

Charybdis: Protecting Marine Ecosystems with Innovation

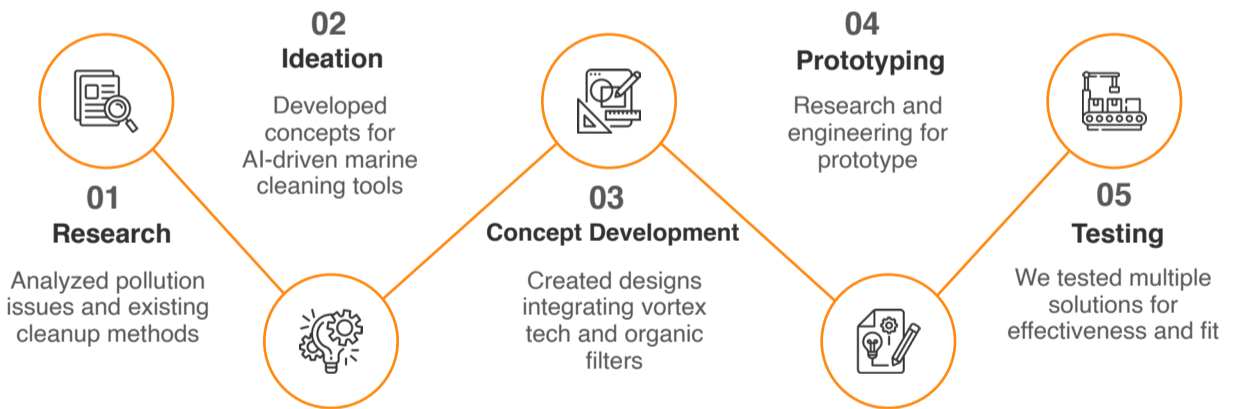
Charybdis is an autonomous robot designed to clean ports of oil spills and plastics, leveraging AI and Organic Filters to preserve marine biodiversity.



Inspired by the mythical monster, Charybdis uses vortex technology and organic filters to revolutionize port cleanup.

Problem Statement

- Rising pollution in marine ecosystems
- Persistent oil spills damaging biodiversity
- Inefficient cleanup methods for plastics and toxins
- Limited tools for mapping underwater environments
- Use of none environmental filters



Results & Outcomes

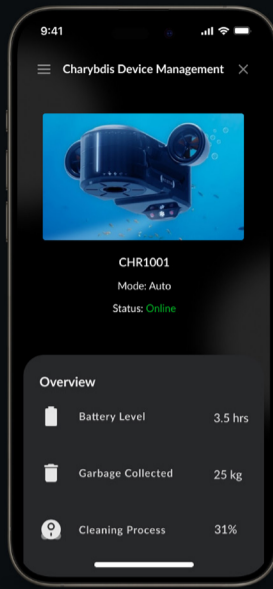
- Designed and developed the UI/UX interface
- Developed 5 concepts, with 2 CAD designs finalized
- Integrated AI, and sensors for precise waste collection
- Leverage biodegradable filters from RESTIA
- Designed Charybdis robot for autonomous cleanup



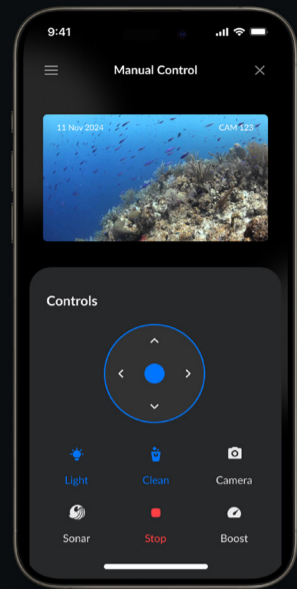
A Glimpse into Our Visuals



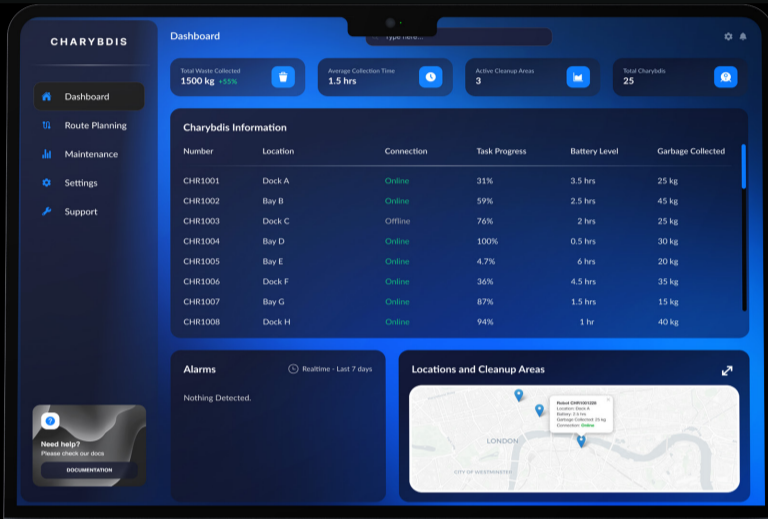
Account Creation



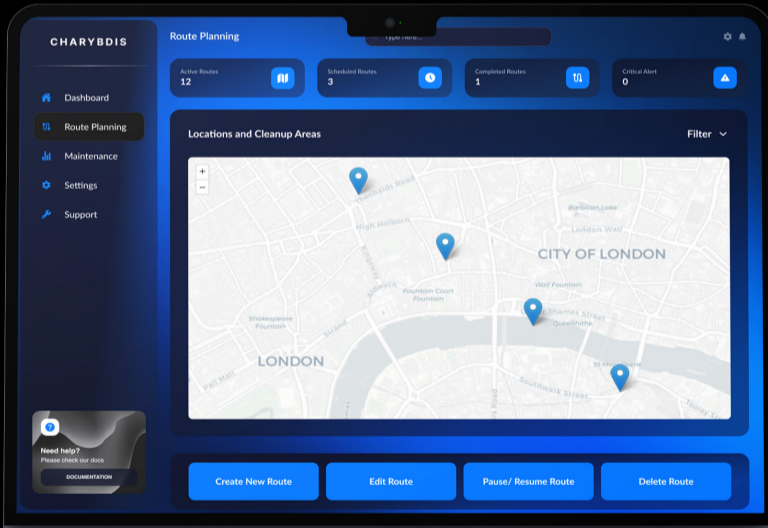
Device Management



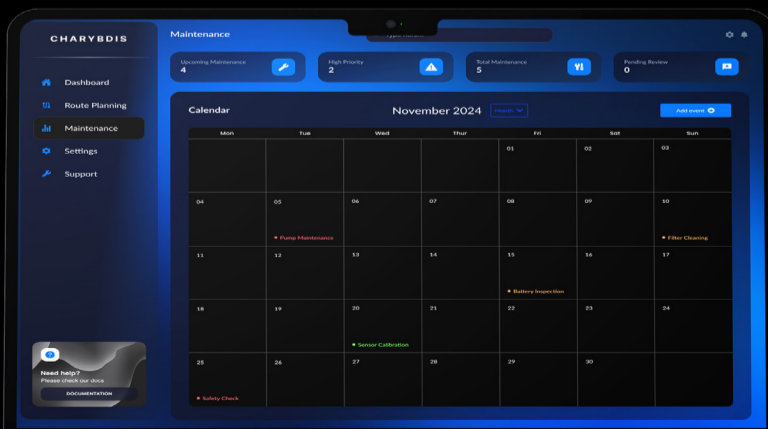
Control Screen



Main Dashboard Interface



Route Planning Screen



Maintenance Screen