Software Architecture - Assignment
Automation API / Design Patterns / API references

1) Link to github:
   https://github.com/nikhilakaleru/Automation-API-Design-Patterns-API-refernces

2) After going through the requirements to finish the task for going through builder design patterns, exploring doxygen for generating documentation for the files, we estimated that it would take 5 hours to complete the project but it took 7 hours to complete it.

3) We created a class for the OblateSpheroidBuilder Class to generate an oblate spheroid using coordinates and radius. We created two types and four methods.

4) Finally created documentation using doxygen.

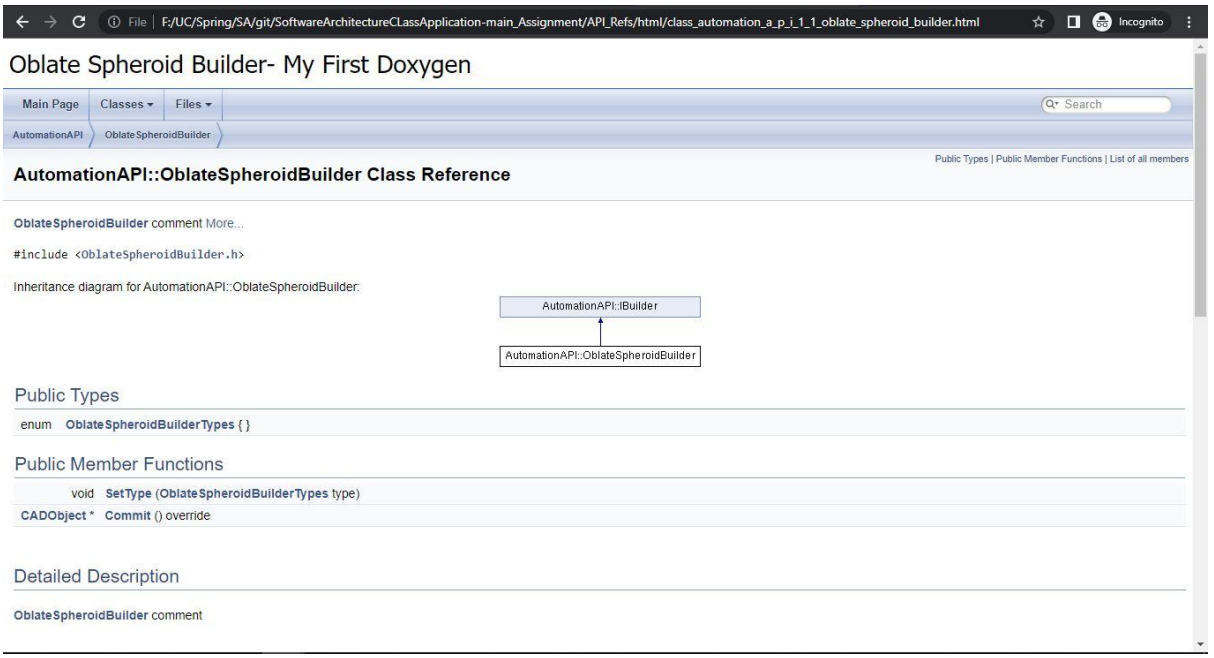
SampleJournal.txt*

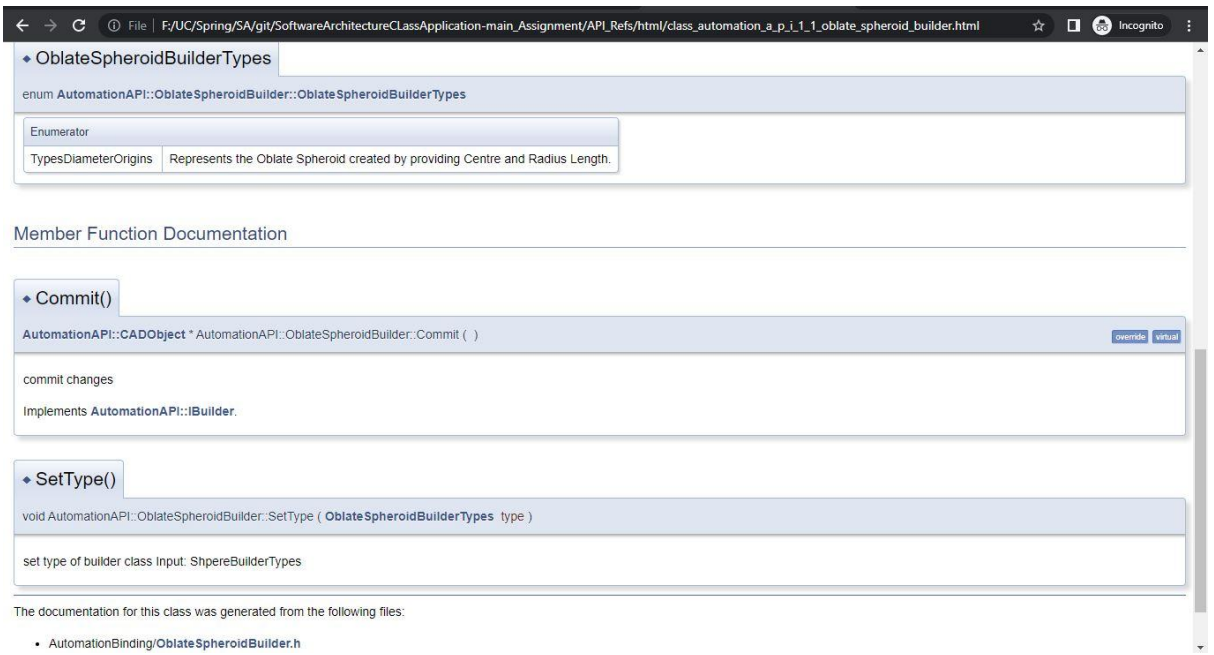
```
#include <iostream>
#include "..\AutomationBinding\AutomationAPI_Session.h"
#include "..\AutomationBinding\AutomationAPI_Part.h"

int main()
{
    std::cout << "Hello World!\n";
    AutomationAPI::Session* mySession = AutomationAPI::Session::GetSession();
AutomationAPI::Part * Part1 = mySession->MakePart("F:\UC\Spring\SA\Some.part");
Part1->MakeWidgetFeature();
Part1->Save();
AutomationAPI::Part * Part2 = mySession->OpenPart("F:\UC\Spring\SA\git\SoftwareArchitectureCLassApplication-main_Assignment\SampleVersionUp.prt");
Part2->Save();

}

```





◆ OblateSpheroidBuilderTypes

enum **AutomationAPI::OblateSpheroidBuilder::OblateSpheroidBuilderTypes**

Enumerator	
TypesDiameterOrigins	Represents the Oblate Spheroid created by providing Centre and Radius Length.

Member Function Documentation

◆ Commit()

AutomationAPI::CADObject * AutomationAPI::OblateSpheroidBuilder::Commit ( ) override virtual

commit changes

Implements **AutomationAPI::IBuilder**.

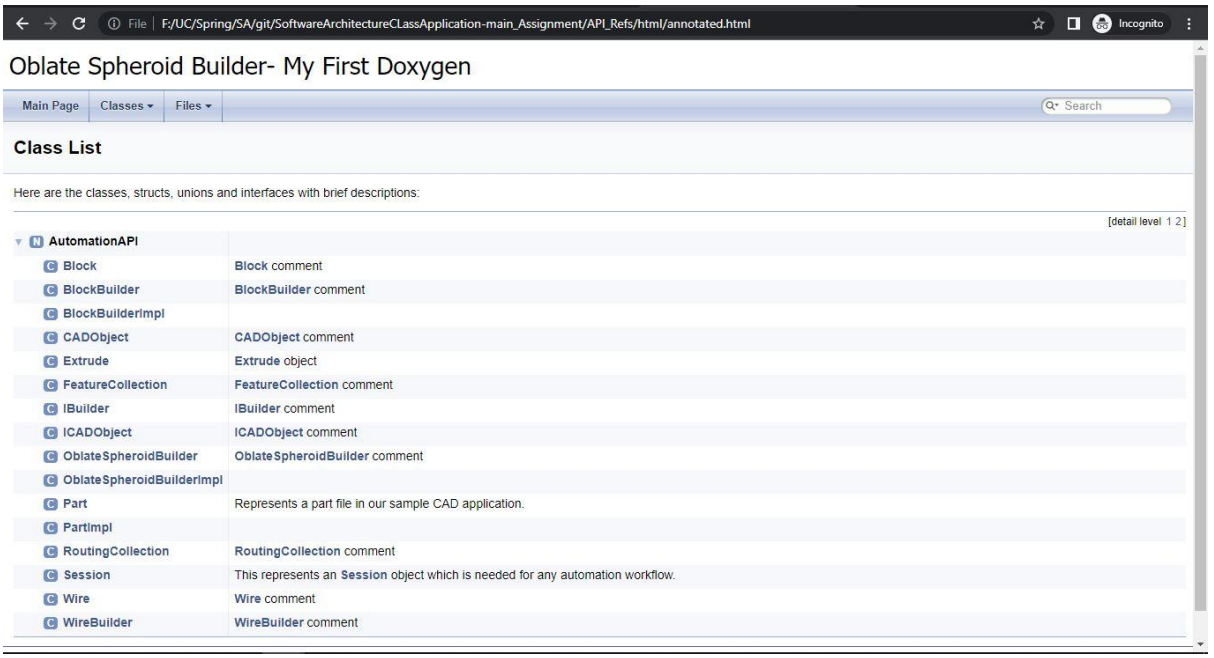
◆ SetType()

void AutomationAPI::OblateSpheroidBuilder::SetType (**OblateSpheroidBuilderTypes** type)

set type of builder class Input: ShpereBuilderTypes

The documentation for this class was generated from the following files:

- AutomationBinding/**OblateSpheroidBuilder.h**



Oblate Spheroid Builder- My First Doxygen

Main Page | Classes | Files | Search

Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

[detail level 1 2]

N **AutomationAPI**	
C **Block**	**Block** comment
C **BlockBuilder**	**BlockBuilder** comment
C **BlockBuilderImpl**	
C **CADObject**	**CADObject** comment
C **Extrude**	**Extrude** object
C **FeatureCollection**	**FeatureCollection** comment
C **IBuilder**	**IBuilder** comment
C **ICADObject**	**ICADObject** comment
C **OblateSpheroidBuilder**	**OblateSpheroidBuilder** comment
C **OblateSpheroidBuilderImpl**	
C **Part**	Represents a part file in our sample CAD application.
C **PartImpl**	
C **RoutingCollection**	**RoutingCollection** comment
C **Session**	This represents an **Session** object which is needed for any automation workflow.
C **Wire**	**Wire** comment
C **WireBuilder**	**WireBuilder** comment