

# CMR College of Engineering & Technology

(UGC Autonomous)

Kandlakoya, Medchal Road, Hyderabad 501401

Centre for Engineering Education Research (CEER) SOCIAL INNOVATION IN PRACTICE

**A.Y 2023-24 IV SEMESTER** 

## **TECH- AQUARIST**

#### **Team Details**

ECE- TR1 (TEAM 3)
22H51A0408 -B. VIGNESHWAR
22H51A0429 -J. VIGNAN
22H51A0432- K. LASYA PRIYA
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22H51A0443 - N. ANUHYA

### **Project Objective**

To clean the water automatically by itself and to feed the fish without any man power

#### Issue





- 1. Damage to aquatic life
- 2. Disruption of beneficial bacteria
- 3. Cost
- 4. Over-reliance on chemicals
- 5. Inadequate instructions

### **Faculty Coordinators**

MR.SURESH RAM - HOD, CEER
MR.B.BALAKRISHNA-, ASST. PROFESSOR
MRS.T.LAVANYA, ASST. PROFESSOR
MR.K.RAVI NAIK, ASST. PROFESSOR

### **Existing systems**

- Chemical Filtration.
- Biological Filtration.
- Under-Gravel Filters.

#### User requirement

Usable for everyone who wants to take care of aquariums

Usable for the people who wants to decorate their homes with beautiful aquariums.

Usable for the people who also want to take care of fish

# Gaps in the existing system

> Noisy

- Poor quality
- > High maintenance
- > Installation
- > High cost
- Operation

# Methodology



The proposed system has a filter which have bio balls and sponge used seperately for aquariums ad a motor. The combination of these components make a filter which cleans the water automatically for 30 days. It takes the dirt water form the bottom of the aquarium and start to clean the water using bio balls and sponge and send back the cleaned water back to aquarium. The feeder which carry food for fish provides the food by using an app named Blynk. By using the app user can provide food for fish when required.