**IZINGODLA ENGINEERING DASHBOARD APPLICATION**

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**USER REQUIREMENT SPECIFICATION**

**DOCUMENT**

**2020**

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# **Introduction**

Izingodla Engineering (IE) is looking for an application that is going to help them assess and monitor their daily operations. Help them keep track of previous projects they have undertaken as Patrick Hendry once said ‘’I know no way of judging the future but by the past’’. As that is going to help them make meaningful decisions and forecasts for projects they are going to engage into in the future. The application should also enable the top management to assess the progress of each step of an engineering project and the person responsible for that step.

Izingodla Engineering have requested Izingcweti Digital Advisory and Solutions (IDAS) Company to help them create the application they are seeking, Izingodla Dashboard Application (IDA) and this document is going to outline all the user and business requirements for the system.

# **Background**

~~Izingodla Engineering Group is a premier consulting company that specialises in engineering services nationally.~~ IE group currently focuses on two main business areas, Izingodla Electrical Engineering and Izingodla Technology. The company was founded and is managed by Mr S Nxumalo who is a qualified Electrical Engineering professional with a variety of skills and experience in the Electrical, consulting and development industry ( What does this part mean). IE has been involved in numerous projects, and is now seeking a system that will help them monitor projects they are currently undertaking not forgetting to keep the ones they have finished stored in a secure manner for later referencing.

Izingodla Group is not Izingodla Engineering Group..It’s not a strictly Engineering or any discipline entity. It is a holding company,an umbrella to other companies including Izingodla Engineering (Pty) LTD.

The IE group is currently using spreadsheet documents to store, manage and assign responsible people to their ongoing projects.

Problems with the current system:

* The project manager cannot monitor the progress of activities given to an individuals for a particular project.
* The client has to email or physically come to office to check on the progress of their projects or get clarity regarding a certain issue.
* Data redundancy and inconsistency is a threat since the IE group is still using a manual system for keeping track of their projects.
* It is hard to check if the employees of the IE group are doing their tasks on schedule and monitor their performance to assess their determination in the success of the business.

# **Project Summary.**

Project Name: Izingodla Engineering Dashboard Application (IDA)

Project Manager: Nxumalo (IDAS)

Project Analysts: S Nxumalo, Senior Analyst

A.L Ndlovu

Project System Developers: L Ncanana, Lead Developer

S Zulu

N Mkhize

# **Project Scope.**

The scope of this project is a dashboard application that will be connected with the current ( new website) website IE group has via a link that will support the daily operations of the IE employees. The application will encompass of all the stages of an engineering project and will make it possible to assign an individual for a particular task. The system will also enable authorized individuals to see the progress of projects according to their access privileges.

# **System Purpose.**

## Users.

Those who will primarily benefit from the application and those who will be affected by the new system.

**C.E.O (Mr Nxumalo):**

Upon completion of the new dashboard application the C.E.O will be able to monitor the progress of all projects and the performance of all users (employees of the company) as the CEO will have the highest access privileges to admin and see everything in the application.

**Project Manager:**

The project manager will be any assigned individual to manage a project that the IE group will be undertaking, the application will enable the project manager to assign his/her project team, monitor their progress and send comments to his teammates but solely for the project he/she is assigned to manage, not other projects.

**Client**

A client is any external user of the application that would be in business with the IE group for a particular project. Upon completion of the system the client will have to assign up to get access to see the progress of their project without having to email or call the IE group for updates and will be able to leave comment if they seek clarity in anytime concerning their project.

Technical Director:

The director reports to the top management continuously in a particular project. The Technical Director will be given access privileges according to his scope of work.

**Quality Engineer (QE):**

The QE is responsible for observing and providing reports of his/her inspection on a particular current project. The application will enable this user to send his/her reports to the PM for further assessment.

**Designer:**

Every stage of an engineering project the IE group undertakes requires a design and that design is done by this user. This user will have access privileges according to their scope of work.

**Other-IE employees:**

The application will enable the OIE employees to have accounts and login and be able to set reminders for their tasks, submit the work they have done for their tasks and be able to leave any comments for the PM.

## Location.

The application will be available to any authorised IE group employees and clients from any location using the Internet. Users will be able to access the application differently according to their user roles (access privileges) and a password protection scheme will be used to authenticate users.

## Responsibilities.

The primary responsibilities of the new application:

* Allow differential access to the application based on type of user.
* Allow a B2B communication between the IE group and the client, and allow internal communication.
* Enable users to set reminders and schedules for their projects.
* Allow top management such as the CEO and Project Managers to monitor the performance of employees.

Other desired features of the new application:

* A consistent “look and feel” throughout the application.
* Password protection scheme for logging into the application.

# **Functional Requirements.**

High Priority

1. The dashboard application shall allow the top management to create a new project and assign the staff according to their positions to undertake that project.
2. The application shall allow the top management to monitor the progress of the tasks given to employees for a particular project.
3. The application shall allow the staff to send their reports on tasks about projects they are working on to the necessary management such as the project manager.
4. The application shall allow the staff to set reminders for meetings or tasks that need to be done partaking a project.

Medium Priority

1. The application must enable a two way communication between the clients to leave their comments pertaining a project, and the project team to respond to that comment.

Low Priority

1. The application shall be able to show the status of a certain project whether the project is active or not active (completed).

The application shall be accessed via a link from the current website the IE group has.

# Non-Functional Requirements.

**Reliability**

* The application shall be completely operation at least during the full working hours of the IE group.
* Down time after a failure shall not exceed \* hours.

**Usability**

* All employees of the IE group shall be able to use the application after \* days of training.

**Performance**

* The application shall be able to support \* number of users simultaneously.

**Security**

* The application shall provide password protected access to content within it that is viewed only by authenticated individuals.

**Supportability**

* The application shall be viewable from all browsers and shall allow accessibility on both mobile and desktop devices.