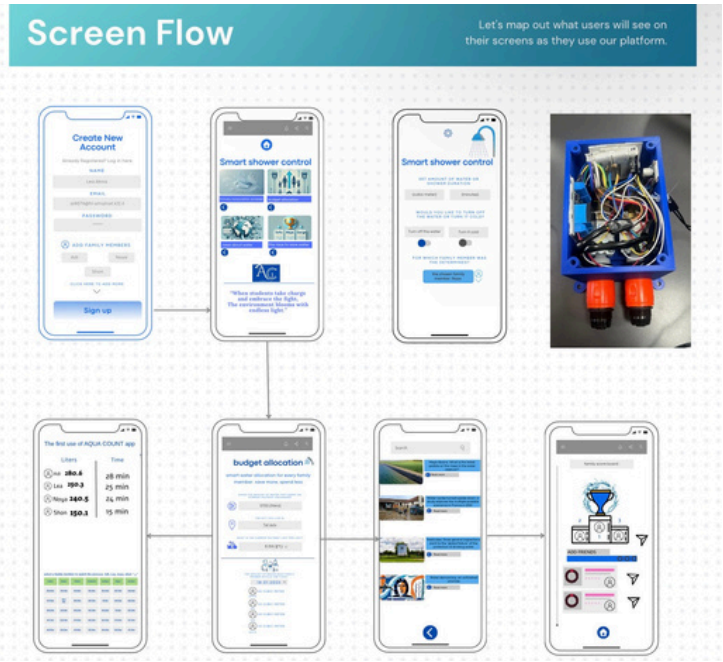
AquaCount

Programming the Shower: Students Create Smart Water Revolution



Do we really need 60 liters of water for a daily shower? High school students from Holtz School in Tel Aviv developed an innovative solution: AquaCount - a smart system that transforms how we consume water in the shower.

> *"When we discovered that only 0.65% of the world's water is fresh water, and that the climate crisis is only exacerbating this situation, we realized we needed to take action and raise awareness about this crisis", explain the project creators.*

Guided by Mekorot Water Company and in collaboration with a multidisciplinary teaching team, students Lea Akiva, Shon Skaliga, Noya Manzour and Adi Sasson thoroughly researched the global water crisis and Israel's water sector.

Their solution combines advanced technology with user-friendly design: a smart box installed on the shower fixture communicates with a dedicated application. The app displays real-time water consumption data, raises awareness of usage patterns, and offers daily water-saving tips in a family-friendly format. For those requiring assistance, it enables setting personal water limits in the application and sends multiple alerts.

ANNUAL IMPACT

PROJECTED YEARLY SAVINGS AND ENVIRONMENTAL BENEFITS

331.4M	35%	€30M
Cubic meters ofwater saved per year	Annual domestic waterconsumption reduced	Value of yearly water savings

Based on projected annual data and current water consumption rates

A survey conducted by the students revealed that **91.4%** of respondents **are unaware** of their shower water consumption, and **69.5% expressed interest** in a system that would help them monitor and limit water usage.

Innovation is also reflected in the social approach: the application encourages family water-saving competitions and achievement sharing on social media, and even rewards users for intelligent water usage.

The system is suitable for any place with a shower, dormitories, student housing, gyms, hotels, and offices. "Everyone can benefit from the savings," the students proudly say.

AquaCount's innovative approach demonstrates how technology with social awareness can create meaningful environmental change. It's transforming our relationship with this precious resource, one shower at a time.

Sources & Further Reading

Academic & Research

- Weizmann Institute of Science - Desalination Research
- Urban Water Conservation Study - Technion

Government & National Sources

- Israel Water Authority - Municipal Consumption Data
- Mekorot - Israel National Water Company
- Israel Water Authority - Rates & Regulations

International Organizations

- United Nations Climate Action - Water Issues
- World Health Organization - Water & Climate Team
- European Environment Agency - Water Use Report

Additional Resources

- EcoWiki - Israel Water Sector Analysis
- Israel Water Portal - Crisis Report
- Maariv Environmental Report

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