International Academic Institute for Science and Technology

International Academic Journal of Science and Engineering
Vol.11, No.1, 2024, pp.126-137.

ISSN 2454-3896

International Academic Journal of Science and Engineering

www.iaiest.com

Secrete Wallet for Password Protection

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Abstract

It basically deals with the secure of multiple data for remote systems connected to the Internet. This system is developed in visual basic.Net. It is purely Web based software. The scope of this product is to keep information safe and secure. The purpose of this application is to protect some sensitive information like credit card details, account details, passwords etc. It includes: Registration, storing passwords, storing documents, Storing Images, Storing favourite links. This project mainly focusses on Especially for the people who are all having accounts in banks, social networks like Gmail, Yahoo, Facebook, Viber etc. It facilitates users to keep their sensitive information like credit card details, passwords etc. Also, if facilitates to keep their favourite documents, links etc.

Keywords: Secrete Wallet, Password Protection, Security.

DOI: 10.71086/IAJSE/V11I1/IAJSE1116
Received: 11 January 2024/Accepted: 22 February 2024/Published: 29 February 2024

Introduction

Since at present everything is done manually, it is having a lot of drawbacks. The major drawback of the present system is the amount of physical volume of the data making information search and retrieval a tedious process [1]. Because of doing all work manually the time for searching the documents which is so difficult. If any document were missed, then at the time of applying product will become rejected. Then reapplying for the product process is so tedious**.** Secret Wallet system mainly focused for strong password production. One password control everything like personal documents, images and personal links.

Because of all these problems of the present system they are decided to use computerized system. The computerized system will solve all these problems. In this case of communication chances of wasting more people time are high [2]. It is fast, flexible and user friendly.

An in-depth examination of the interrelationships between the many tasks carried out by a system is known as analysis [3]. Analysing a system involves doing things like drawing lines around it and checking to see if a potential system has to take other systems into account. Decision points and transactions processed by the current system are the subjects of data acquired during analysis.

System analysis makes use of a number of techniques and models that are logical in nature [4]. Planning the system and conducting an initial study to acquire information (by interviews, questionnaires, etc.) are the two main components of a system analysis. When doing a cost-benefit analysis or feasibility study, tools like a data dictionary, decision tree, data flow diagram, and structured English can be quite helpful.

When the organization has partnership with other companies, we need to send some legal data to other organization, in that situation watermarking is not an efficient technique to protect the data[5]. Watermarking is the technique of embedding the unique code to the original data, if the unauthorized person identifies one set of code, he can recover the original data from watermarking.

- Publicity cannot be assured
- Security is very Low

Literature Review

Adu-Gyamfi et.al [6] It becomes absolutely necessary to add anonymity to bitcoin transactions so that opponents will have a difficult time following the original bitcoin users' transaction paths. The difficulties in identifying users' true identities, the original transactions, the transaction addresses, and the coins are therefore thought to be improved by anonymity. However, there are attacks that compromise the integrity of the perfectly legitimate practice of combining services within the bitcoin blockchain. Furthermore, in recent decades, the Lockmix model and other similar mixing service schemes have been introduced to improve the blockchain ecosystem's privacy and accountability framework in general and to specifically secure Bitcoin. Properties like unforgeability, confidentiality, fine-grained access control, authentication, privacy, and public verifiability make up the suggested Anonymix technique. The anonymix technique supports the management of trust requirements for mixing services and is compatible with the bitcoin framework. Our theoretical analysis demonstrates that the bitcoin framework is safe from potential recurring attacks when using the Anonymix technique.

Torkanfar et.al [7] Existing procedures are still not perfect. The main problems with the way that current tendering practices are being carried out are security and legal concerns as well as a lack of transparency. This paper argues that the centralization of e-tendering systems is the root cause of the problem. As a result, this study offers a critical evaluation of the blockchain's potential for creating distributed e-tendering systems and suggests a cutting-edge framework for their decentralization. Three technologies—blockchain, public key infrastructure (PKI), and interplanetary file system (IPFS)—are integrated to create the suggested framework. To showcase the idea and assess how blockchain technology can be used to address security and legal issues while enhancing trust and transparency, a decentralized application (DApp) is created utilizing the suggested framework. The outcome demonstrates that a blockchain-based e-tendering system reduces the need for centralized authorities to manage the tendering process and distributes to parties a transparent and unchangeable record of the tendering history.

Laitano et.al [8] The pathophysiology and recovery of exertional heat stroke will be discussed along with the seldom-examined roles of skeletal muscles. An outline of the heat generation process that leads to extreme hyperthermia is provided, along with information on the production and release of bioactive substances like acute phase proteins, chemokines, and cytokines. By switching from a pro- to an anti-inflammatory state, these molecules

can impact various organ systems and have an impact on healing. A victim's ability to resume physical activity or need a longer recovery period can be ascertained by the activation of innate immunity. A succinct discussion of whether skeletal muscle secretory phenotype can be altered by heat acclimation to either prevent or facilitate recovery from exertional heat stroke is also included. We conclude that an important organ system in the pathophysiology of exertional heat stroke should be the skeletal muscles.

Perpiñan et.al [9] Initial categorization of the participants was based on obesity status, and subsequently, their status was based on the presence of multiple sclerosis. The parameters that were collected were clinical, radiologic, and analytical. There were 303 hospitalized COVID-19 patients in this prospective cohort study. According to our findings, obese patients had pneumonia, bilateral pulmonary infiltrates, moderate COVID-19 symptoms, and a higher frequency of tocilizumab usage. In the meantime, patients with multiple sclerosis (MS) exhibited elevated levels of creatinine and troponin, greater mortality, and a higher frequency of severe pneumonia and respiratory failure. According to the study's primary conclusions, IL-6 may be able to predict the severity of COVID-19 in obese patients, while troponin and LDH may be utilized as predictive biomarkers for COVID-19 severity in MS patients. It is therefore likely that patients with obesity or multiple sclerosis should receive more individualized and intensive treatment for COVID-19.

Perpinan et.al [10] In this longitudinal study, we looked at 146 patients' clinical, biochemical, and circulating cytokine levels both at the time of their COVID-19 admission and 4-6 weeks later. This study aimed to investigate the potential role of basal cytokines as early prognostic biomarkers of COVID-19 and the effect of comorbidities, such as obesity or metabolic syndrome (MS), on the cytokine profile. With the exception of IL-1β, which was lower upon admission, most inflammatory cytokines were at higher levels upon admission compared to when they were at their lowest point 4-6 weeks later. These levels were independent of MS or obesity because the cytokine storm obscures these inflammatory processes. Resistin, IL-6, IL-8, IL-15, MCP-1, and TNF-α were the cytokines that showed a negative correlation with a COVID-19 patient's prognosis among those examined. The best early indicators of needing invasive ventilation are specifically resistin and IL-15. Resistin and IL-15 should thus be part of the patients' customized treatment decision algorithm for COVID-19.

Proposed System

If the new system is to succeed, it must eliminate every drawback of the current one. Because of its flaws, the current system is not very effective. Because of this, the suggested strategy ought to lessen the impact of any complaints.

The proposed system makes the management of the details easier which is far better than the existing system. In our system the need for maintaining large, written information is reduced. The way in which the data stored is very efficient. This helps in easy entry, editing, storing the data as well as retrieving the data.

- Easy entry, editing, deletion, and extraction of information.
- Quick retrieval of the wanted information.

1. Modules in the System

Registration

The details of the customers' registrations are saved in this module. Password, username, physical address, phone number, email, etc. Are all part of the registration information. The customer will receive the verification PIN for authentication purposes. The consumer is required to input this PIN whenever he wishes to access this system.

Storing Documents

At any moment, you can use this module to upload files to the cloud server. Ensure the file is safely stored on the main server before uploading it. A unique key is assigned to each uploaded file and sent to the user's registered account. The developers of this software made every effort to ensure that it would be easy for users to navigate. Entering the user's login credentials is necessary for further processing.

Storing Passwords

This module maintains secure different passwords like Gmail, face book and Google passwords. This module mainly focuses for password encrypted format. This password stored in database in encrypted format. User can enter Pin no and view these passwords and edit for user.

Storing Images

This is provided for users to store their documents and images. This module enters their favourite documents and images with extension. Once upload the personal images then user can view their favourite documents and images. Verified images can view registered user only. User can login for user id and password and enter security PIN no and process images like edit, modify, and delete the images.

Storing Favourite Links

User can directly view their favourite web pages by pressing the links that they can directly view their favourite web pages by pressing the links that they have been stored.

2. Dataflow Diagram

Data Flow diagram is a Graphical Representation of Data movement, process, and files (data store) used in support of an information system. They can be very effective in settings the pose few constraints on the development or modification of the system under study. The DFD classifies system requirements and identifies major transformation that will become program in system design. It is the starting point in system design that decomposes the requirement specification down to lowest level of details. The direction of flow is the form top to bottom and from left to right.

The DFD describes what data flows (logical) rather than new using four symbols, as mentioned down processes them.

- A Square define a source or destination of system.
- An Arrow identifies data flow.
- A circle or a “bubble” represents a process that transforms incoming data flow(s) into outgoing data.

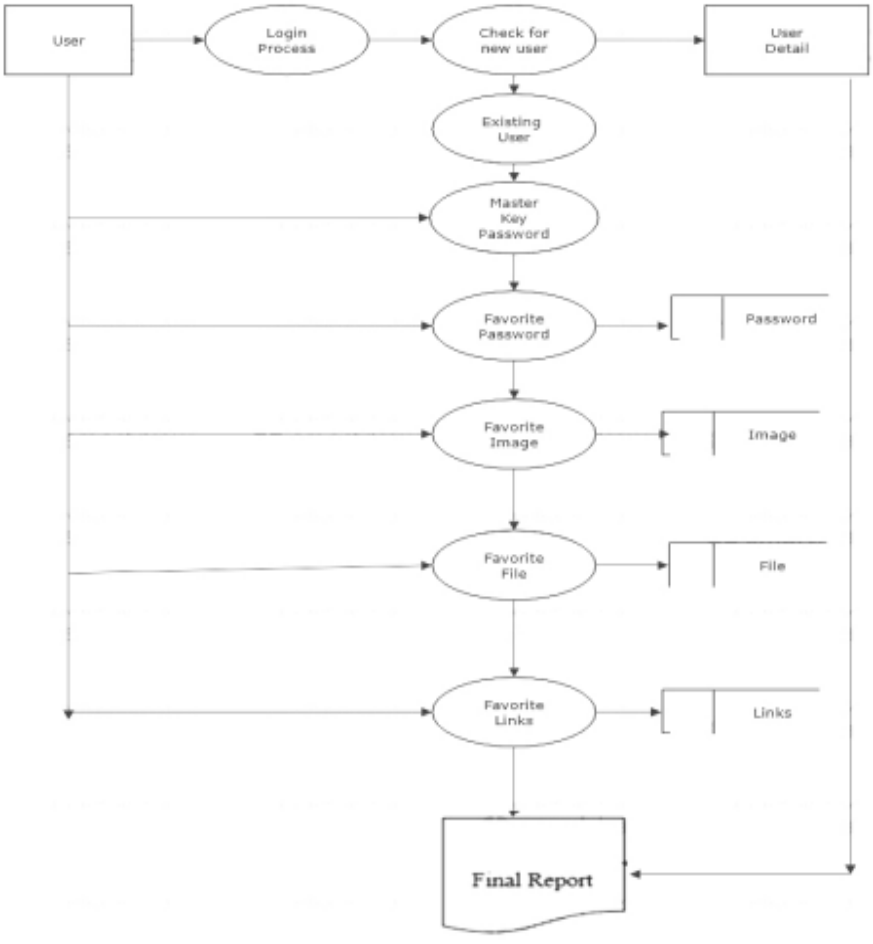


Fig. 1: Secret Wallet System



Fig. 2: Entity Relationship Diagram

System Specification

1. Hardware Specification

Table 1: Hardware Specification

Processor	Pentium Core 2 Duo 2.88 GHZ
System RAM	1 GB
Hard disk drive	500 GB
Keyboard	106 multimedia keyboards
Mouse	Optical Mouse
Monitor	15” Colour Monitor

2. Software Specification

Table 2: Software Specification

Front end	ASP.Net 2008
Back end	MS SQL Server 2000
Operating system	Windows XP

3. Software Features Front End: ASP.NET

Today, in the age of B2B and B2C e-commerce, slow Web applications can be a huge waste of resources and a surefire way to lose consumers. For both programmers and system administrators, website performance is a top priority while making code or updating apps.

You can build and deploy high-performance Web applications with ease with ASP.NET because it has numerous tools and functionalities for that purpose. Among these characteristics are:

- An improved process models
- Compilation of requested pages and automatic storage on the server
- ASP.NET-specific performance counters
- Web application testing tools

Online applications that need to handle a high volume of requests concurrently can be easily built with the help of ASP.NET. In this article, you will learn how to make use of the built-in performance counters in the.NET Framework and how to customise the way your applications, services, and drivers are monitored by creating your own Performance Counter objects.

4. Creating ASP.NET Web Applications

You may create enterprise-level web apps with the help of ASP.NET, a unified web development platform. Despite ASP.NET's strong syntax compatibility with ASP, the new programming model and infrastructure it introduces let you build a whole new breed of applications. As a component of the.NET Framework, ASP.NET enables you to leverage the common language runtime's capabilities, including versioning, language interoperability, inheritance, type safety, and more.

To help you build code that makes the most of this new platform, this part covers both the conceptual aspects of ASP.NET and the procedural subjects.

5. Back-End: MS SQL SERVER (Structured Query Language)

The relational database management system SQL Server can manage massive volumes of data, several users at once, and ensure that all data remains intact while offering a plethora of complex features for administration and data distribution.

Clients and physical data are connected through the SQL Server component. The data is not directly accessible by any client apps.

Data Access Options

The various data access options are available from Microsoft are given below:

- **Data Access Object (DAO)**

It communicates with the data sources through the JET database engine.

- **Remote Data Objects (RDO)**

It offers a structure for building and manipulating ODBC database system components using code.

- **ActiveX Data Objects (ADO)**

No more deciding between DAO, RDO, or any of the other data access methods; this programming paradigm does it all. A common link across many file systems, databases, and email servers is its intended function.

- **ADO Command Object**

The ADO Command object is used to execute commands against a data source. This object can apply changes through manipulation command such as insert, update and delete; it is presently limited to read-only, forward-only access to the Result set through the ADO Data Reader.

- **ADO Data Reader**

If the user wants to perform a sequential, read-only pass through a query result, the dataset command can be used to establish a reader object. The properties and methods included in the ADO Data Reader helps the user to scan through the query result.

Research and Discussion

1. Input Design

The process of accepting legitimate user input is known as input design. The database then stores this legitimate data as operational data. Making input data entry as easy and error-free as possible is the purpose of input design. When entering data, the input screen is careful to prevent any erroneous information from being saved as operational data.

Of all the steps involved in designing a system, input design is the most time-consuming and costly. It is error-prone since it is the first thing users see when they interact with the computer. Inaccurate input data will have a magnifying effect on processing and outcome. The following is the goal for the input design:

- Produce cost effective method input
- High-level accuracy
- Free of ambiguity

Several stages of input design are:

- Data recording
- Data verification
- Transmitting data to the system
- Data correction

As part of the input design, the original inputs are transformed into a format that is compatible with the system. The goal of input design is to eliminate logical errors and simplify data entering. The system processes the following several forms of input data.

External

They are the prime inputs to the system. The external input is what the user supplies to the system. There are two types of external inputs in the OOS. User gives one input and the other are by admin.

Internal

They are input format required for the system to understand. When the external input is obtained from the user, these inputs are transferred as messages through windowing system. These messages are then captured and handled as input for further processing.

2. Output Design

The output design specifies the desired output and how it should be generated. In order for the correct decisions to be made, it is important that the correct information be presented. We can broadly classify the produced results into three groups:

- Screen Output
- Output to be stored as files in storage media
- Hard copy of the output

Simply said, the screen output is a visual representation of the output that has been generated. Online information often displays the results of most searches on the screen. Having the result saved in a file for future reference and being able to print off hard copies for management and other uses is a win-win.

The objectives of the output design are as follows:

- Design output to serve the indented purpose
- Design output to fit user
- Deliver the appropriate quantity of output
- Assure that output is where it is needed
- Provide output on time
- Choose the right output method

Making sure the system's input and output are well-designed and user-friendly is an essential task. Getting the processing result out to people is the primary use case for system outputs. As an added bonus, outputs include a record of the results that can be saved for future reference. To aid in decision-making and enhance system-user relationships, an understandable output design is essential.

3. Database Design

A database is just a group of related data files that have been structured to meet all of your data needs. Microsoft SQL Server offers additional optional features that help with database architecture, including controls over which users may access the database, how they can add, edit, and retrieve data, and how to ensure the independence, integrity, and security of that data.

(i) Data Co-ordination

Information stored in several files is combined, accessed, and processed in a database as if it were in a single file. It stands to reason that all of the data is in one place. The data could be physically stored on several devices in many geographically dispersed places, all linked through data transmission infrastructure.

(ii) Data Integrity

Doing so guarantees that all information stored in the database is accurate and comprehensive. Modifying database contents compromises the database's integrity. Data integrity of limitations must be maintained for consistency's sake.

The following are examples of integrity constraints:

- Domain constraints specify NULL or NOT NULL
- Validity integrity - checks for data type and range
- Entity integrity - uniqueness and primary key
- Reference integrity - foreign key relation

(iii) Data Independence

When application programmes are data independent, they are not affected by changes to the physical organisation of data. The goal here is to make it possible to change the structure and content of physical data without having to rewrite the applications or reorganise the data itself.

Table 3: Name: Enrool

Primary key: pin

Field Name	Field Type	Size	Description
Pin	Numeric	10	Master Key Generates
Fname	Numeric	20	First_Name
Lname	Varchar	10	Last_Name
Gender	Varchar	10	Gender
Username	Varchar	20	Username
Cpwd	varchar	20	Cpwd
Hint	varchar	20	Hint
Mno	varchar	20	Mno
Email	varchar	20	Email
address	varchar	50	Address
country	varchar	20	Country
State	varchar	20	State
City	varchar	20	City

Table 4: Name: Links

Primary key: pin

Field Name	Field Type	Size	Description
ID	Varchar	10	ID
Pin	Numeric	20	Pin
Name	Varchar	10	ERL details entry
URL	varchar	10	URL

Table 5: Name: Filedb

Foreign key: pin

Field Name	Field Type	Size	Description
ID	Varchar	10	ID
Pin	Numeric	20	Pin
File_name	Varchar	10	File_name
File_type	varchar	10	File_type
File_date	Date/time	10	File_date

Table 6: Name: Image

Foreign key: pin

Field Name	Field Type	Size	Description
ID	Varchar	10	ID
Pin	Numeric	20	Pin
File_name	Varchar	10	File_name
File_path	varchar	10	File path details

Table 7: Name: Password

Foreign key: pin

Field Name	Field Type	Size	Description
Pin	Numeric	20	Pin
Name	Varchar	10	ERL details entry
password	varchar	10	Password

4. Code Design

Simplifying the code to get better coding is the major goal of conducting code design. To make the internal operations more intelligible, the loading is done in a fashion that displays the validation manager for each column. Anyone other than the package developer can deduce the variable's purpose thanks to the careful loading process.

5. Menu Design

Menu design developing in this project are two different formats. One is Admin menu. Another one is manager (agent) menu. Admin menu works in different way like upload documents, view leakage files details and total no of manager details.

Second menu work in manager like view all documents details, download documents, lock file details and warp details view.



Fig. 3: Home Page

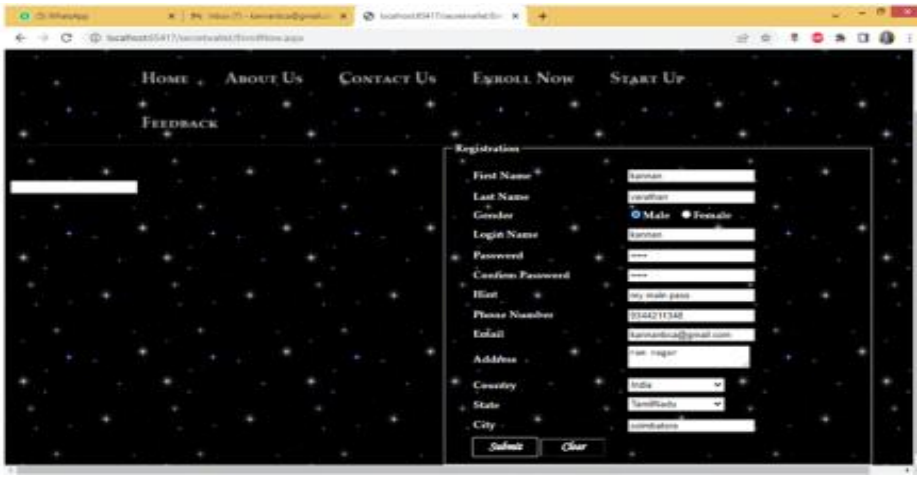


Fig. 4: Registration Page



Fig. 5: Login Page



Fig. 6: Image Upload



Fig. 7: To Add Image

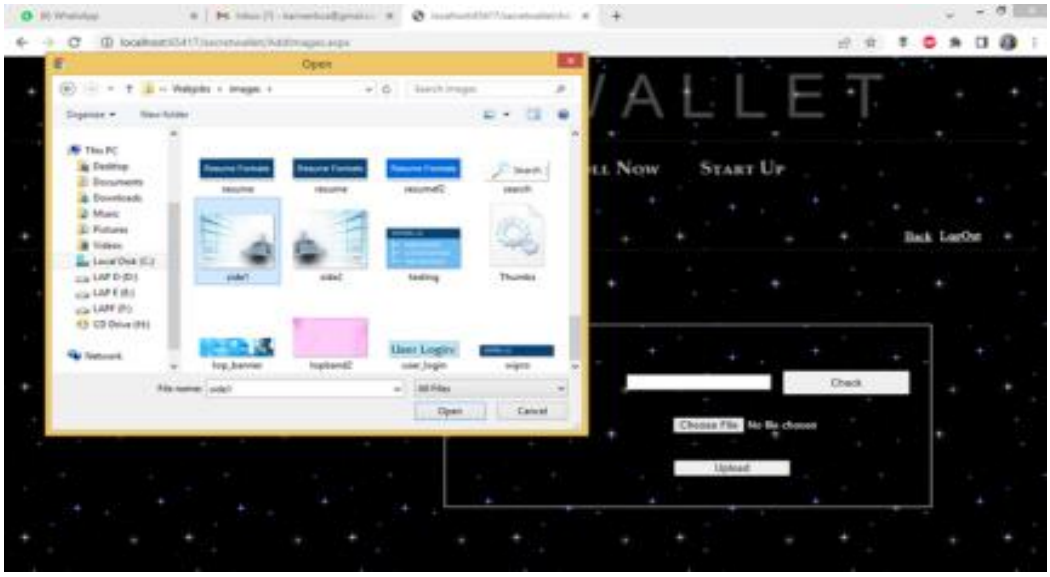


Fig. 8: To Choose a File



Fig. 9: To Upload an Image

Conclusion

The system has been designed, developed and implemented after tedious testing and debugging the goals of the system have reached in such a manner that the system is flexible for any change in the near future. The coding has been done cautiously so that any developer can follow the program easily with the knowledge of the convections followed hence it is easy to be maintained. Testing has been completed and a third person, with little knowledge of coding, tested the system for user friendliness and simplicity.

The system was tested with all possible samples of data and the performance of the system proves much effective and the data maintenance and manipulation is achieved practically. The process done based on our project is very easier for the users to access it. The calculations done at the computer is very accurate and reliable. It may be stored and referred in the future for the development of the concern with the modern technological enhancements.

Built on ASP.Net, the system guarantees flexibility and reduces response time. Additionally, the system provides a chance to improve and expand upon the current system.

Using every conceivable data sample, we were able to assess the system's performance and see that it effectively manages and manipulates data.

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