

OOP Bank System Project Class Specification

1. Classes functioning as common utilities

Name	Description
Database	<ul style="list-style-type: none">• A class that provides functionalities to interact with the database.• It provides below 3 major functions:<ul style="list-style-type: none">a. Initialize database (create engine)b. Store and provide DB sessionc. Provides methods to 'new a record' or 'update a record' in a table in database. All other classes can call these methods to save new/updated records into database.
Utility	<ul style="list-style-type: none">• A class that provides functions that can be called by all other classes or modules.• These functions include: setting up logger, formatting message, logging information or errors, printing message to screen, etc.
Sequence	<ul style="list-style-type: none">• A class that functionality to generate monotonically increasing numbers, which will be used in many places.• It is provided because MySQL doesn't provide object 'sequence' at database level.

2. Classes of base entities

Name	Description
<ol style="list-style-type: none">1. Bank2. Employee3. Customer4. Bankaccount5. CustomerAccount6. AccountTransaction7. CreditCard8. CardApplication	They are base classes which are equivalent to the bottom level entities, such as customer, account, employee, credit card, account transaction,, etc.

3. Classes of application modules

Name	Description
<ol style="list-style-type: none">1. AccountManager2. CustomerManager	<ul style="list-style-type: none">• They are higher level classes that interact with different group of bottom level entities and each provides a set

<p>3. TransactionManager 4. CreditCardManager</p>	<p>of functionalities in one area.</p> <ul style="list-style-type: none">• They also provide an interface for human-computer interaction. More specifically, method 'Menu()'
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