

Bus Routing Application (BusRA) Iteration 1 Explore Phase

This is the delivery of the research conducted, the prototype developed, and project development progress, as planned during the first Iteration speculation. According to the findings of the study, CMU Africa requires a bus routing application. We discovered that some students are dissatisfied with the existing alternative method and would like to see improvements. Some students waste a lot of time waiting for the bus, and academic staff has a difficult time scheduling bus routes and shuttles. During this phase, research was conducted and a prototype was created.

Project Design prototype:

The link below shows the sample of BUs Routing application User Interface Design.

<https://www.figma.com/file/53fSqVs3Uv6AgFbhh8ZBYc/Untitled?node-id=1%3A498>

The Link below contains the questions and response from the users. The data contained in this link are from the Carnegie Mellon University Africa students only. We are so committed to talk to the CMU staff, however, we have not received their inputs yet. According to the verbal communication we had with CMU Africa staff in charge of the transport, She confirmed the need of the bus tracking application. Hence, there are ongoing discussions about this project. We did talk to the drivers, they are willing to share the bus location as they move.

Research Survey data collected:

https://docs.google.com/spreadsheets/d/1KoxonUqyNn0eCy952pPrUN4YG0hHEzB0/edit?usp=share_link&oid=114276264906694094576&rtpof=true&sd=true

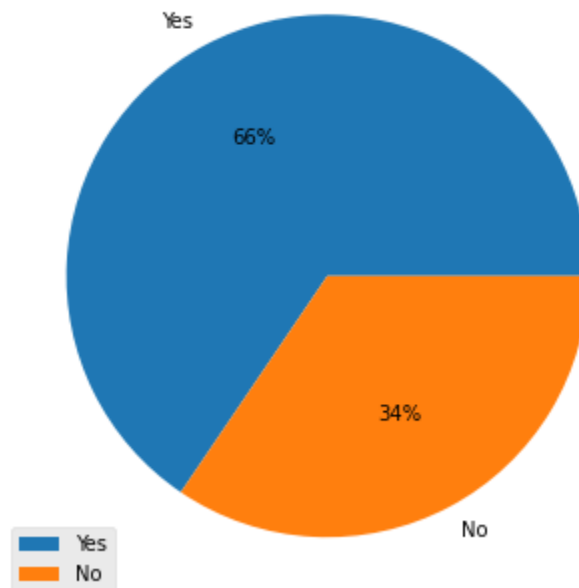
Proof of concepts.

Based on the survey study conducted, we have noticed that our idea will be useful to the customer and end users in general, and we have decided to proceed with the implementation of our project because it is something that can be achievable and important to the CMU community. In addition, we have approached one of CMU staff who is in charge of student service support, and she confirmed that our project idea will be very useful to the CMU and it will address major challenges existing in the transportation service.

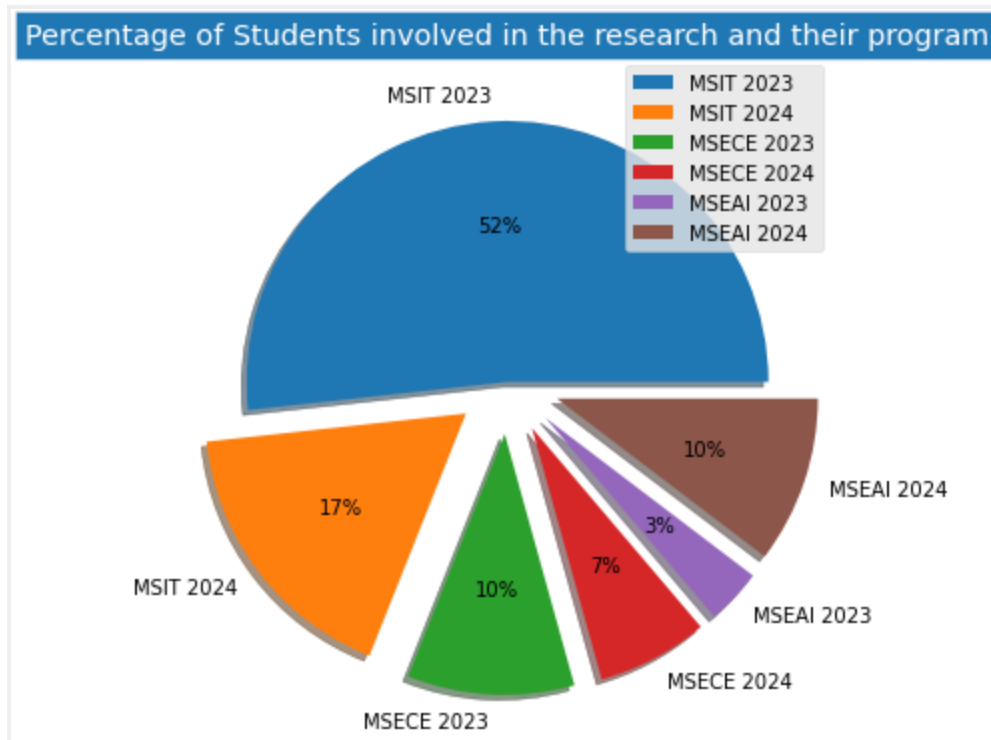
Feedback from The Main Customer(CMU) and Users

We conducted a survey of students regarding the bus issues. The following section depicts the students' questions and answers. We spoke with our client, CMU Africa. **Mika Inamahoro**, who is in charge of student services support, provided all of the information shown below. We left Mika a form so she could fill it out and use the data provided in the next iteration.

Percentage of Students who want change in the existing transport communication

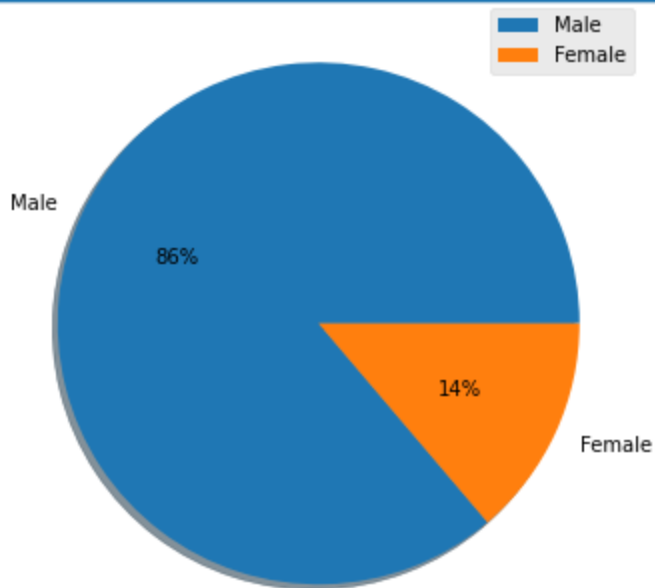


According to the research, 66% of all students involved in the research chose Yes, indicating that existing transportation communication needs to be changed. This demonstrates how our project benefits both our customer and the users, particularly students.



According to the above chart, it appears that MSIT2023 understands why we require data from the current system. MSEAI 2023, on the other hand, shows a small percentage of people who participated in the survey, which could be due to their small number.

Percentage of Students Gender involved in the research



According to the research, 86 percent of those who participated in our survey were male, while 14 percent were female, as shown in the above chart.

Project Evaluation

We discovered that we had met the goals of this iteration based on the deliverables. As the tasks were distributed in the speculation phase 1, they were completed in accordance with the requirements, and we are pleased that we were able to complete the tasks.

