

Problem statement

Problem Statement

The rate of school bus and van accidents in Kenya have been alarming to parent, relatives and Kenyans at the thought of young children losing their lives (Obuhuma, Ondiek & Ombui, 2013).

Using school busses involves handing over children to persons who parents trust will deliver them to school. With the high number of pupils crisscrossing the City of Nairobi to attend school in school busses, there is need to track them at all times. Tracking the vehicles and as a result the children will provide peace of mind for parents and school administrators.

There is need for an integrated system for schools administrators, school buses and parents to automatically track the movement of pupils in real-time. This system would help reassure parents and school administration of the safety of the pupils.

Research Questions

- i.What systems are being used in schools around the world to track school buses?
- ii.What solutions are used in Nairobi County to track school children?
- iii.What technology solution can be used to notify parents and schools on the location of pupils?
- iv.Is the developed solution efficient in tracking school children while on transit?

Scope of Work

This thesis is aimed at linking junior primary school pupils with their parents during transit to and from school. It is limited only to notification of parents whenever the pupil boards and alights a school bus and tracking the bus via GPS through a mobile phone in the vehicle.

The study will be constrained to Nairobi County schools and parents and the devices to be used in this research are Android based smartphones with Internet, GPS and NFC capability.

Empathize & Discover

Empathize with Your Customer

Learning Objectives

After completing this unit, you'll be able to:

- Describe the benefits of empathetic research.
- Describe three types of empathetic research.
- Understand when to use empathetic methods.

Three Ways to Dig In to Discovery

There are numerous empathetic research methods, and new ones are being created every day. For starters, we recommend using one or all the following easy techniques.

- Embodiment
- Shadowing
- Interviewing

Let's learn a little more about each.

Brainstorm & Prioritize Ideas

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Brainstorm

Write down any ideas that come to mind that address your problem statement.

🕒 10 minutes

TIP

You can select a sticky note and hit the pencil (switch to sketch) icon to start drawing!

Person 1

Person 2

Person 3

Person 4

Person 5

Person 6

Person 7

Person 8

3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

🕒 20 minutes

TIP

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mind.