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Digital Waste Manager

The Challenge:

A lot of people want to recycle, but they encounter barriers:
Lack of information
Lack of motivation
Goal: To remove uncertainty in sorting and motivate people to recycle more.

🏗️ *App architecture*:

1. **Frontend:** 📱 React Native App
2. **Backend:** ☁️ Backend API
3. **Database:** 🗄️ Postgresql Database
4. **Additional functions for the application:** 🗺️ Maps, 📅 Calendar, 🏆 Achievements and so on

Detailed explanation of key features:

👤 **User Profile:** Registration, tracking recycling statistics and achievements.
📷 **Scanner:** Waste identification using a photo. Instant answer to which bin the waste belongs to.
🗺️ **Interactive Map:** Display of the nearest waste separation bins and collection yards based on GPS location.
🏆 **Achievements:** Points system for each scan and correct sorting. Leveling up and unlocking unique achievement badges.
📅 **Export Calendar:** Clear schedule of export of various types of waste.

Impact & Conclusion:

✅ **Real-time education:** The user learns to sort directly at the bin, not from leaflets.
✅ **Reduction of contamination:** More accurate waste identification leads to a cleaner recycling stream.
✅ **Increased motivation:** Thanks to achievements, a boring duty becomes a fun activity with measurable progress.
✅ **Data centralization:** All information (what, where, when to throw away) is in one place on the phone.

LIVE IT PROJECTS

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