

Abstract

This course is made of 102 sheets, contains 19 figures, 9 tables, 1 appendix and a list of references to sources used 8 items. Thesis is devoted to the development of mathematical and software banking subsystem "Payment service".

The purpose of an information bank subsystem is to improve the implementation of remote transactions between the user and the bank, increasing the efficiency of the system and adapt the system to the requirements of data protection.

Analyzed content billing subsystem for different types of users and administrators. Analyzed adaptability of the system according to the requirements of data protection.

Consider the following security requirements for personal data payment services, industry data security standard payment cards.

Analyzed the classification of software architectures, a complete classification of cryptographic algorithms encryption information by comparing the pros and cons of each method and algorithm.

Consider the following tools: programming language Java, SQL, Java Script, markup language hypertext documents HTML, cascading style sheets CSS, Bootstrap toolkit, technology JSP.

Based on the criteria set out to solve this problem selected software architecture type client – server, application programming interface Java DataBase Connectivity. Were selected asymmetric cryptographic algorithm for encrypting data - RSA algorithm.