**Design patterns**

Design Principle: Open/ Closed

Text

Description automatically generated with medium confidence

Exporter base – The abstract class that is closed

Location:

ExporterToMsProjectFile – The class that extends Exporter to implement new functionalities, avoiding introducing undesirable side effects.

Graphical user interface, application

Description automatically generated

Location:

Rationale: ExporterBase is the abstract class that is closed and ExporterToMsProjectFile is the class that extends ExporterBase to implement new functionalities avoiding introducing undesirable side effects.

Decorator Design Pattern

The Component Interface

Graphical user interface, text, application, email

Description automatically generated

Location:



The decorator class

Text

Description automatically generated

Location:



Graphical user interface, text, application, email

Description automatically generatedA concrete decorator class

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.

Graphical user interface, text, application, email

Description automatically generatedFaçade

Location:

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