

System Description: Small Loan Application System

The Small Loan Application System facilitates customers in obtaining small loans ranging from 500 to 15,000 EUR when purchasing products from shops affiliated with an organization. The system involves multiple user roles, including **Customers** and **Employees** (Organization representatives), to process and approve loan applications efficiently.

Classes, Attributes, and Relationships

Class	Attributes	Relationships
Customer	- CustomerID - Name - ContactInformation	- Can have multiple Loan Applications (1..n)
Employee	- EmployeeID - Name - Position	- Approves Loan Applications (1..n) - Associated with one Organization (1..1)
Loan Application	- ApplicationID - LoanAmount - LoanPeriod - DecisionStatus (positive/negative) - CustomerSignature - EmployeeSignature	- Linked to one Customer (1..1) - Linked to one Product (1..1) - Processed at one Shop (1..1) - Approved by one Employee (1..1) - May result in one Contract (1..1)
Contract	- ContractID - Status - TerminationDate - Terms	- Originates from one Loan Application (1..1)
Organization	- OrganizationID - Name - Address	- Owns multiple Shops (1..n) - Employs multiple Employees (1..n)
Shop	- ShopID - Location - ContactInfo	- Belongs to one Organization (1..1) - Offers multiple Products (1..n) - Facilitates multiple Loan Applications (1..n)
Product	- ProductID - Name - Price - Description	- Available at multiple Shops (1..n) - Linked to multiple Loan Applications (1..n)

System Workflow and Relationships:

- Customer visits a Shop and selects a Product.
- If interested in financing, a Loan Application is created, incorporating data from the Customer, Product, Shop, and Organization, along with loan amount and period.
- The Loan Application undergoes an automatic decision process by the Organization, resulting in a Decision Status of positive or negative.
- Positive: The application can proceed to become a Contract.
- Negative: The application is blocked from further progression.
- For a positive decision, both the Customer and an Employee must approve (sign) the Loan Application.
- Once approved by both parties, the Loan Application transitions into a Contract.