**Visitor Management System (VSMS)**

**ABOUT**

VSMS, visitor management system, will be a REST service that will allow different applications both web and mobile to access visitors/guests details maintained in a central database. The application will register new non-existing visitors/guests with their provided details such as (Names, National ID number, telephone and email address). This will include the visitors time in and out and also their comments where applicable. An existing visitor details will be populated upon input of an existing primary identifier which in this case will be National ID or Email.

**IMPLEMENTATION STRUCTURE**

The application will be executed in two phases – API and UIX development.

1. **API Development**

This will be developed in Lumen, a PHP microframework written in Laravel.

To achieve this, we will have the following API end points that the web/mobile clients applications will interact with to get http requests and responses:

* Login – this will authenticate users to access the Guest Book Registration page using REST API and JSON Web Tokens (JWT).

The login API will;

* Use OAuth framework where users can access their resources through any another application
* Be able to support browser-based apps or native mobile apps
* Will keep an authentication server that keeps track of JSON web tokens generated to

**The authentication Process**

* A user will request to use the web/mobile app in order to register guests.
* The web/mobile app will check if the user is authenticated to use the web/mobile app and send an authorization to the Login API if the user is not authenticated
* With the existing user details the API will check and return an authorization code in this case a JSON Web Token whose expiry can be specified. This token will be used to call the Registration API for the CRUD operations
* Visitors Registration – Using credentials from the Login API, it will receive CRUD operations requests from the web/mobile app that will be used to register the guests
* Other API Functions

The API will also be able to register;

* Properties: - Where the hosts being visited will reside
* Blocks/Floors: - within the properties registered
* Companies/Hosts: - These will be the people being visited by the visitors and will have properties such as (host type (company or individual), phone numbers, email, address, block, floor etc.)

1. **UIX Development**

This will be developed in VueJS – a JavaScript framework for building user interfaces and single page applications

The UIX will consist of:

1. Checkins: - This will be a list of visitors who have been checked in a facility. New visitors can be created and checked in a property by selecting the host from a list.
2. Visitors list: - A list of all the visitors in a property. These visitors can be checked in to a facility if already registered