***Design Patterns***

1. **Illustrating code snippet:**

Uma imagem com texto

Descrição gerada automaticamente

**Class location**: ganttproject/biz.ganttproject.core/src/main/java/bix/ganttproject/core/chart/grid/OffsetBuilderImpl.java

**Design Pattern:** Factory. In the OffsetBuilderImpl.java class the initialization of various constants is handle by a creator that is not the class, this makes it easier to modify their creation and makes the code more understandable.

1. **Illustrating code snippet:**

**Uma imagem com texto

Descrição gerada automaticamente**

**Class location**: ganttproject/ganttproject/src/main/java/net/sourceforge/ganttproject/calendar/GPcalendarProvider.java

**Design Pattern:** Singleton. The class provides access through a single instance (line 71), the constructor to the class is private (line 109) and the method that instantiates the class is public (line 95).

1. **Illustrating code snippet:**

**Uma imagem com texto

Descrição gerada automaticamente**

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**Class location**: ganttproject/ganttproject/src/main/java/net/sourceforge/ganttproject/gui/UIFacade.java

**Design Pattern:** Façade. The UIFacade interface provides an easier use of a complex subsystem, it is implemented in the UIFacadeImpl.java class which is then used in the abstract class GanttProjectBase.java. This latter one will be the façade class that has access to the subsystem.