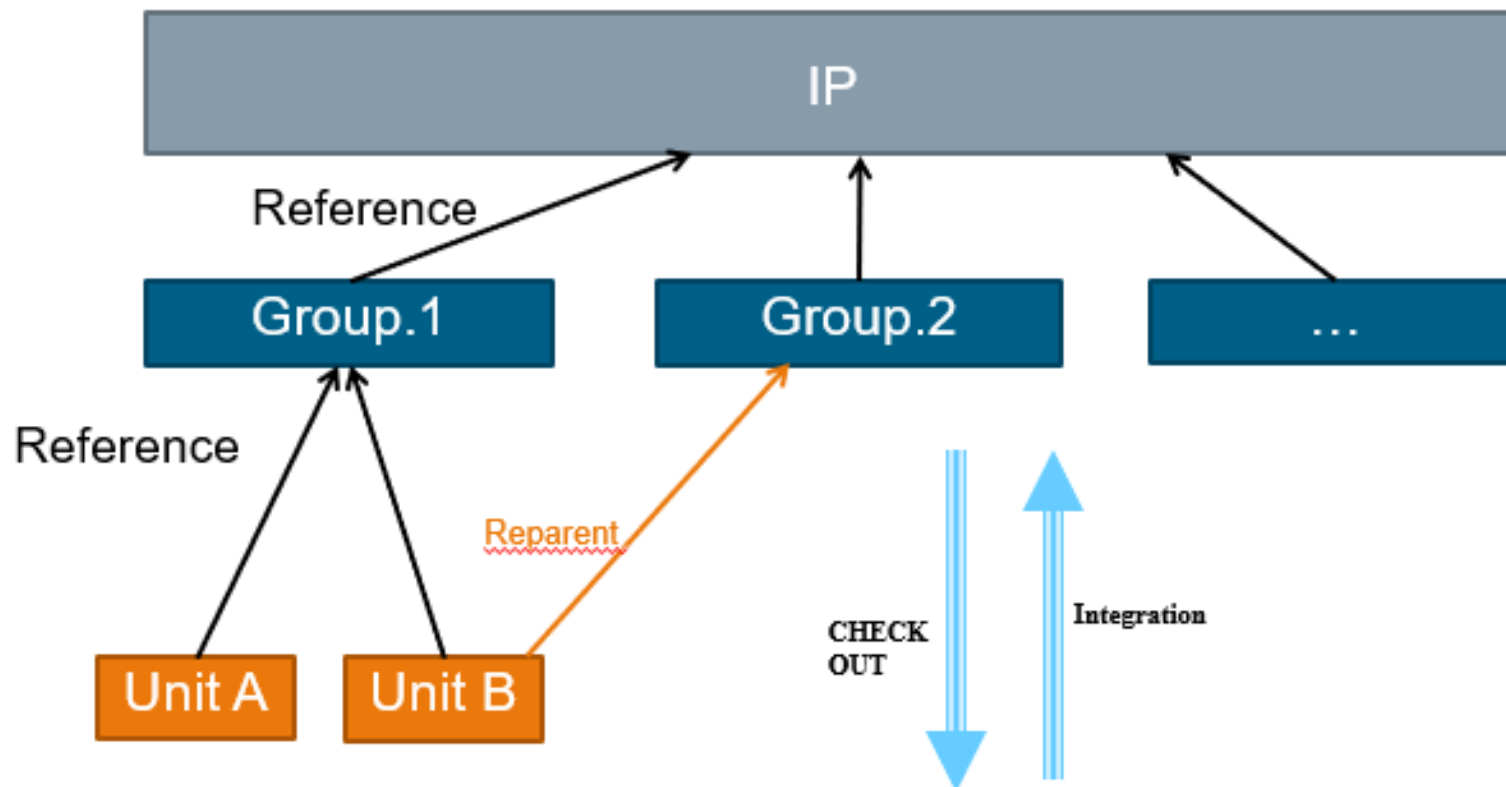
PART 2

开发模式介绍

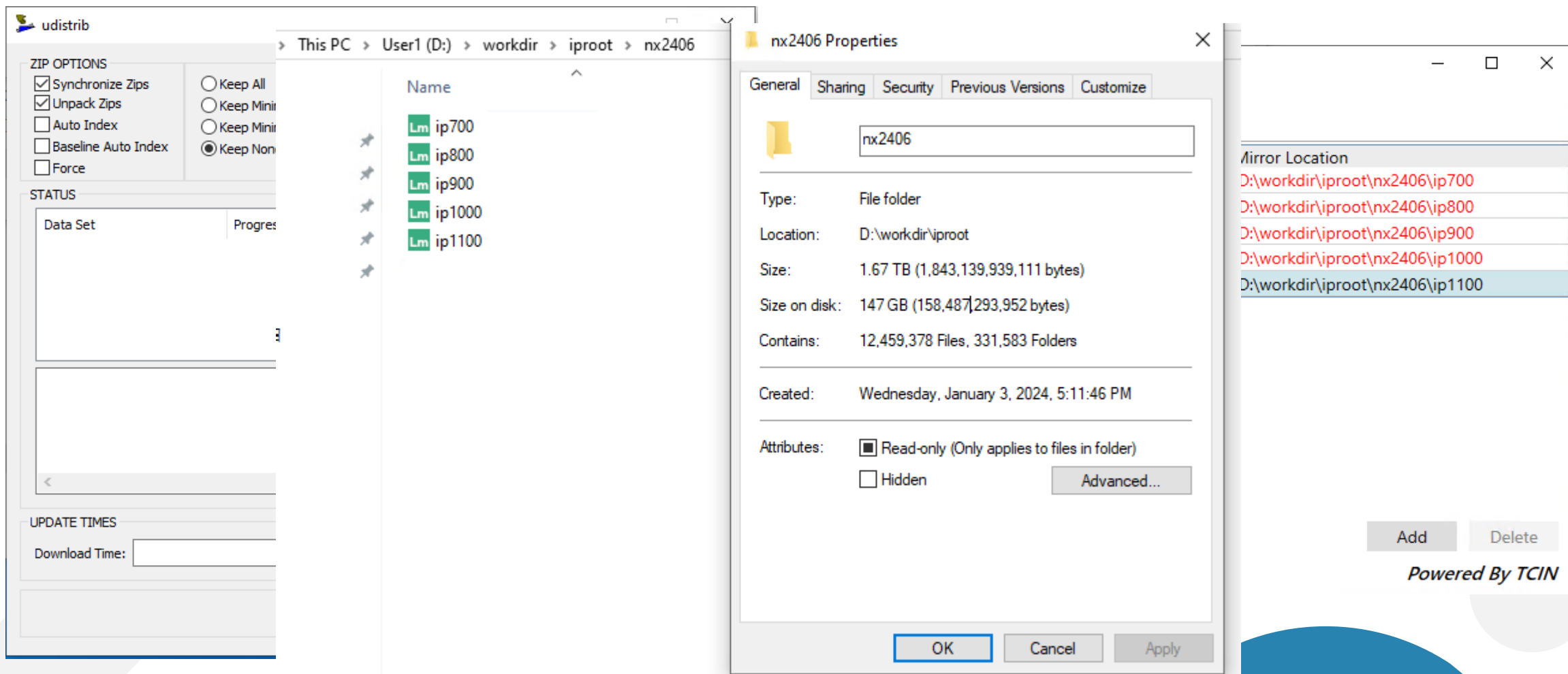
代码版本控制



代码版本控制



源代码下载





Unit使用

DEV模式代码的check in/out

UDU工具使用



NX1072171GeodesicCurvesOnBody_modelingPR10813305NX1070842

Change Package NX1070842

NX1070842 State: closedType: normalOwner: Yang YuTarget Env: Modeling_nx2406Source Env: GeodesicCurvesOnBody_modeling

Description

This CP is to implement the unittest for the project DES.23Q2.45 : Geodesic Curves on Body

'GeomUnitTest_CurveOnSurfaceParms.cxx' includes the cases for Curve On Surface.

Please review.

Cai Lucien help me put the part file ' DES23Q2_45_GeodesicFillet_01plane_UnitTest.prt ' in the corresponding location.
file path: \\shibw1303\for Hao Cai

Report Items (0)

Number/ID	Type	Priority	Short Description/Title
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File List (3)

File Filter: Action Filter: Approver Filter: Notifier Filter:

!	*	File Name	File Directory	Rev	Action	Approvers	Notifiers
<input checked="" type="checkbox"/>		GeomUnitTest_CurveOnSurfaceParms.cxx	geomunittest/no/ind	4	add	drstephe,zzciadm,n,zcitestadmn,+caih,+zhangd	gewhh,hansch,kulkarra,+qdhnf9,+qinhui,+z004t8jj
<input checked="" type="checkbox"/>		GeomUnitTest_CurveOnSurfaceParms.seq	geomunittest/no/ind	3	add	drstephe,zzciadm,n,zcitestadmn,+caih,+zhangd	gewhh,hansch,kulkarra,+qdhnf9,+qinhui,+z004t8jj
<input checked="" type="checkbox"/>		libgeomunittest.def	libdef/libis	1	modify	zzciadm,n,zcitestadmn,+caih,+zhangd	weberjo,+qdhnf9,+qinhui,+z004t8jj

Approvers (5)

Name	Proxy	Status	Date	Type	Files
<input checked="" type="checkbox"/> CTest Admin	YYNX CI	approve	Apr 8, 2024 7:54 PM CST	rule	all
<input checked="" type="checkbox"/> Lucien Cai	Yachen Sun	approve	Apr 8, 2024 5:29 PM CST	user	all
<input checked="" type="checkbox"/> Stephen Shepherd	Bill Halstead	approvepersist	Apr 5, 2024 2:06 AM CST	rule	selected
<input checked="" type="checkbox"/> Tony Zhang		approvepersist	Apr 7, 2024 10:16 AM CST	user	all
zzCi Admin	<input checked="" type="checkbox"/> NX CI	approve	Apr 8, 2024 6:59 PM CST	rule	all

Notifiers (7)

Name	Type	Events
Bill Halstead	rule	close,submit
Bruce Qin	user	close,submit
Jiafeng Jin	user	close,submit
Joerg Hansch	rule	close,submit
John Weber	rule	close,submit

MainAncillaryDiaryChecklistControlsCode ReviewMetricsCloudRunner

ConsoleDOUG ConsoleProduct: NXUser: z004wm9dDevOps Tools: 23.2.2No peer unit for change package NX1072171Unit File List selected unit: GeodesicCurvesOnBody.65Unit File Browser selected unit: GeodesicCurvesOnBody.65Unit File Browser selected unit: GeodesicCurvesOnBody_modelingNumber of unit peer node files: 5Unit File List selected unit: GeodesicCurvesOnBody_modelingNumber of unit peer node files: 3

PART 3

我的个人产出

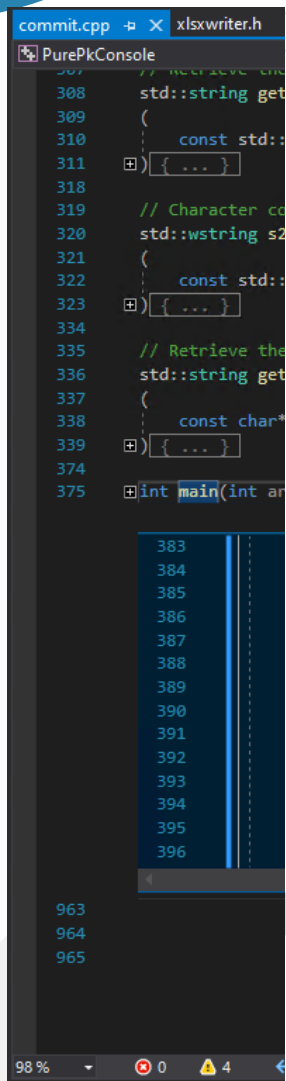
测试工作的产出内容

name	Date modified	type	size
AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_01.py	1/12/2024 3:21 PM	Python File	11 KB
AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_01.seq	1/12/2024 3:21 PM	SEQ File	2 KB
AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_01--master....	1/12/2024 3:21 PM	XML File	1 KB
AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_02.py	1/12/2024 3:32 PM	Python File	10 KB
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AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_02--master....	1/12/2024 3:32 PM	XML File	1 KB
AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_03.py	1/12/2024 3:47 PM	Python File	7 KB
AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_03.seq	1/12/2024 3:47 PM	SEQ File	2 KB
AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_03--master....	1/12/2024 3:47 PM	XML File	1 KB
AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_04.py	1/12/2024 3:49 PM	Python File	7 KB
AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_04.seq	1/12/2024 3:49 PM	SEQ File	2 KB
AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_04--master....	1/12/2024 3:49 PM	XML File	1 KB
AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_05.py	1/12/2024 3:59 PM	Python File	12 KB
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AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_06--master....	1/12/2024 4:04 PM	XML File	2 KB
AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_08.py	1/12/2024 4:52 PM	Python File	13 KB
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AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_08--master....	1/12/2024 4:52 PM	XML File	2 KB
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AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_09.seq	1/12/2024 5:00 PM	SEQ File	2 KB
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AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_10.py	1/12/2024 5:19 PM	Python File	15 KB
AdmTest2_GeodesicCurvesOnBody_NX2406_TP_Case_10.seq	1/12/2024 5:19 PM	SEQ File	2 KB

测试工作的产出内容

```
GeomUnitTest_Curv...nSurfaceParms.seq  GeomUnitTest_Curv...nSurfaceParms.cxx  Limit_AtPoint  Run0
GeodesicCurvesOnBody_modeling
121  UGS::GeomUnitTest::CurveOnSurfaceParms::CurveOnSurfaceParms() : UGS::TestUtils::TestSuite("no") { ... }
128
129  //BEGIN EDITABLE SECTION
130  GEOMUNITTEST_DEFINE_TEST_SUITE_CURVEONSURFACEPARMS(Projection_FromCenter)
131  void Projection_FromCenter::Run() { ... }
232
233  GEOMUNITTEST_DEFINE_TEST_SUITE_CURVEONSURFACEPARMS(Projection_ThreePoints)
234  void Projection_ThreePoints::Run() { ... }
348
349  GEOMUNITTEST_DEFINE_TEST_SUITE_CURVEONSURFACEPARMS(Geodesic_FromCenter)
350  void Geodesic_FromCenter::Run() { ... }
457
458  GEOMUNITTEST_DEFINE_TEST_SUITE_CURVEONSURFACEPARMS(Limit_AtPoint)
459  void Limit_AtPoint::Run()
460  {
461      NXOpen::Session* theSession = NXOpen::Session::GetSession();
462
463      NXOpen::Part* workPart(theSession->Parts()->Work());
464
465      NXOpen::Features::CurveOnSurface* nullNXOpen_Features_CurveOnSurface(NULL);
466      NXOpen::Features::CurveOnSurfaceBuilder* curveOnSurfaceBuilder1;
467      curveOnSurfaceBuilder1 = workPart->Features()->CreateCurveOnSurfaceBuilder(nullNXOpen_Features_CurveOnSurface);
468
469      curveOnSurfaceBuilder1->LineLimits()->StartLimit()->Distance()->SetFormula("0");
470
471      curveOnSurfaceBuilder1->ArcLimits()->StartLimit()->Distance()->SetFormula("0");
472
473      curveOnSurfaceBuilder1->CurveFitData()->SetTolerance(0.01);
474
475      curveOnSurfaceBuilder1->CurveFitData()->SetAngleTolerance(0.5);
476
477      curveOnSurfaceBuilder1->ArcLimits()->EndLimit()->SetLimitOption(NXOpen::GeometricUtilities::CurveExtendData::LimitOptionsValue);
478
479      curveOnSurfaceBuilder1->SetCurveType(NXOpen::Features::CurveOnSurfaceBuilder::CurveTypeEnumArcCircle);
480
481      NXOpen::SelectionIntentRuleOptions* selectionIntentRuleOptions1;
482      selectionIntentRuleOptions1 = workPart->ScRuleFactory()->CreateRuleOptions();
483
484      selectionIntentRuleOptions1->SetSelectedFromInactive(false);
485
486      NXOpen::Features::Brep* brep1(dynamic_cast<NXOpen::Features::Brep*>(workPart->Features()->FindObject("UNPARAMETERIZED_FEATURE(1)")));
487      NXOpen::Face* face1(dynamic_cast<NXOpen::Face*>(brep1->FindObject("FACE 1 {(50,50,0) UNPARAMETERIZED_FEATURE(1)}"));
```

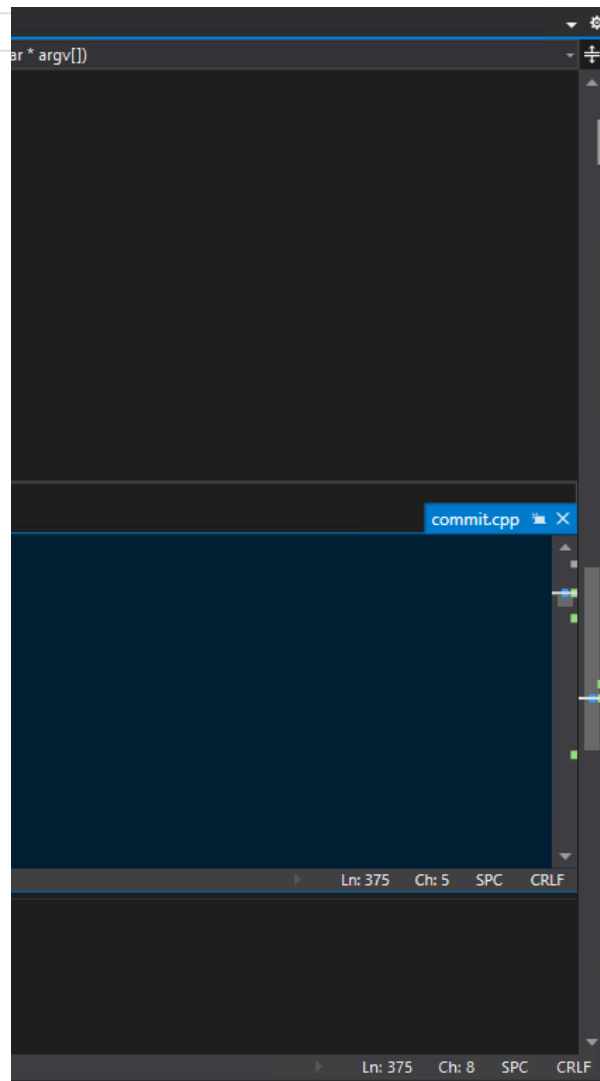
开发工作的产出内容



```
commit.cpp  xlsxwriter.h
// Retrieve the
308 std::string get
309 (
310     const std::
311     { ... }
312 )
313
314 // Character co
315 std::wstring s2
316 (
317     const std::
318     { ... }
319 )
320
321 // Retrieve the
322 std::string get
323 (
324     const char*
325     { ... }
326 )
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328 int main(int ar
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User1 (D:) > Autotest Remaster Script Tools > PSB_TEST

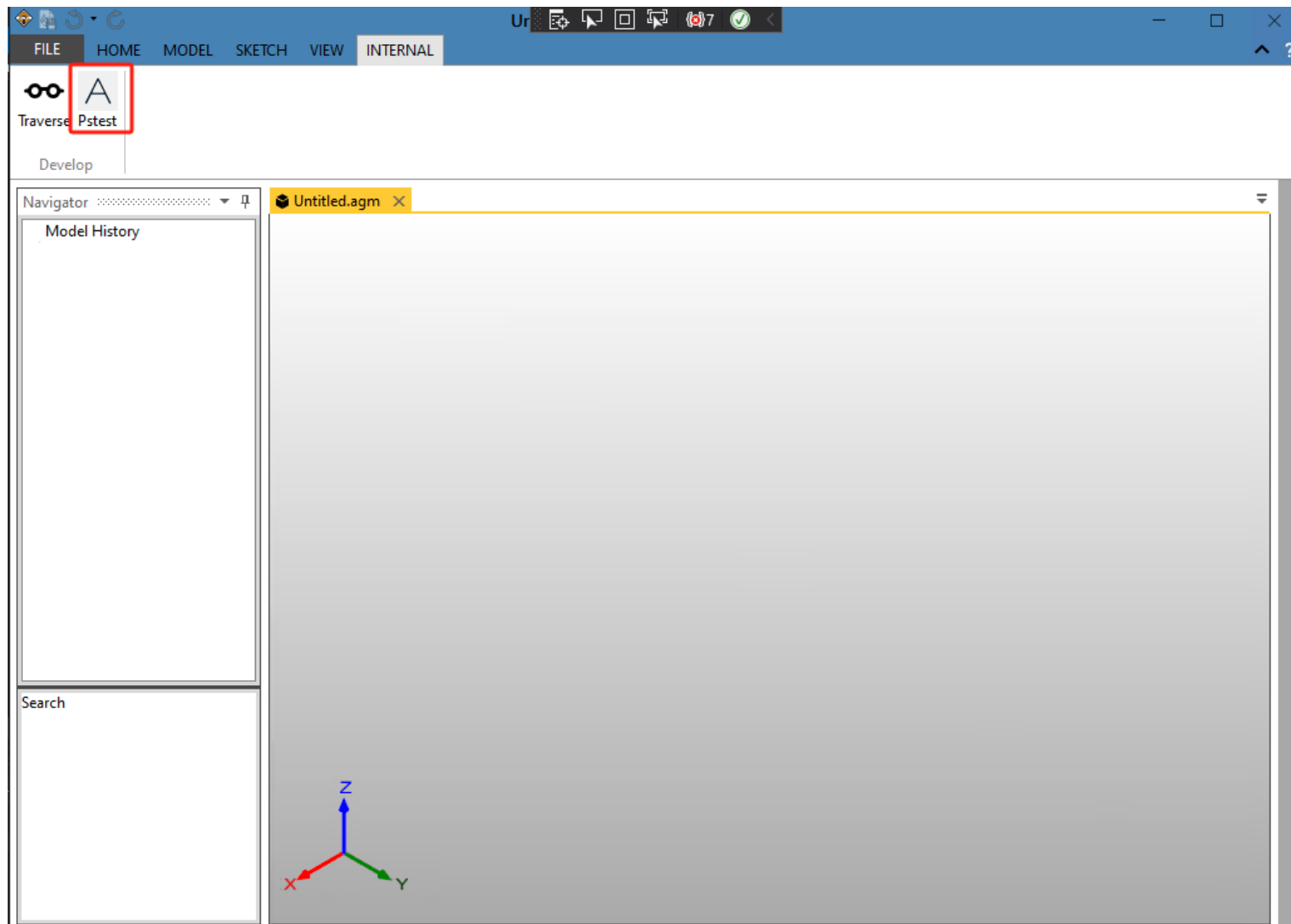
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iconengines	3/14/2024 9:19 AM	File folder	
imageformats	3/14/2024 9:19 AM	File folder	
platforms	3/14/2024 9:19 AM	File folder	
Schemas	3/14/2024 9:19 AM	File folder	
styles	3/14/2024 9:19 AM	File folder	
translations	3/14/2024 9:19 AM	File folder	
Browse_history.ini	3/14/2024 9:21 AM	Configuration sett...	1 KB
bz2.dll	2/23/2024 11:24 AM	Application exten...	74 KB
D3Dcompiler_47.dll	3/11/2014 6:54 PM	Application exten...	4,077 KB
group.exe	3/13/2024 10:55 AM	Application	22,608 KB
libEGL.dll	3/27/2020 9:18 PM	Application exten...	24 KB
libexpat.dll	2/23/2024 11:25 AM	Application exten...	151 KB
libGLv2.dll	3/27/2020 9:18 PM	Application exten...	3,491 KB
minizip.dll	2/23/2024 11:25 AM	Application exten...	47 KB
opengl32sw.dll	6/14/2016 8:00 PM	Application exten...	20,433 KB
Parasolid Bodyshop Automated Test Tool...	3/13/2024 5:54 PM	Application	90 KB
PurePkConsole.exe	3/13/2024 10:07 AM	Application	364 KB
Qt5Core.dll	3/27/2020 9:18 PM	Application exten...	6,049 KB
Qt5Gui.dll	3/27/2020 9:18 PM	Application exten...	6,963 KB
Qt5Svg.dll	3/28/2020 2:41 AM	Application exten...	330 KB
Qt5Widgets.dll	3/27/2020 9:18 PM	Application exten...	5,466 KB
update.exe	2/28/2024 11:21 AM	Application	219 KB
xlsxio_read.dll	2/23/2024 11:26 AM	Application exten...	32 KB
xlsxio_write.dll	2/23/2024 11:26 AM	Application exten...	25 KB
xlsxwriter.dll	2/23/2024 11:26 AM	Application exten...	327 KB
zlib.dll	2/22/2024 5:16 PM	Application exten...	87 KB



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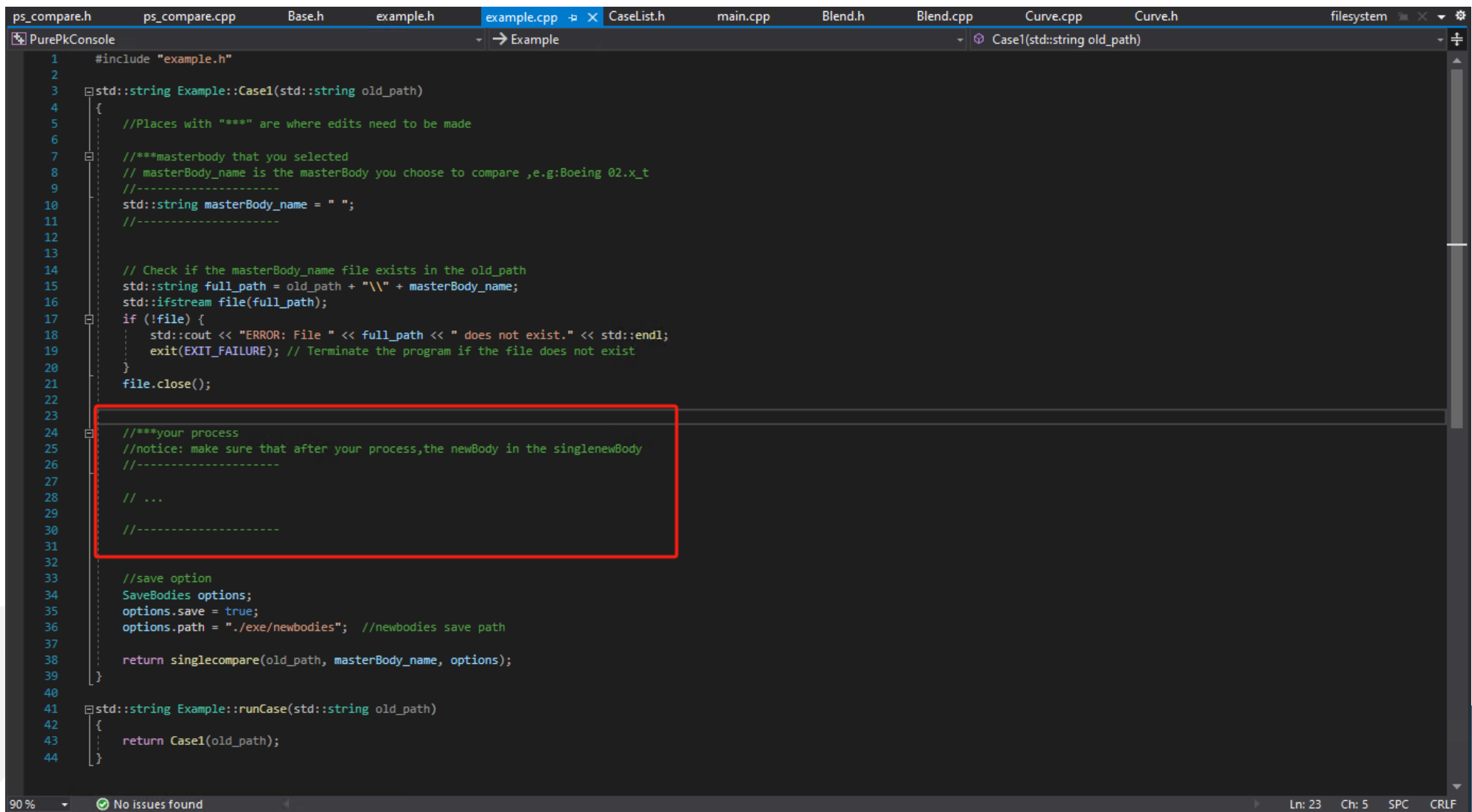
开发工作的产出内容

AGM 简单展示



开发工作的产出内容

用户拓展自定义框架搭建



The image shows a code editor window with multiple tabs. The active tab is 'example.cpp'. The code implements a file comparison utility. A red rectangle highlights the 'your process' section, which is currently empty, indicating where user-defined logic should be placed. The code includes file path handling, file existence checks, and a save option for new bodies.

```
1  #include "example.h"
2
3  std::string Example::Case1(std::string old_path)
4  {
5      //Places with "****" are where edits need to be made
6
7      /***masterbody that you selected
8       // masterBody_name is the masterBody you choose to compare ,e.g:Boeing 02.x_t
9       //-----
10     std::string masterBody_name = " ";
11     //-----
12
13
14     // Check if the masterBody_name file exists in the old_path
15     std::string full_path = old_path + "\\ " + masterBody_name;
16     std::ifstream file(full_path);
17     if (!file) {
18         std::cout << "ERROR: File " << full_path << " does not exist." << std::endl;
19         exit(EXIT_FAILURE); // Terminate the program if the file does not exist
20     }
21     file.close();
22
23
24     /***your process
25     //notice: make sure that after your process,the newBody in the singlenewBody
26     //-----
27
28     // ...
29
30     //-----
31
32
33     //save option
34     SaveBodies options;
35     options.save = true;
36     options.path = "./exe/newbodies"; //newbodies save path
37
38     return singlecompare(old_path, masterBody_name, options);
39 }
40
41 std::string Example::runCase(std::string old_path)
42 {
43     return Case1(old_path);
44 }
```

90 % No issues found Ln: 23 Ch: 5 SPC CRLF

PART 4

实习心得

