

Laboratory Work No. 1

Topic Selection and Requirements Formation

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"Bank Credit Department System"

1 System Description

"**Bank Credit Department System**" is designed for optimizing the processing and analysis of credit-related processes within the bank. The main features of the system include:

- **Credit Application Processing:** Creation, submission, and processing of credit applications.
- **Scoring and Creditworthiness Assessment:** Automated analysis of the creditworthiness of the applicant.
- **Document Management:** Creation, modification, storage, and transmission of documents.
- **Customer Communication:** Communication with customers through all available channels (chat, SMS, messengers, social networks, etc.).
- **Reporting and Analytics:** Creation of reports for evaluating the credit portfolio and monitoring its status.
- **Integration with External Systems:** Interaction with other credit organizations, government agencies, etc.

2 Key Actors

- **Customers:** Individuals and legal entities submitting credit applications.
- **Credit Specialists:** Employees responsible for processing and analyzing credit applications.
- **Customer Relationship Managers:** Employees who communicate with customers, guiding them from start to finish.

- **Analysts:** Specialists providing information about the productivity of the department and responsible for reporting.
- **System Administrators:** Technical specialists maintaining system functionality and improving its fault tolerance.
- **Department Managers:** Managers responsible for risk management and making strategic decisions.
- **Lawyers:** Specialists dealing with legal aspects of all agreements and documents.
- **Financial Analysts:** Employees analyzing and forecasting the economic situation and preparing reports.
- **Security Specialists:** Specialists responsible for system security, data preservation, fraud prevention, and cyber attacks.

3 Actions, Access, and Capabilities for Key Actors

3.1 Customers

- **Actions:** Creating, modifying, and submitting applications, providing documents.
- **Access:** User's personal account.
- **Capabilities:** Monitoring application status, communicating with specialists through communication channels (chat or email).

3.2 Credit Specialists

- **Actions:** Processing applications, making credit decisions.
- **Access:** Application management system, client documents, scoring system.
- **Capabilities:** Viewing, editing applications, generating reports and providing them to management.

3.3 Customer Relationship Managers

- **Actions:** Communicating with customers, consulting on credit products.
- **Access:** Client documents, chat, corporate email.
- **Capabilities:** Creating applications, editing applications, requesting and providing documents.

3.4 Analysts

- **Actions:** Data analysis, portfolio monitoring, report preparation.
- **Access:** General data on the work of the credit department, analysis tools.
- **Capabilities:** Creating, editing, and providing reports.

3.5 System Administrators

- **Actions:** System maintenance, corporate computer setup, server setup and maintenance, problem resolution, error control.
- **Access:** Full access to the system and its settings.
- **Capabilities:** System configuration, user access management, data security.

3.6 Department Managers

- **Actions:** Monitoring employee performance, making strategic decisions.
- **Access:** Reports, tasks, chat, email.
- **Capabilities:** Viewing reports, managing personnel through communication channels (chat, email).

3.7 Lawyers

- **Actions:** Creating, checking, and preparing legal documents, consulting on legal issues.
- **Access:** Document database.
- **Capabilities:** Viewing, creating, and editing documents.

3.8 Financial Analysts

- **Actions:** Analyzing and forecasting the economic situation, preparing reports.
- **Access:** Access to data related to the financial component of the department.
- **Capabilities:** Creating, editing, and providing reports.

3.9 Security Specialists

- **Actions:** Ensuring protection against all types of attacks, fraud, system monitoring.
- **Access:** Full access to the security system and data.
- **Capabilities:** Preventing attacks, changing user access rights, data control.

4 Application Value Description

- **Accelerate application processing:** Automation of the system helps specialists analyze the application faster and make a decision.
- **Improve creditworthiness assessment accuracy:** Increasing the security of the bank's credit department from dishonest individuals, whose actions lead to financial losses.
- **Enhance customer communication:** Supporting customers at all stages allows for improving service and customer trust.
- **Ensure transparency and control:** Impossibility of falsification and fraud from the side of company employees, thanks to control over the application at all stages by different specialists.
- **Enhance data security:** Integration with external systems allows for increasing data security and protecting confidential information.
- **Optimize personnel management:** The ability to control personnel and instant communication with them allows for increasing the efficiency of the department.