**ALLISTER MUGAISI ATSENGA**

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**THE BIG DATA AFRICA**

Overview

The Big Data Africa is a survey data analytics application that provides extensive analysis on survey feedback responses on a product such as company brand, problem in community, institutional research etc. from surveyees through researchers.

Project scope

In order to achieve the above named application, the project will implement various features, a responsive web- based application system accessible over the internet.

Some of the co-module functionalities include:

* Authentication Module

This provides role based access control functionality to the system that restricts access to authenticated and authorized users to the platform.

* Survey Module

The system is able to create and manage surveys, surveys' question and surveys’ question option or choice.

* Surveyees Response Module
* Business Analytics Module
* User Management Module

High level requirements

The system has a web-based application and a mobile application as such, any device with internet access and the latest browser will be able to access it.

Some of the automation features within the application include:

* Authentication using JSON Web-Token
* Multiple user registration
* Create and manage surveys
* Create and manage researchers
* Create and manage clients
* Create and manage administrators
* Display surveys based on researcher location
* Create and manage survey questions
* Create and manage question choices
* View response analytics by questions
* View and manage surveyees

Deliverables

* Responsive web-based application accessible through all media platforms.
* Application source code to be deployed on Contabo servers and Netlify.
* An intuitive designed application using React JS.
* A sever logic backend developed using Node JS.
* Containerized backend and frontend using Docker.
* A mobile application developed using Expo React Native.
* A privacy policy document to abide with legal laws

Affected parties

* Business management

Affected Business Processes or Systems

* Business data analytics
* Business insights

Specific Exclusion from Scope

The mobile application has not been deployed to either app store or play store. The app can be run on mobile using Expo.

Implementation plan

* The application will provide a dashboard that is built using React JS
* The application will have a server side logic built in Node JS.
* The application will have automated workflow in GitHub Actions.
* The application will be containerized using Docker.
* Part of the application will collect data using a mobile application built-in React Native.
* The application database to be used is MongoDB

Design UI

Below is the link for the application

<https://admin-thebigdataafrica.netlify.app/login>

Admin Login Credentials

Email address: [allistermugaisi@gmail.com](mailto:allistermugaisi@gmail.com)

Pass: 2@Muccinex