E-Waste Identifier

CS 160, Group 4
Team Name: F4

TEAM MEMBERS

Aung Paing Soe

PRODUCT MANAGER

BACK-END

Kyaw Soe Han

MAPS INTEGRATION

BACK-END

Trong Le

AI INTEGRATION

FULL-STACK

William Ngo

REPAIR & UI/UX

FRONT-END

E-WASTE STATISTICS

- **62 million tons** in 2022
- Predicted to increase by **32%** to **82 million** by 2030
- **Only 1%** of rare earth element demand is met by recycling

Global e-Waste Monitor 2024: Electronic Waste Rising Five Times Faster than Documented E-waste Recycling. (n.d.). UNITAR.

https://unitar.org/about/news-stories/press/global-e-waste-monitor-2024-electronic-waste-rising-five-times-faster-documented-e-waste-recycling

EVEN MORE STATISTICS

- **31%** of Americans have unused old devices.
- **37%** trade in or exchange their old devices.
- **29%** use proper disposal services.

Milden, D. (2025, April 29). Break up with your old tech. CNET survey finds 31% of US adults are missing out on money by hoarding unused devices. CNET. https://www.cnet.com/tech/recycling-tech-survey-2025/

PRODUCT GOAL

- Help manage old electronic devices
- Bring awareness to the environmental problem of e-waste pollution
- Provide recycling and repair solutions to electronic devices

VISION STATEMENT

For all electronic device owners of any repair experience

Who wants to fix their electronic issues or recycle them,

The E-Waste Identifier is a web application

That provides all-in-one interactive platform for repairing and/or recycling their old electronic devices.

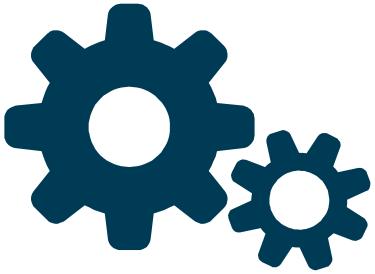
Unlike existing platforms that provides one or the other,

Our product incorporates troubleshooting solutions along with easy-to-navigate user interface that will bring awareness to the issue of e-waste pollution.

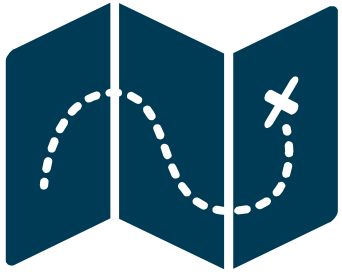
MAIN FEATURES

TROUBLESHOOTING GUIDE

REPAIR GUIDE

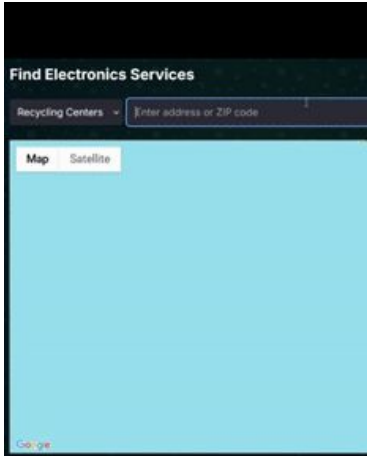


LOCAL REPAIR SHOP & RECYCLING CENTER LOCATOR

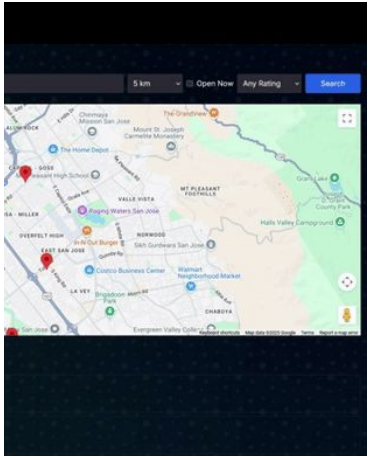


INTEGRATED MAPS PAGE

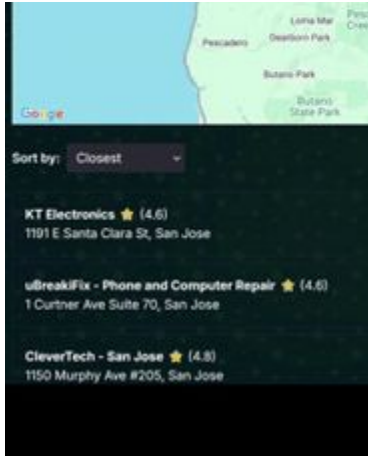
- Search for Recycling or Repair Centers



- Filter Search Criteria with Live Updates



- Sort Search Results



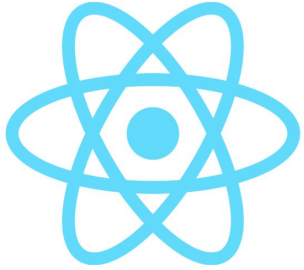
OUR TECH STACK

TYPESCRIPT

GOOGLE MAPS & PLACES API

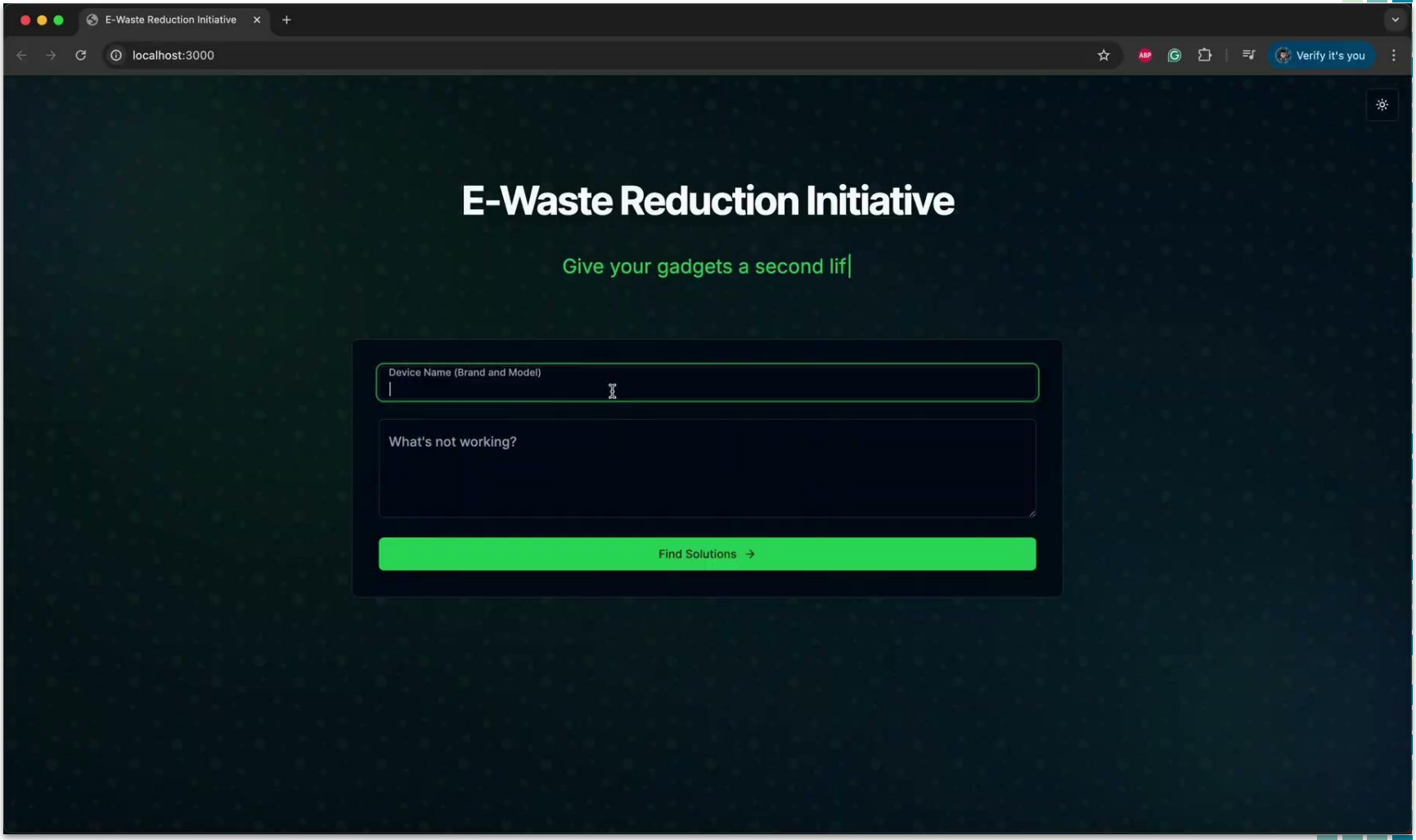
IFIXIT API

REACT/NEXT.JS



GOOGLE GEMINI API

APPLICATION DEMO


E-Waste Reduction Initiative
localhost:3000
Verify it's you
E-Waste Reduction Initiative
Give your gadgets a second lif
Device Name (Brand and Model)
What's not working?
Find Solutions →

FUTURE IMPROVEMENTS

- Faster Response on the Google Gemini API
- Price Estimates on Repair Shops
- Device Replacement Suggestions

THANKS!

Any questions?

Slide Template: https://www.slidescarnival.com/template/mowbray-free-presentation-template/1932