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[Project 2003]

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# Project Requirements.

## Basic Requirements:

A database app to manage the lifecycle of connected IoT assets from cradle to grave. As a device moves from manufacture into installation, operation, and eventual removal and recycle there is a need to record information about the device, e.g. serial number, owner, location, installation, connection, maintenance etc. The project objective is an app that records device associated information into a database to record its life history as a 'source of truth' for use by device manufacturers and business users. Emphasis on this project would be a UI experience that is more oriented towards the workflow of the lifecycle.

1)      Use of Firebase to manage data.

2)      API calls preferred to abstract out services so recommended to use microservice architecture.

3)      The project should be extendable to multiple clients running off the same database.

4)      There should be option for data to be stored on client side or client-side API keys, but functionality on cloud.

5)      Stretch goals - think scalability from 5 devices to 1000 or more.

## Our Understanding:

A structured way to keep track of devices in an IoT-based application allows for the user to monitor known statistics and update data for each device in whatever format they like. It should be flexible by allowing dynamic grouping and user-saved documents and files while also being structured enough to serve a large customer base.  – **technical aspect of Database**

A mobile interface that allows businesses and contractors to monitor and maintain their IOT devices in the field and update each device in real time. Each device should have a GPS coordinate, last serviced, and notes about the device and how it should be maintained in the future. - **implement a Real time Database**

The User Interface should be easy to understand for users of different tech literacy levels as this could be used by a manner of people tracking servers to cow trackers. **- the application of User Interface**

## Mission Statement

To provide a software solution to manage a wide range of physical devices in one simple location.

## Value We provide

With the shutdown of the Amazons IOT solution we come to fill in the market gap to provide a solution for the specific use case scenarios that our possible clients.

## Application Purpose POV

Database:

Create a scalable database for our clients that

# Project Roles

Tom-

**Front end/ UI/Flutter**

Task: To design and manufacture a UI for the client

Niko-

**Project Oversight, Security of Project, Both Front end and back end**

Task: To work on both front and back end of the project to ensure that all team members have the same idea for the project

Joe-

**Firebase/Backend, Security of Project**

Task: To design and manufacture Firebase infostructure. Ensure that it is secure to be used by the clients.

# Project TimeLine

Project Start: October 24:

# Front End Design

## Iteration One:

The design needs to be modular and simple. The application should be easy to use for a wide range of people who are technical. The app is going to feature 5 distinct colours for a theme.

A screenshot of a computer screen

Description automatically generated

The app's main background will be #EDF6F9 with the font colour being #303633.

For our frontend design we will be using Flutter allowing us to port to many types of devices including phone, desktop and web giving clients many different ways to access the software our primary focus will be mobile support allowing contractors and admins to add new devices on site and in real time.

A screenshot of a device

Description automatically generated

Iteration two

Iteration two features only three colours: white, royal blue and charcoal black. I Chose royal blue as many people associate blue with technology and with the app being a tech tracker i thought it was a perfect choice of colour. The charcoal black is a less harsh black and clashes less with the colour theme.

A blue and grey rectangular shapes

Description automatically generated with medium confidence

Screens screenshot of a phone

Description automatically generated

A blue and white background with a logo

Description automatically generatedA screenshot of a phone

Description automatically generated

## Iteration 2:



A screenshot of a phone

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