Product Requirements Document

By: Hewa swift.

Product Requirements Document

1 Objective

Vision	To have the Hewa swift air purifying device in Kenyan Public service Vehicles and school buses.
Goals	I) To purify the air in PSV's thereby reducing the rate of transmission of respiratory diseases caused by harmful particulate matter in contaminated air. II) To be able to monitor the air pollution trends and collect data to inform policies. III) We are looking to compare air quality conditions at different locations/cities which will be a key factor in decision making.
Initiatives	I) Get access to various components needed to build the air purifier. II) Assemble components together and program the device to collect data on the quality of air to then activate the purifiers if need be. III) Configuring the device to send data to the dashboard on Grafana.

Persona(s)	Our personas include: 1. Matatu Sacco Owner.  Juma Karembo *"As long as my customers have the best user experience while using my matatu, I have no problem."* **Age:** 29 **Work:** Matatu SACCO owner **Family:** Married **Location:** Kagumo Responsible Authoritative Organized Futuristic **About** Juma is a matatu SACCO owner whose job entails making sure that passengers using vehicles in his SACCO have the utmost comfort. He is very futuristic and is not afraid to spend money to ensure customer experience is at its peak. Furthur,he enjoys reading tech blogs. He is looking to incorpporate the latest technology trends in the PSV sector to his SACCO vehicles . **Goals** To improve the matatu industry using latest technology. To ensure customer experience is at its peak. To remain intentional about taking care of his workers wellbeing. **Frustrations** Passengers not opening windows while in the car. Passengers leaving litter in the car. Drivers and conductors being rude to passengers. **Tools** Subaru Android Laptop **Brands**

2)Primary school teacher.

Claire Chebet

"Everyone has different priorities, what I care most about is being healthy"

Age: 34

Work: Primary school teacher

Family Divorced

Location: Kasarani,Nairobi

Hardworking | Authoritative

Organized | Authoritative

Organized | Organized

About

Claire is a primary school teacher who goes to school five times a week by bus.each month for work. She is frustrated by the fact that no matter how frequently she uses public service vehicles,she finds it hard to get a vehicle with fresh air in atmosphere. She expects her travel solution to be as protective as she is.

Goals

To improve her students academic perfomance .

To instill students with instrict motivation to learn.

To remain intentional about taking care of her health.

Frustrations

Students refusing to open windows in class

Some students have chest problems.

Fellow passengers refusing to open windows in PSVs

Tools

Safari

Iphone

MacBook

Brands

Personality

Introvert

Extrovert

Darling

Futuristic

Responsible

3)Government official..

Zainabu Matendeti

"It is my responsibilty to ensure that the health of each and every citizen is safeguarded"

Age: 42

Work: Government Official

Family Engaged

Location: Gigiri

Strict | Authoritative

Organized | Responsible

About

Matendeti is a government official whose responsibilities include: ensuring the health of citizens is safeguarded and passing laws and regulations to safeguard citizens health.

Goals

To ensure citizens health is safeguarded.

To ensure citizens attain best health possible.

To remain intentional about taking care of his workers wellbeing.

Frustrations

Citizens not adhering to health regulations.

Citizens are having an increase of respiratory related diseases.

Drivers and conductors carrying overcapacity.

Tools

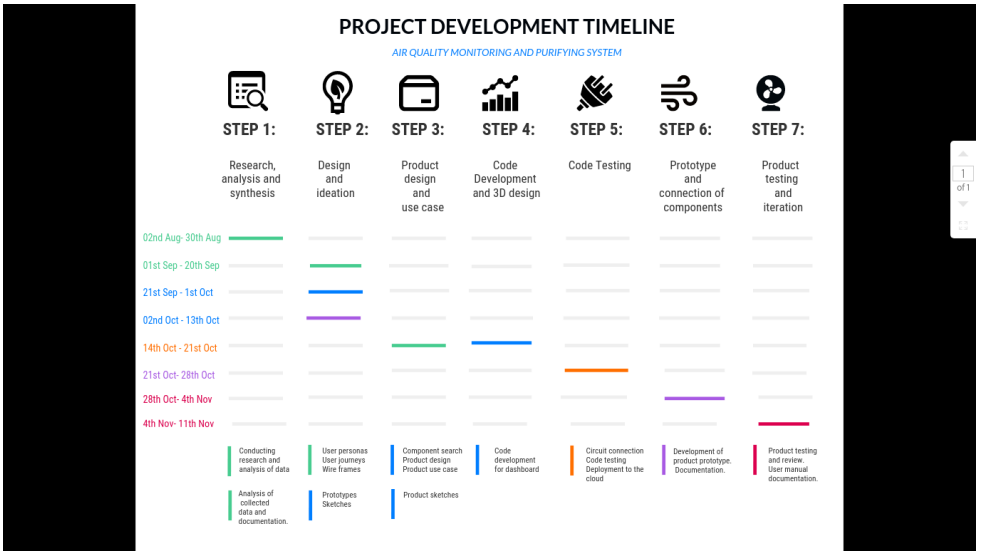
Iphone

Safari

Macbook

Brands

2 Release

Release	v 1.0
Date	12th November 2021
Initiative	I) Get access to various components needed to build the dispenser. II) Fit components to the casing.
Milestones	
Features	I) A compact casing. II) Purification system.

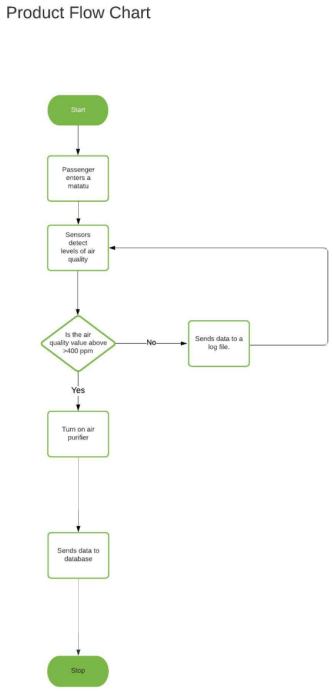
	III) Fans that serve to draw air in and out of the vehicle. IV) Data collected should be visible on the Grafana dashboard.
Dependencies	The system depends on the sensors collecting accurate data and triggering the Arduino to turn on and off the air purifier.

3 Features

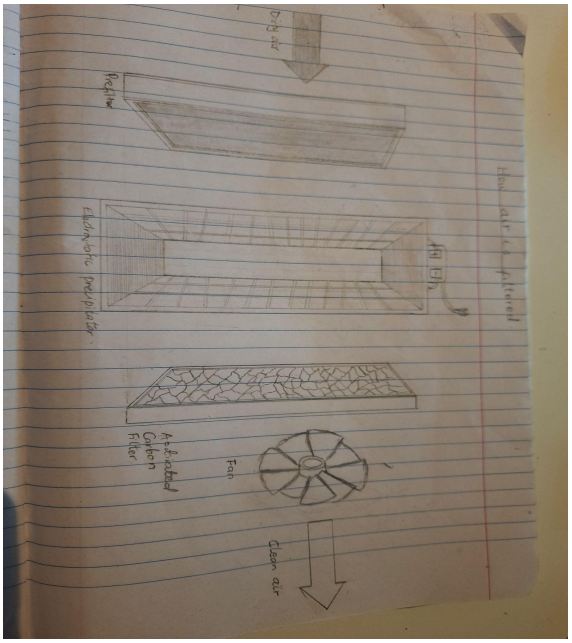
Feature	Automatic air purification system.
Description	The system goes on anytime the sensors trigger the Arduino. If a set threshold is reached, sensors go off, Arduino triggers the device to go on and air getting in the vehicle gets cleaned.
Purpose	This will clean air in PSV's as well as help to reduce the rate of respiratory disease transmission.
User problem	Having to inhale dirty air while commuting in a public service vehicle.
User value	This feature allows users to breathe clean air while in a PSV.
Assumptions	Users are not willing to open windows during a commute.
Acceptance criteria	A device should be able to : ● Record the quality of air inside the vehicle. ● Trigger the purification system on when the threshold is met. ● Send recorded data to the dashboard.

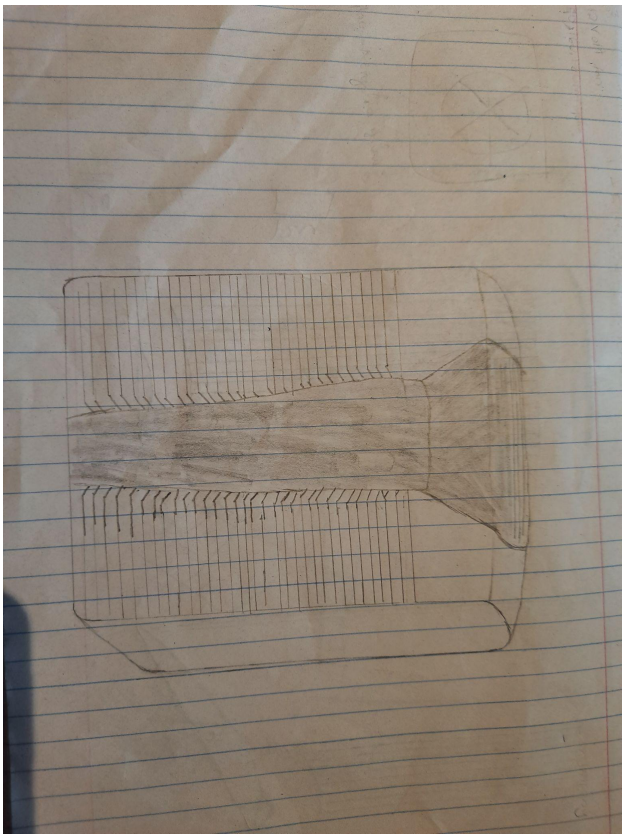
4 User flow and design

I) Product flow



II) Hardware Schematics





5 Analytics

Hypothesis: We believe the automatic feature will help us gain a high rate of customer conversion.

Key performance indicator	Baseline	Target	Time frame
Client Retention	We are currently at 0%	We aim to acquire 300 vehicles using our device.	3 months from the launch date

6 Future work

Future features	Purpose	Priority	Timeframe
To have a portable mini, affordable air purification device.	For users to be able to clean air they breathe wherever they may be.	Low	April 2022- June 2022.