LINEAR

DCU
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IRISH TRANSPORT IS NOT RELIABLE

Last year, Dublin Bus and Go-Ahead Ireland (which runs some suburban bus routes) were fined €7.8m and €2.4m respectively due to delays and cancellations. Source1. Busses don't come for hours and then 4 turn up and once and 2 are empty. Busses are full and people are left waiting. This causes excess carbon emissions and wastes money and pushes commuters to less sustainable private cars.
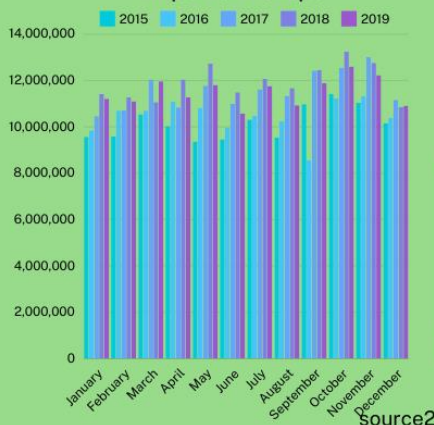
STOP

HOW ARE ROUTES DECIDED NOW?

We got into contact with the NTA who provided us with sources to demonstrate how bus routes are implemented/decided. These sources showed that bus routes are predominantly decided by popular request made through surveys. Surveys cost money and consume a lot of time, *linear aims to eliminate this with data and statistics.*

OUR GOALS

- To make an app that improves the user's commute & Make daily travel fun
- Collect data and analyse to improve bus efficiency
- Improve bus arrival and quantity at important stops

WHAT IS LINEAR?

Linear is a user focused app that improves commutes with with its unique features, makes it fun with gamification an improves things behind the scenes through data collection.

WHAT DATA WILL LINEAR COLLECT?

Each time a user inputs a stop or uses their leap card data is collected. this may include stop location, time and how long they waited. This will be detailed in our privacy policy.

Chart legend: 2015, 2016, 2017, 2018, 2019

Y-axis: 0 to 14,000,000 (increments of 2,000,000)
X-axis: January, February, March, April, May, June, July, August, September, October, November, December
Source2

WHAT MAKES LINEAR USEFUL?

With features like location based alarms so you don't miss your stop, reminders when your bus is near and push notifications of delays and diversions. Linear has game like features that makes travel not only fun but convenient too! Through leader boards, challenges and unlockable characters our aim is to improve travel at the core of its problem

WHAT WILL WE DO WITH USER DATA?

Using machine learning we can analyse data on a day-to-day basis and improve Irish transport at the source of its problem. With the data collected daily the program can predict how many busses are needed at each time and whether they should change their route based on traffic.

CONCLUSION

Linear is a cost effective, eco-friendly solution to Irish transport problems

REFERENCES

source1-rish Independent- **Dublin's public transport has been ranked the worst in Europe** – how can we get it on the right track?. source2-https://www.cso.ie/en/releasesandpublications/ep/p-tranom/transportomnibus2019/publictransport/

LINEAR
Level 1 :Ronnie
300 XP | LEVEL UP: 50
BUS ROUTE
GAMES!
FRIENDS: 6
DAILY CHALLENGE
Walk 5000 Steps

Smarter Travel
Student Awards