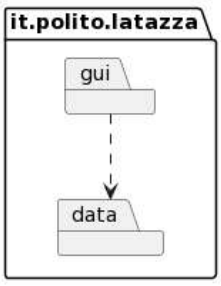
LaTazzaDesignG39.md 9.52 KB

LaTazza design document

Contents

Package diagram

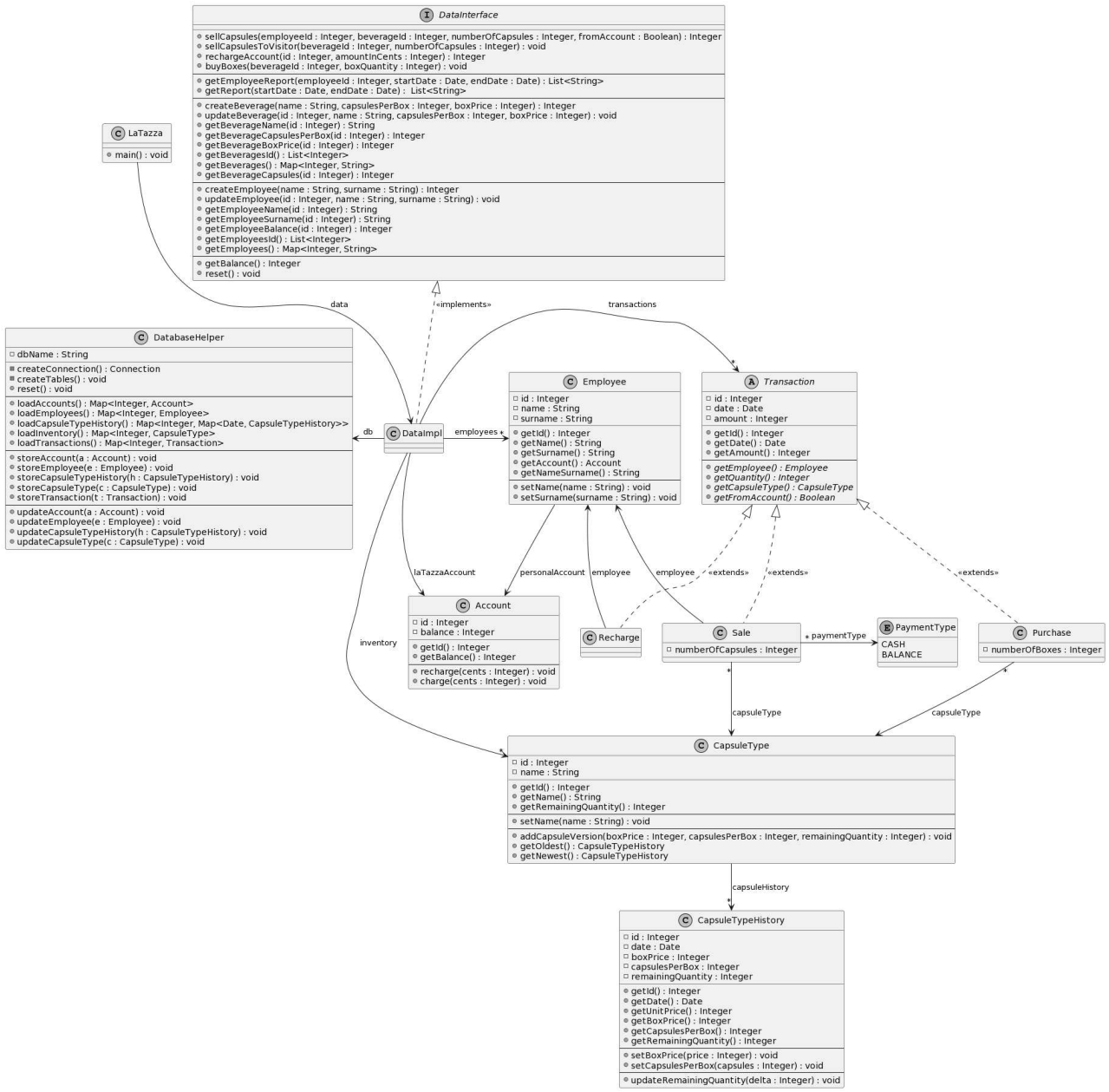


The proposed software architecture for the LaTazza system includes two main packages, the `data` package and the `gui` package. The first one includes the classes that implement the data model of the application, whereas the second one includes the classes needed for the drawing and the management of the GUI. Since the GUI works on a set of data objects, the link between those two packages is directed from the second to the first.

This architecture implements two high-level architectural patterns:

- *Layered*: the application is structured in two layers, the underlying data layer and the GUI that works on top of it, using the services offered by the data layer
- *Model-view*: the application makes use of two separate sets of classes to manage the data and their presentation

Class diagram



The structural façade pattern is used: the user interacts only with the system through the `gui` that interacts with the `DataImpl` class. The `DataImpl` class implements the interfaces through which it is connected to the rest of the system and manages the interaction between the other classes. In this way the user's experience will be simpler and not affected from possible future changes in the lower level.

Verification traceability matrix

	LaTazza	DataImpl	DatabaseHelper	Account	Employee	CapsuleType	Transaction	Sale	Pur
FR1	X	X	X	X	X	X	X	X	
FR2	X	X	X	X		X	X	X	
FR3	X	X	X	X	X		X		
FR4	X	X	X			X	X		
FR5	X	X	X						
FR6	X	X	X						
FR7	X	X	X			X			
FR8	X	X	X	X	X				
RFC11	X	X	X			X			

Verification sequence diagrams

The following diagram represents the implementation of Scenario 1 and Scenario 2. It is assumed that the loading operations from the database have already been performed.