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Raiymbek Kabiyeu
No. of student's record book w68636

Online bank account

Supervisor: dr inż. Lukasz Piatek

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Introduction

Online Bank Account: This technology gives consumers easy access to banking services and data by streamlining financial transactions and management using internet-based platforms and applications.



Figure 1: Screen of the created online bank.



Figure 2: Depositing and withdrawing funds from online banking account

Chapter 1

Basic Principles and Applications of Online Bank Account Technologies in Finance

1.1 Basic principles

1.1.1 Explanation

Through online platforms and mobile applications, online bank accounts provide a range of financial activities for both individuals and businesses, including fund transfers, bill payment, and investment management.

1.2 Platforms and Services

1.2.1 Interactive Lessons

Online Bank RK offers a a convenient and easy to understand interface. interface and a wide range of banking services.

1.2.2 Online bank Interface

RK Bank also has authentication, and tokens will appear in the near future. Online Bank RK prioritizes security and offers advanced feature.

1.3 Design of Application

1.3.1 Functional

Functional: Providing simple navigation, smooth transaction processing, and extensive financial management capabilities are the main goals of the functional design of online banking programs.

1.3.2 Non-functional

Non-functional: Security protocols, system dependability, performance enhancement, and adherence to legal requirements are examples of non-functional features.

1.4 Design of Application

Effective design is crucial in ensuring that online banking applications meet user needs while also maintaining security and reliability. This section explores the design considerations and strategies employed in the development of online banking applications.

1.4.1 Functional design

Functional design refers to the functional elements and capabilities of an online banking application. These elements are directly related to the usability and effectiveness of the application in handling financial transactions and managing accounts. Some of the most important functional design elements include user interface (UI), transaction workflow, account management tools, alerts and notifications.

1.4.2 non-functional design

Non-functional design looks at the behind-the-scenes setup, speed, and security measures that keep the online banking app running smoothly. It includes aspects like how safe it is, how much it can grow, how dependable it is, and if it meets all the rules and regulations effectively and efficiently.

Chapter 2

Technical and Security Challenges

2.1 Technical and Security Challenges

2.1.1 Security Concerns

The security of online banking platforms is a major concern due to the risk of unauthorized access, data breaches, and fraudulent activities.

2.1.2 User Authentication

Effective user authentication methods are crucial for preventing unauthorized access to online banking accounts. This entails employing multi-factor authentication and biometric verification techniques.

2.1.3 Data Privacy

Protecting sensitive financial information is crucial to maintain user trust and comply with privacy regulations such as GDPR and CCPA.

2.1.4 Transaction Security

Secure transmission and storage of transaction data are essential to prevent interception, tampering, and unauthorized modifications of financial transactions.

2.1.5 Regulatory Compliance

Online banking platforms must adhere to regulatory requirements related to data security, consumer protection, anti-money laundering, and financial reporting.

2.1.6 Scalability

Scalability challenges arise from the increasing volume of transactions, user growth, and technological advancements, requiring scalable infrastructure and efficient resource management.

Chapter 3

Prospects for Development

3.1 Possible Directions for Online Banking

3.1.1 Enhancing Security Measures

Continuous improvement of security measures is necessary to mitigate evolving cyber threats and protect online banking platforms from unauthorized access and fraud.

3.1.2 Improving User Experience

User-centric design principles should guide the development of online banking applications to provide seamless navigation, personalized recommendations, and intuitive features.

3.1.3 Integration with Emerging Technologies

Integration with emerging technologies such as blockchain, artificial intelligence, and biometrics can enhance the security, efficiency, and innovation of online banking services.

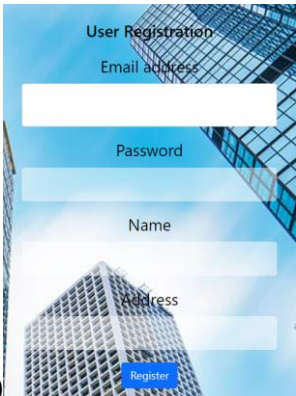
3.1.4 Personalized Financial Management

Personalized financial management tools leveraging data analytics and machine learning algorithms can help users make informed decisions, optimize their finances, and achieve their financial goals.

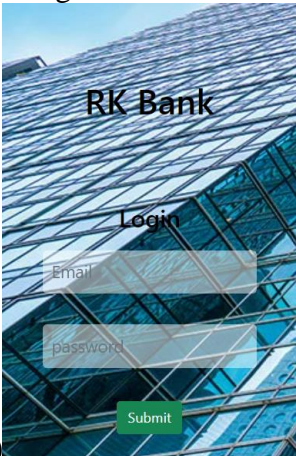
3.1.5 Expansion of Services

Online banks can expand their service offerings to include additional financial products and services such as insurance, investment advisory, and peer-to-peer lending, catering to diverse customer needs.

How to use RK Online bank



1) Registration



2) Login and Password



3) Deposit or Withdraw



4) Send money



5) Check Balance

Functional Modules for User Registration

The backend user registration process in an online banking application comprises multiple functional modules, each tasked with specific responsibilities to guarantee a smooth and secure registration procedure.

User Authentication Module: This module validates user credentials, such as email and password, to grant secure access to the platform.

Registration Form Submission Handler: Responsible for processing user-submitted registration data, including email, password, name, and address.

Data Validation Module: Ensures the validity of user-entered data, preventing errors and ensuring accuracy during the registration process.

Registration Success Notification Module: Provides feedback to users upon successful registration, guiding them to proceed with logging in.

Error Handling Module: Manages any errors that may occur during the registration process, ensuring appropriate feedback to users.

Integration with Database Module: Establishes a connection with the database to securely store user registration information.

User Registration UI Management: Manages the display of registration-related user interface elements, ensuring a smooth user experience throughout the registration process.

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**University of Information Technology and Management in Rzeszow Faculty
of Applied Information Technology**

Thesis Summary

Author: Kabiye Raiymbek

Supervisor: dr inż. Łukasz Piątek

Key words:

The development of online banking technologies offers significant opportunities for improving financial services' accessibility and efficiency. However, addressing technical and security challenges is crucial to ensure the reliability and trustworthiness of online banking platforms. Future developments should focus on enhancing security measures, improving user experience, and leveraging emerging technologies to provide personalized financial services and expand the range of offerings.

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