## **Phase1:Smart Water Fountains**

A smart water fountain is a technologically advanced drinking water dispenser designed to provide convenient access to clean and safe drinking water while incorporating innovative features. Design thinking for a smart water fountain involve

- 1. User-Centered Design: Prioritizing the user's experience by making it easy and enjoyable to access drinking water
- 2. Filtration and Purification: Incorporating water filtration and purification systems to ensure the water dispensed is of high quality and safe to drink.
- 3. Hydration Tracking: Adding features like digital displays or smartphone connectivity to track water consumption and remind users to stay hydrated.
- 4. Contactless Operation: Utilizing sensors or touchless interfaces for water dispensing to minimize physical contact and improve hygiene.
- 5. Sustainability: Integrating eco-friendly materials and components, as well as water-saving mechanisms to promote environmental sustainability.
- 6. Accessibility: Ensuring the water fountain is accessible to people of all abilities, including those with disabilities, by providing wheelchair-friendly designs and easy-to-reach dispensers.
- 7. Maintenance Monitoring: Implementing sensors and remote monitoring capabilities to detect issues, such as low water levels or filter replacements, and notify maintenance staff.
- 8. Data Analytics: Collecting usage data to optimize water fountain placement, maintenance schedules, and resource allocation.
- 9. Customization: Allowing users to adjust water temperature, flavor, or carbonation levels to cater to individual preferences.
- 10. Energy Efficiency: Incorporating energy-saving features, such as LED lighting and power-saving modes, to reduce electricity consumption.

Design thinking in this context involves empathizing with the needs of users for hydration, defining the requirements for a smart water fountain, ideating creative solutions, prototyping and testing those solutions, and continuously improving the design based on user feedback and data analysis. The goal is to create a user-friendly and sustainable solution that enhances the drinking water experience while considering environmental and accessibility factors.