# SRS DOCUMENT FOR PEPSPAYZ MUNENENE PRAISE KABERIA 20/04549

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#### 1.0 INTRODUCTION

#### 1.1 PURPOSE

This document serves as a comprehensive guide outlining the specifications and requirements for the implementation of the PEPSPayz system. Developed by [Your Company Name], PEPSPayz is an international money transfer and payment gateway system aimed at facilitating secure and efficient financial transactions globally. The version of the system addressed in this document is 1.0.0, marking the initial release of the PEPSPayz platform.

1.2 Intended Audience and Reading Suggestions

The document is intended for the following audiences:

- Clients/Customers: Including individuals, businesses, and financial institutions utilizing the PEPSPayz platform for sending and receiving payments.
- Designers and Developers: Responsible for crafting the user interface and implementing system features.
- Managers of [Your Company Name]: Ensuring alignment with user requirements and serving as a reference point for project oversight.
- Marketing Team: Utilizing system requirements for strategic planning and promotional efforts.
- Testers and Maintenance Teams: Utilizing the document for testing procedures, maintenance planning, and ongoing system support.
- Trainers: Utilizing the document to develop training materials for end-users.

## 1.0 Project Scope

H Connect's web application is designed as a health awareness platform with a primary focus on connecting users and providing them with relevant services to address their health-related needs. The homepage of the web application will prominently feature health information and provide links to fitness web pages, enabling

users to access fitness programs and resources.

The project aims to accomplish the goals and objectives outlined in the project proposal, with the overarching goal of delivering a comprehensive and high-quality web application that fulfills the needs of its users.

#### 1.0 REFERENCES

- 1. Sample Applications User Guide Release 2.0.0, April 24, 2015. [Online] Available: https://www.intel.com/content/dam/www/public/us/en/documents/guides/dpdk-sample-applications-user-guide.pdf (Accessed: 04/07/2020, 13:00 hrs).
- 2. California Department of Education. [Online] Available: <a href="https://www.cde.ca.gov/re/di/ws/appdevstandards.asp">https://www.cde.ca.gov/re/di/ws/appdevstandards.asp</a> (Accessed: 07/09/2020, 21:00 hrs).
- 3. Fadeyev, Dmitry. "10 Useful Web Application Interface Techniques." Smashing Magazine. [Online] Available: https://www.smashingmagazine.com/2009/01/10-useful-web-application-interface-techniques/ (Accessed: 05/07/2020, 12:00 hrs).
- 4. Tutors Globe. "Users of the SRS." [Online] Available: <a href="http://www.tutorsglobe.com/homework-help/software-engineering/users-of-the-srs-7744.aspx">http://www.tutorsglobe.com/homework-help/software-engineering/users-of-the-srs-7744.aspx</a> (Accessed: 08/09/2020, 13:00 hrs).
- 5. Science Soft Professional Software Development. [Online] Available: https://www.scnsoft.com/blog/what-makes-a-great-mobile-app-development-team (Accessed: 07/07/2020, 14:00 hrs).
- 6. Simplicable.com. [Online] Available:
  - Design Constraints: <a href="https://simplicable.com/new/design-constraints">https://simplicable.com/new/design-constraints</a>
  - Project Assumptions: <a href="https://simplicable.com/new/project-assumptions">https://simplicable.com/new/project-assumptions</a> (Accessed: 06/07/2020, 22:00 hrs).

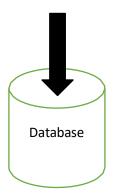
#### 2.0 OVERALL DESCRIPTION

In this section, the document provides an overview of the functionality of the H Connect Web Application.

### 2.1 PRODUCT PERSPECTIVE

The end product, the H Connect Web Application, will be accessible to any user. The product implementation is designed to utilize the client-server model. It aims to replace the current manual system used by the H Connect Company.

The primary objective of the project is to develop an ideal platform capable of conducting most of the tasks and services offered directly from the company's headquarters. As the company lacks branches, the web application will serve as the primary means of offering services, overcoming geographical disparities.



The users connect to the web application by use of a web a browser, they are expected to have good internet connection. The Xampp server hosts the web application via the MyPHP Admin.

#### 2.0 PRODUCT FEATURES

This section outlines the key features of the PEPSPayz system.

### 2.0.1 System Interface

The system interface encompasses the following interfaces:

- Registration and Login interface
- Admin interface
- User interface for:
  - Senders
  - Recipients
  - Local banks
  - Mobile money providers

### 2.0.2 Interfaces

### 1. Login Interface

- Users can register for a new account.
- Allows users to log in to the system using their credentials.
- Authentication is performed before granting access; otherwise, access is denied.

#### 2. Admin Interface

- Admins can log in to the system.
- Perform administrative tasks such as managing user accounts, transaction monitoring, and system configuration.

#### 3. Sender Interface

- Allows users to log in to the system.
- Initiate money transfer requests.
- View transaction history.
- Manage payment methods.

## 4. Recipient Interface

- Allows recipients to log in to the system.
- Receive funds from senders.

- View transaction history.
- Withdraw funds to bank accounts or mobile wallets.

#### 5. Local Bank Interface

- Interface for local banks to integrate with PEPSPayz.
- Authenticate bank accounts for fund transfers.
- Process incoming and outgoing transactions.

## 6. Mobile Money Provider Interface

- Interface for mobile money providers to integrate with PEPSPayz.
- Authenticate mobile money accounts for fund transfers.
- Process incoming and outgoing transactions.

## 7. Payment Gateway Interface

- Interface for third-party payment gateways to integrate with PEPSPayz.
- Securely process online payments for merchants.
- Ensure seamless transactions between PEPSPayz and external platforms.

## 2.0.1 Hardware Interface

The PEPSPayz system is independent of the hardware used and relies heavily on web browsers.

#### 2.0.2 Software Interface

The system requires internet connectivity. Users can access the application using a web browser and a stable internet connection.

## 2.0.3 Memory Constraints

Memory constraints are dependent on the device being used to access the web application.

### 2.0.4 Operations

The PEPSPayz system will be operational 24/7. Users can log in to the system via a web browser at any time of the day.

Site adaptation Requirements

# 2.0 User classes and Characteristics

USER CLASS	CHARACTERISTICS for access
Sender	<ul> <li>Devices: Any device with internet connectivity, including smartphones, tablets, or computers.</li> <li>Requirements: Access to a web browser is essential.</li> <li>Importance: Vital for initiating money transfer requests and managing payment methods.</li> </ul>
Recipient	<ul> <li>Devices: Similar to senders, any device with internet connectivity.</li> <li>Requirements: Access to a web browser for receiving funds and managing transactions.</li> <li>Importance: Crucial for receiving funds and managing transactions securely.</li> </ul>
Local Bank	<ul> <li>Devices: Accessible via desktop computers or mobile devices with internet connectivity.</li> <li>Requirements: Integration with the PEPSPayz system for processing transactions securely.</li> <li>Importance: Essential for verifying bank accounts and facilitating fund transfers.</li> </ul>
Mobile Money Provider:	<ul> <li>Devices: Similar to local banks, accessible via desktop or mobile devices.</li> <li>Requirements: Integration with PEPSPayz for processing mobile money transactions.</li> <li>Importance: Key for facilitating transactions via mobile wallets and ensuring seamless transfers.</li> </ul>
Payment gateway	Dependent on developers.connect via APIs

Admin	Devices: Desktop computers or laptops with internet
	connectivity.
	Requirements: Full access to administrative features of the
	PEPSPayz system.
	Importance: Critical for overseeing and managing the entire
	PEPSPayz platform, ensuring smooth operation and compliance
	with regulations.

We are also considering general visitors who might visit our web application homepage not necessarily to create an account but to view information.

### 2.1 Operating Environment

The system will be hosted by the company via the Xampp server.

The end user need not worry about the operating environment, only thing needed is a latest web browser software and a good if possible fast internet connection & a smartphone.although we will also intergrate used for users who don't have access to smartphones

## 2.2 Design and Implementation Constraints

#### • Commercial Constraints:

• The budget and time allocated for developing the web application may impose limitations on the scope and features that can be implemented.

## • User Requirements:

• Users may express dissatisfaction with certain features as they become familiar with the system, leading to requests for new features or modifications.

### • Compliance with Laws and Regulations:

• Adherence to laws, standards, and regulations pertaining to web applications, such as data protection regulations (e.g., GDPR) and financial regulations (e.g., PCI-DSS), may impose constraints on the design and implementation.

### • Design Style Preferences:

Different users may have varied preferences regarding design styles. The chosen design may
not appeal to all clients, leading to potential usability issues or dissatisfaction among certain
user groups.

### 2.2 User Documentation

The PEPSPayz system will undergo comprehensive documentation throughout all stages, from design to development. The purpose of this documentation includes:

- Boosting knowledge of the web application system among users.
- Ensuring easy navigation through system features.
- Employing a format that is easy to understand and accessible to all users.

### 2.3 Assumptions and Dependencies

- 1. The assumption is that technological advancements are accessible and beneficial for all users.
- 2. Infrastructure and facilities required for system operation are fully developed and available.
- 3. The architecture and design of the system are well-established and compliant with relevant standards.
- 4. The product is assumed to be financially viable based on market research and analysis.

- 5. The cost of project development will not exceed the allocated budget.
- 6. Users are assumed to have existing email accounts for communication and authentication purposes.

  7. It is assumed that users are familiar with the features and functionalities outlined in the system
- documentation.

These assumptions and dependencies form the foundation for the successful implementation and operation of the PEPSPayz system. They will be regularly reviewed and adjusted as necessary throughout the project lifecycle.

# 3.0 System Features

The system features below outline how the PEPSPayz system intends to satisfy user requirements:

### i. Money Transfer Functionality

The primary feature of the system is to facilitate money transfers both locally and internationally. Users will have the ability to initiate and receive payments securely through the platform. The system will support various payment methods, including bank transfers, mobile money, and online wallets.

## ii. Secure Authentication and Authorization

The system will implement robust authentication and authorization mechanisms to ensure secure access to user accounts. This includes features such as multi-factor authentication and role-based access control to protect sensitive financial information.

## iii. Transaction Tracking and History

Users will have access to transaction tracking and history, allowing them to view past transactions and monitor the status of current transfers. This feature provides transparency and accountability, enhancing user confidence in the platform.

# iv. Currency Conversion

The system will support currency conversion for international transfers, providing users with real-time exchange rates and seamless conversion options. This feature ensures flexibility and convenience for users conducting cross-border transactions.

#### v. Fraud Detection and Prevention

To safeguard against fraudulent activities, the system will incorporate robust fraud detection and prevention mechanisms. This includes monitoring for suspicious behavior, implementing transaction limits, and employing advanced security algorithms to detect and mitigate potential risks.

### vi. Customer Support and Assistance

The system will offer comprehensive customer support and assistance to address user inquiries, resolve issues, and provide guidance on using the platform effectively. This includes various support channels such as live chat, email support, and a dedicated help center.

## vii. Compliance with Regulatory Requirements

The system will adhere to all relevant regulatory requirements and compliance standards governing financial transactions and data protection. This includes compliance with anti-money laundering (AML) regulations, Know Your Customer (KYC) requirements, and data privacy laws to ensure legal and regulatory compliance

## 3.0 Functional Requirements

## 3.0.1 Registering/Login Interface

- REQ-1: The system shall provide a registration form for new users, including personal information and account details required for money transfers.
- REQ-2: Users shall be able to log in to the system using their registered credentials, including username/email and password.
- REQ-3: Upon successful login, the system shall authenticate users and display their account dashboard.
- 3.0.2 User Account Management
- REQ-4: Users shall have the ability to manage their account settings, including profile information, contact details, and security settings.
- REQ-5: Users shall be able to update their password and other security information to ensure the safety of their accounts.
- REQ-6: The system shall provide options for users to reset their password in case of forgotten credentials, following a secure verification process.
- 3.0.3 Money Transfer Functionality
- REQ-7: Users shall be able to initiate money transfers between their own accounts or to other users within the system.
- REQ-8: The system shall provide options for users to specify the amount, recipient, and purpose of the money transfer.
- REQ-9: Money transfers shall be processed securely and efficiently, with real-time updates on transaction status and confirmation notifications to users.
- REQ-10: Users shall have access to transaction history and statements, allowing them to track and review their financial activities within the system.

### 4.0 External Interface Requirements

#### 4.1 User Interfaces

The main users of the PEPSPayz system will include system administrators, managers of the organization,

and clients.

System Administrator Interface:

The system administrator should be literate in computer usage and proficient in HTML, CSS, JavaScript, MySQL, and PHP.

The administrator interface will provide exclusive rights to manage the system, including configuration, user management, and monitoring.

The GUI will facilitate easy navigation and access to system management functionalities.

Manager Interface:

Managers of the organization will have access to specific administrative features related to their roles.

The interface will provide tools for monitoring system performance, financial transactions, and user activity.

Client Interface:

Clients, including patients, medical doctors, pharmacies, laboratories, and insurance companies, will have access to specific features based on their roles.

Clients will interact with the system through forms for registration, transaction requests, and account management.

The interface will include controls to limit user access to privileged features and prevent unauthorized alterations to the system's functionality.

### 4.2 Hardware Interfaces

The PEPSPayz web application is designed to be accessible from various devices that support web browsing capabilities. Therefore, no specific hardware interfaces are required.

### 4.3 Software Interfaces

Users only need a standard web browser and internet connection to access the PEPSPayz system. The application is platform-independent and compatible with commonly used web browsers.

#### 4.4 Communication Interfaces

The PEPSPayz system primarily relies on email services and the HTTP protocol for communication. Users receive notifications and updates via email, and all interactions with the system are carried out over the HTTP protocol.

## 5.0 Other Functional Requirements

#### 5.1 Performance Requirements

The performance of the PEPSPayz system is dependent on the capabilities of the device being used to access it. There

are no specific performance requirements outlined for the web application.

### 5.2 Safety Requirements

The primary safety concern for the PEPSPayz system is the security of user accounts and financial transactions. Users are advised not to share their passwords and to adhere to best practices for online security to prevent unauthorized access to their accounts. The system implements encryption and security protocols to protect user data and ensure the safety of financial transactions.

### 5.0 Security Requirements

The registration and login functions of the PEPSPayz system are essential for user authentication and tracking system usage. User information is securely stored in databases to ensure confidentiality and integrity.

### 5.1 Software Quality Attributes

Maintainability: The PEPSPayz system should be designed in a way that facilitates easy maintenance and updates to accommodate changes or improvements.

Scalability: The system should be able to handle an increasing number of users and transactions without compromising performance.

Reliability: Ensuring the availability of the web application at all times is crucial. Reliability is a primary goal of the development process to maintain user trust and satisfaction.

## 6.0 Other Requirements

Legal Policies: The PEPSPayz system complies with all data protection and privacy regulations established by the Government of Kenya. There are no copyright violations, and data acquired from external sources will be appropriately referenced.

Packaging: Only the H Connect Company has access to the rights of the PEPSPayz system. The web application is not intended for commercial purposes but for the benefit of the company. There will be no sale of the system or any of its components by the company.