# MEDICATION / VACCINATION TRACKER/ DATABASE SYSTEM

## Web & Desktop Application

Proposed Client: **Your Hospital**

Service Provider: **Aysh Inventions Ltd**

2021

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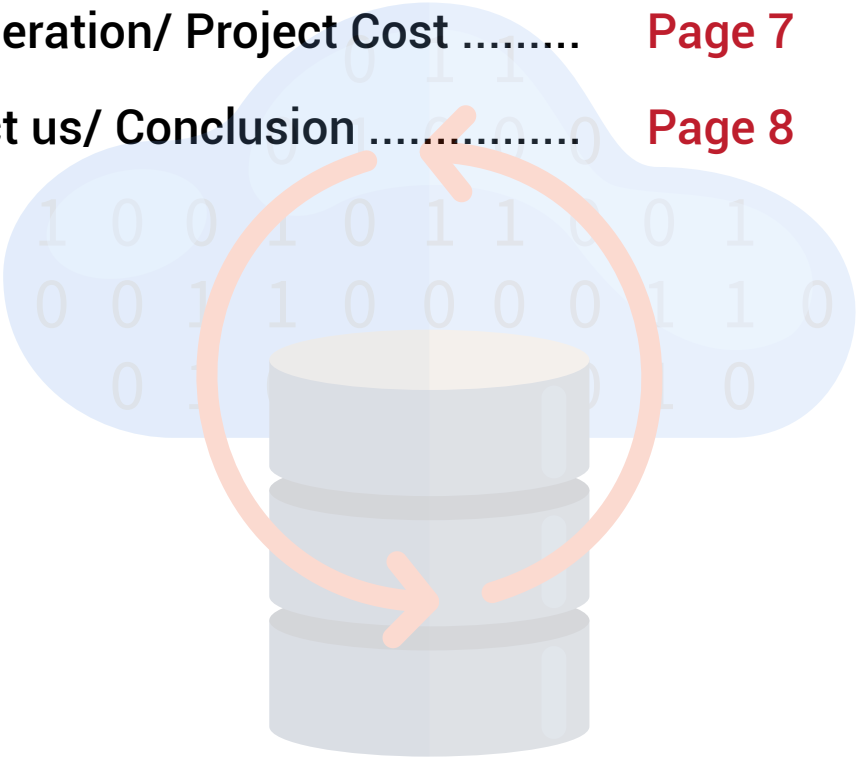


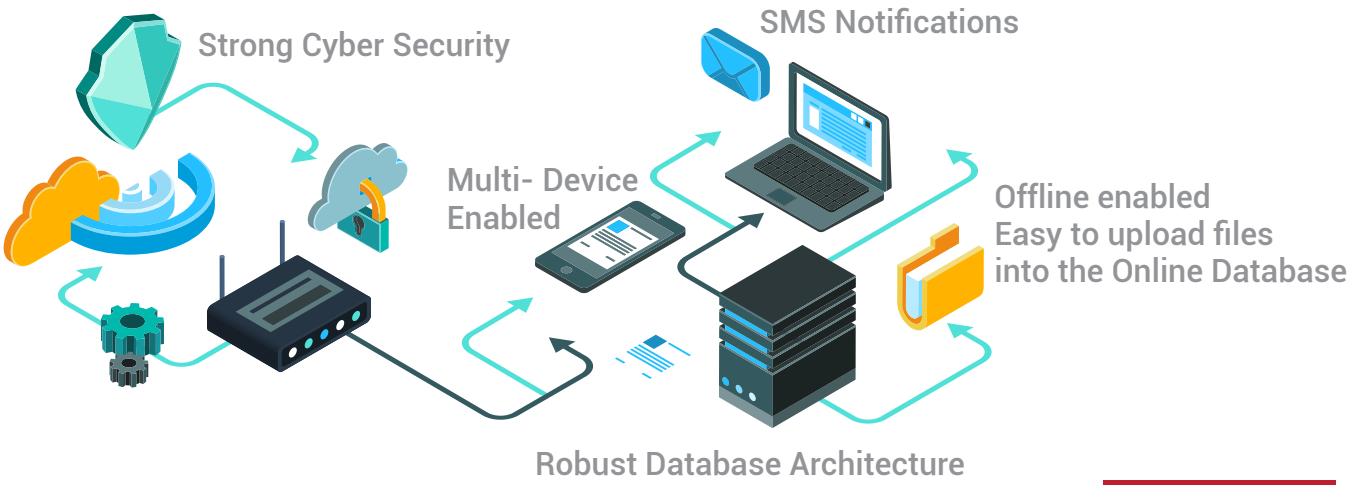
# INTRODUCTION

## A Database System to manage Vaccination/ Medication

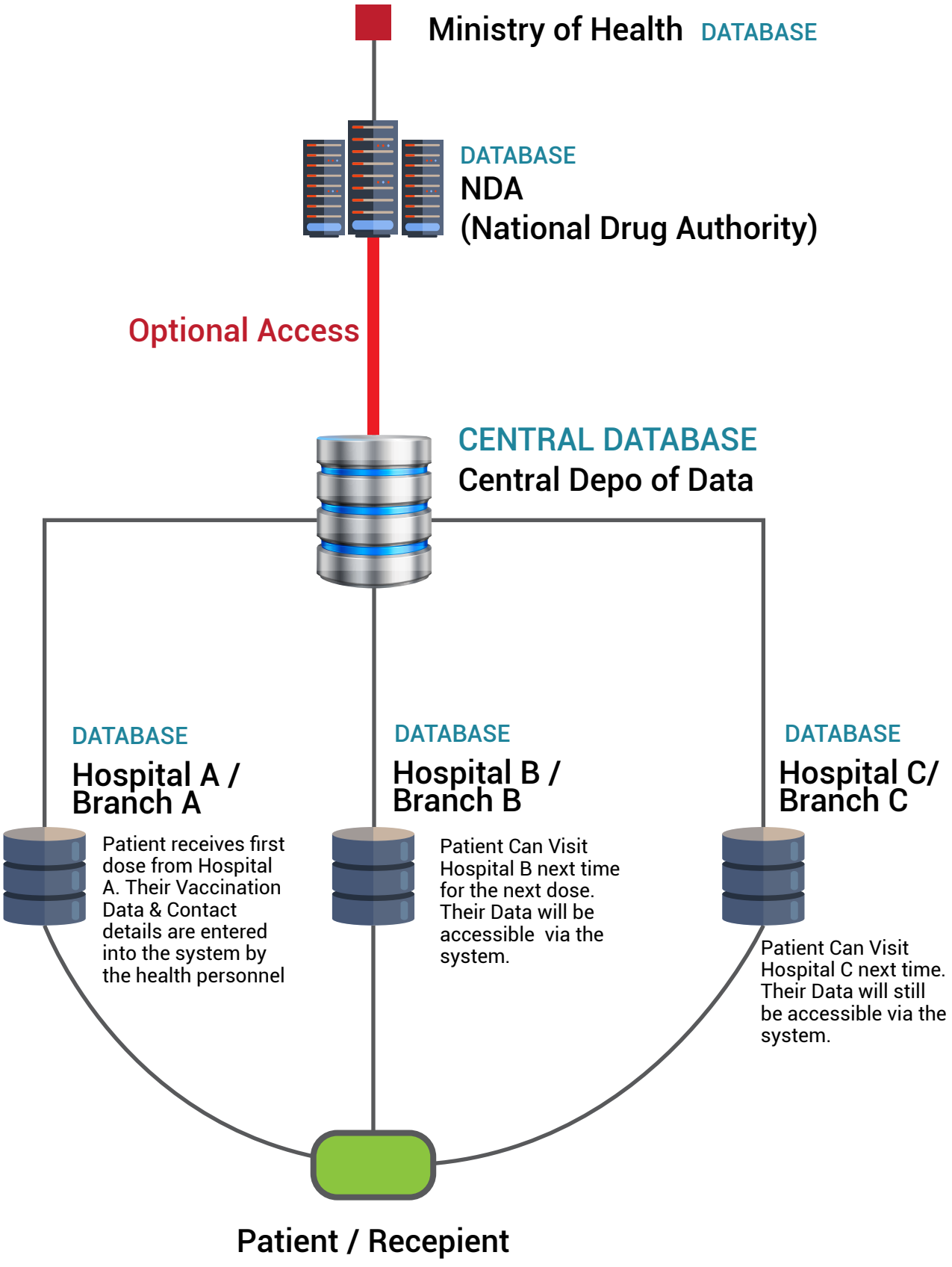
We hereby propose to create and maintain a massive, robust & efficient online database system (Web & Desktop Application) for your hospital, which shall be dedicated to keeping track of administered vaccines / medications all over the country/ your hospital branches. The system shall keep data like Vaccine / Drug type, recepient details and other relevant administration details for the various vaccines / hospitals. It shall be accessible anywhere by the authorized personnel using an internet connection, and accordingly the right personnel shall be able to edit/ manage the data in the system. The system shall also have automatic SMS reminders sent to patients to remind/ alert them of things like their next dose, other vaccinations, and other relevant communications from the hospital.

The main project details are included in the subsequent pages and in the attached draft document..

For more information, please contact us .

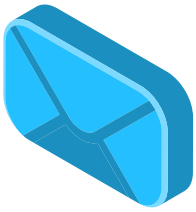


# SYSTEM FLOW DIAGRAM



# HOW THE SYSTEM WORKS

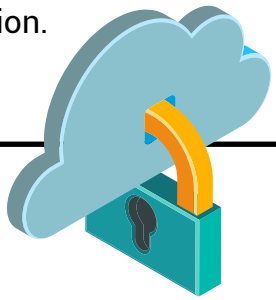
## SMS NOTIFICATION



Patient receives confirmation SMS notification on their phone about the received Vaccine/ Medication, and when their next appointment is scheduled to occur.

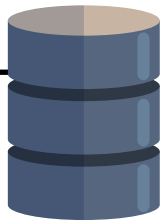
## ONLINE

Data is captured (entered by the System Admin) via the web application after patients have received Vaccination/ Medication.



Secure Internet Connection

## Hospital Branch Database



Data is captured in the Hospital Branch Database. (Online)

## OFFLINE

The data may also be captured offline using Ms Excel and uploaded later into the online database via the web application.

## CENTRAL Database

A copy of the data is automatically sent by the system to the central Data Depo accessible to other stakeholders like NDA or Ministry of Health..

# TOOLS & PARTNERS

## FRONT - END TOOLS

HTML5, CSS
Javascript
Bootstrap 5
Git
JavaFX (optional for desktop app)

## BACK - END TOOLS

JAVA
JavaPlayFramework
SBT Build Tool

## DATABASES

Oracle Autonomous Database
MySQL Database

## CLOUD SERVERS/ HOSTING

Secure Oracle Cloud

## SOME OF OUR PARTNER TECHNOLOGIES

TruIT Uganda Limited, Oracle Inc. USA, PlayFramework

# SYSTEM SECURITY & DATA SAFETY

## LAYER 1

### FRONT - END SECURITY

Strong Password Encryption

## LAYER 2

### BACK - END SECURITY

CSRF Protection using JavaPlay-MVC architecture

## LAYER 3

### DATABASE S ECURITY

Oracle autonomous database security

## LAYER 4

### SERVER SECURITY

Oracle Cloud Security

# REMUNERATION/ PROJECT COST

The remuneration/ project cost shall be as indicated in the draft contract document that includes a detailed breakdown of all the works involved and other details such as project timelines.
Below is a brief summary of the project cost.

| ITEM | ANNUAL COST (UgX) |
|---|---|
| Advanced Database Instances , Cyber Security & Oracle Cloud Services (Up to 10 TB Online Data Storage Capacity & Security annually). | 50 Million |
| Relevant Equipment & Services Procurements for the hospital (Computers, Storage devices, and other equipment indicated in the contract document. | 120 Million |
| System design, development & maintenance/ annual system upgrades & troubleshooting + Legal Assets: All Technical & Non Technical labor (Aysh Inventions Ltd Production Team) | 850 Million |
| Medical Consultations/ Research. | 100 Million |
| Hospital Staff training on technology use & all year Technical support | NIL |
| **TOTAL ANNUAL COST** | **UGX 1,120 Million** |

# CONTACT US/ CONCLUSION

**More Details as of all the desired works, timelines and other terms and conditions of work have been included in the attached draft of the binding contract document and shall be edited and agreed upon/ approved by both the proposed client (your hospital) and the contractors (Aysh Inventions Ltd) before the work begins.**

## THANK YOU AND MAY GOD BLESS YOU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