

# SMART HYDRATE

-The Future of Water Bottles

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# Introduction

## Why Hydration Matters?

- Essential for bodily functions (temperature regulation, nutrient transport, waste removal, etc.)
- Essential for health and well-being.
- Impacts energy levels, cognitive function, and physical performance.
- Many people don't drink enough water daily.
- The challenge of tracking and remembering to hydrate.

# Project Overview

- A smart water bottle that syncs with a mobile app to track water intake, glows to remind users to hydrate, and purifies water using UV-C light for safe drinking.
- Goal: Promote healthy hydration habits and ensure clean water access on the go.



# Problem Statement

- Many individuals struggle to maintain adequate daily hydration due to busy lifestyles and lack of awareness. Traditional water bottles offer no reminders or insights into personal water consumption. There is a need for a smart water bottle that can monitor intake, provide real-time reminders, and offer personalized hydration insights to promote healthier habits and concerns about water purity, leading to potential health issues and decreased productivity.

# Problem Solution

- The SmartHydrate Bottle addresses this by providing intelligent water intake tracking, personalized reminders, and on-the-go UV purification, empowering users to effortlessly monitor, improve, and ensure the safety of their daily hydration.



# Target Audience

- Health-conscious individuals
- Office workers and students
- Fitness enthusiasts
- Tech-savvy users aged 18–45

# Needs and Preferences

- Clean, safe drinking water
- Consistent hydration habits
- Stylish, portable design
- Seamless tech integration

# Key Features

- Intelligent Water Intake Tracking
- Personalized Drink Reminders
- On-Demand UV Water Purification
- Seamless Mobile App Integration



Integration

# Design Requirements

## Aesthetics

Sleek, modern look with glowing LED bands

## Ergonomics

Easy grip, spill-proof, lightweight

## UX

Simple interface with one-button operation and app connectivity

## Portability

Fits in standard cup holders and bags

# Technical Specifications

## Materials

- **Body:** BPA-free Tritan plastic (or Stainless Steel option).
- **Cap:** Food-grade silicone and plastic.

## Dimensions

- **Height:** 24 cm
- **Diameter:** 7 cm
- **Weight:** 350g (empty)
- **Capacity:** 650 ml

## Components

- Water level sensor.
- UV-C LED module (275nm wavelength).
- Bluetooth 5.0 module.
- Rechargeable lithium-ion battery (USB-C charging).
- LED ring for reminders.

## Manufacturing

- Injection molding
- CNC machining
- Assembly and quality control.

# Testing Procedures

## Prototype Testing

- Functional testing of all features
- Durability testing
- Battery life testing

## User Testing

- Gather feedback on comfort
- usability
- app interface

## Compliance Testing

- Ensure compliance with relevant safety standards
- Meet regulatory requirements for labeling and packaging

# Timeline

PHASE	DURATION
Research & Ideation	2 weeks
Concept Development	2 weeks
Prototyping	3 weeks
User Testing	2 weeks
Final Design	1 weeks
Production Prep	2 weeks

# Budget

CATEGORY	COST ESTIMATE
Design & Prototyping	1000/-
Electronics & Components	1300/-
App Development	1000/-
Testing & Certification	5000/-
Marketing & Packaging	200/-
<b>Total</b>	<b>8500/-</b>

# CONCLUSION

- Stylish and sustainable smart bottle that bridges wellness and innovation
- Keeps users healthy and hydrated with smart tracking and reminders
- Seamlessly integrates with health and fitness apps for easy hydration management
- Combines convenience, advanced technology, and sleek design to support a healthier lifestyle

# Thank You

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