



GREENMODULE



A MODULAR LOW-MAINTENANCE INDOOR PLANT SYSTEM

THE PROBLEM

Why are indoor plants still difficult to sustain? Background

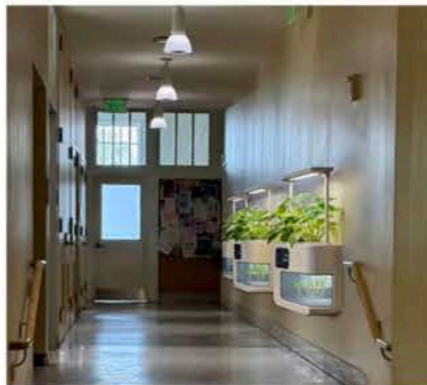
Indoor plants can improve environmental quality, comfort, and emotional well-being. Yet although we spend most of our time indoors in classrooms and offices, plants are rarely used in everyday indoor spaces.

Challenges — The real challenge is not adding plants — it is maintaining them.

Traditional indoor plants require frequent watering, regular monitoring, cleaning, and replacement. For universities and offices, this means higher labor, cost, and inconvenience, which makes indoor greenery difficult to sustain long-term.

OUR SOLUTION

GreenModule is a wall-mounted modular indoor plant system designed to make indoor greenery easier to maintain and sustain. Instead of relying on frequent manual care, GreenModule simplifies maintenance through a structured modular design.

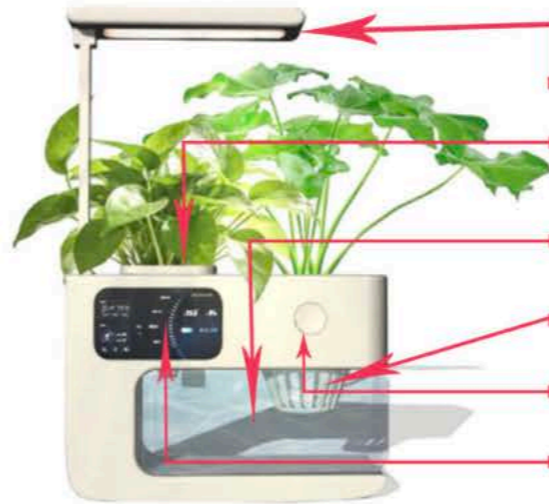


Value Proposition

- Target Customers:** Universities and Offices
- Reduced maintenance complexity
- Lower long-term operational cost
- Scalable indoor greenery solutions
- Accessible plant care for non-experts



System Design



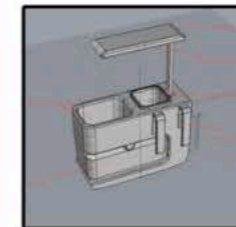
- LED Grow Light:** provides consistent lighting.
- Replaceable Plant Cartridge:** makes plant replacement quick and simple when plant health declines.
- Internal Water Reservoir:** stores water for refilling every 3 – 4 weeks.
- Wick Irrigation System:** automatically delivers water to the roots.
- Slow-Release Fertilizer:** reduces the need for frequent fertilizing.
- Plant Health Monitoring Display:** shows plant condition clearly.

Together, these features create a controlled growing environment that keeps plant care simple and low-maintenance.

Full Life Cycle



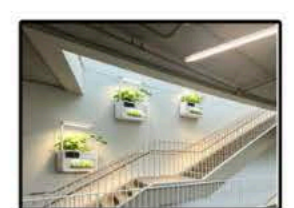
Testing & Validation



Standardize product structure
Create detailed CAD models



Manufacturing and assembly
Low Maintenance & Plant survival testing



Deliver units and conduct pilot installations
Evaluate pilot performance and refine the system

Meet the Team

Ruofan Wang
Ruotong Liu
Jinbei Li

Email address: rliu98@jh.edu
Phone: +1 (410) 240 2488