Pattern 1: Facade Pattern (Structural Design Pattern)

**Location of the design pattern from repository root:**

* ganttproject/src/main/java/net/sourceforge/ganttproject/gui/UIFacade.java
* ganttproject/src/main/java/net/sourceforge/ganttproject/chart/gantt/GanttChartController.java
* ganttproject/src/main/java/net/sourceforge/ganttproject/export/ConsoleUIFacade.java
* ganttproject/src/main/java/net/sourceforge/ganttproject/GanttProject.java
* ganttproject/src/main/java/net/sourceforge/ganttproject/GanttProjectBase.java
* ganttproject/src/main/java/net/sourceforge/ganttproject/UIFacadeImpl.java
* ganttproject/src/main/java/net/sourceforge/ganttproject/GanttGraphicArea.java

**Explanation:**

We can find a Facade Pattern in the way the Interface UIFacade hides a more complex subsystem including classes like GanttProjectBase.java, UIFacadeImpl.java and ConsoleUIFacade.java, which can be accessed, for example, through the class GanttChartController.java. Other classes like GanttChartArea.java can interact with this subsystem through the GanttChartController.java. This is illustrated in the next simplified UML diagram of this situation.

