**Design patterns**

Design Pattern 1: Open/ Closed

Text

Description automatically generated with medium confidence

Exporter base

Location:

ExporterToMsProjectFile

Graphical user interface, application

Description automatically generated

Location:

Rationale: ExporterBase is the abstract class that is closed because it is used in eleven more classes beyond ExporterToMsProjectFile, so if we changed something we would need to change it in twelve different places .The ExporterToMsProjectFile is the class that extends ExporterBase to implement new functionalities avoiding introducing undesirable side effects.

Design Pattern 2: Decorator Design Pattern

The decorator class

Text

Description automatically generated

Location:



Rationale: The decorator is an abstract class that implements Exporter the component interface that defines the common type for all the classes. The StylesheetExporterBase is a concrete decorator that extends ExporterBase the decorator.

Design Pattern 3: Façade

Graphical user interface, text, application, email

Description automatically generated

Location:

Rationale: Façade provides a unified interface to a complex subsystem and that complexity in this case is hidden in TimelineFacade.