

# Gar(B)age Band

Acknowledgements  
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## ABSTRACT

The H2O Orchestra is a Paraguayan musical organization where youth from underprivileged backgrounds get the chance to play instruments made out of waste from local rivers and landfills. With a desire to create an unseen instrument, Dr. Martin Burt reached out to us asking if we could make something from materials that are like those that would be found polluting Paraguay's rivers and lakes.

This instrument would be used to further the musical education of children who would otherwise not be able to have such an opportunity. Being able to play a musical instrument gives underprivileged children the chance to better their lives by surrounding themselves with people who have similar interests to them. It also teaches them important lessons in hard work, commitment, and responsibility. We hope that our project will also inspire more people around the world to turn their waste products into instruments or other reusable items, and that our instrument will be used by the orchestra long into the future, educating its audience.

## BACKGROUND

We collaborated with the H2O Orchestra, founded by Luis Szarán, to transform the polluted rural communities of Paraguay. This foundation sensitizes the conservation of water and the responsible use of recyclable materials such as pipes, water containers, hoses and vessels. The orchestra also provides an accessible program for young children to participate in music theory classes and instrumental lessons, whom previously may not have had the opportunity to do so. By working with the orchestra, we hope to illuminate the poverty and pollution crisis in Paraguay.



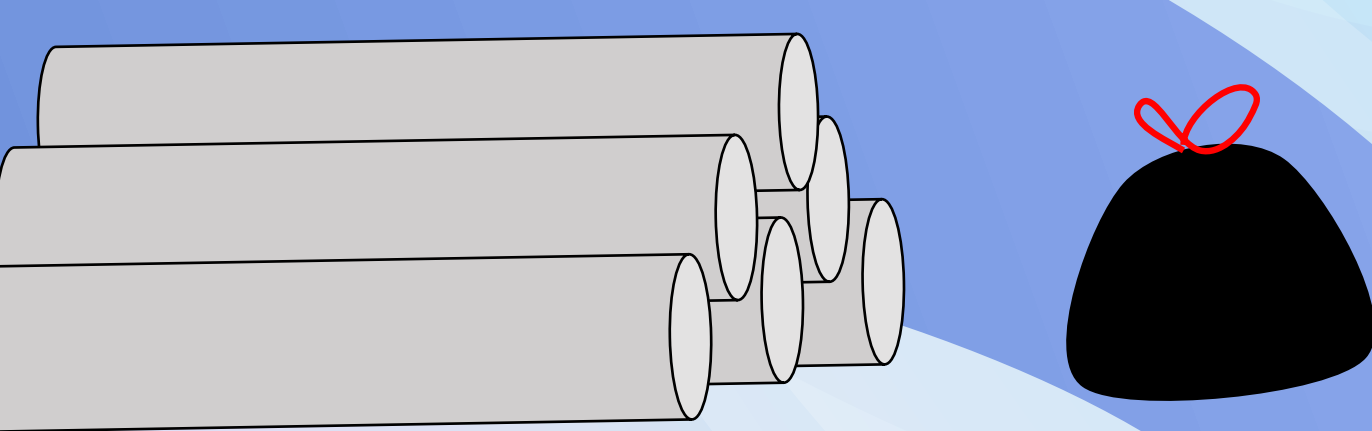
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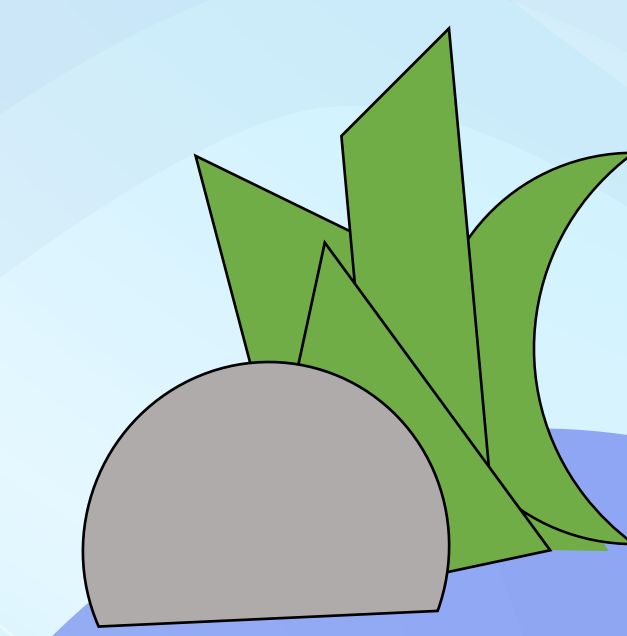
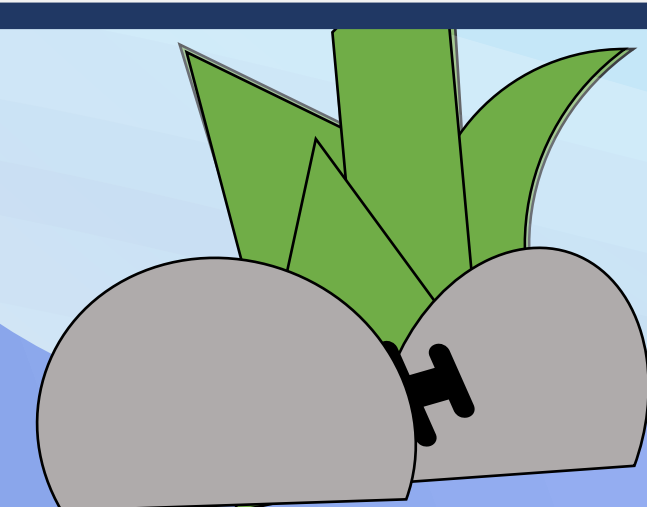


## CONSTRUCTION PROCESS



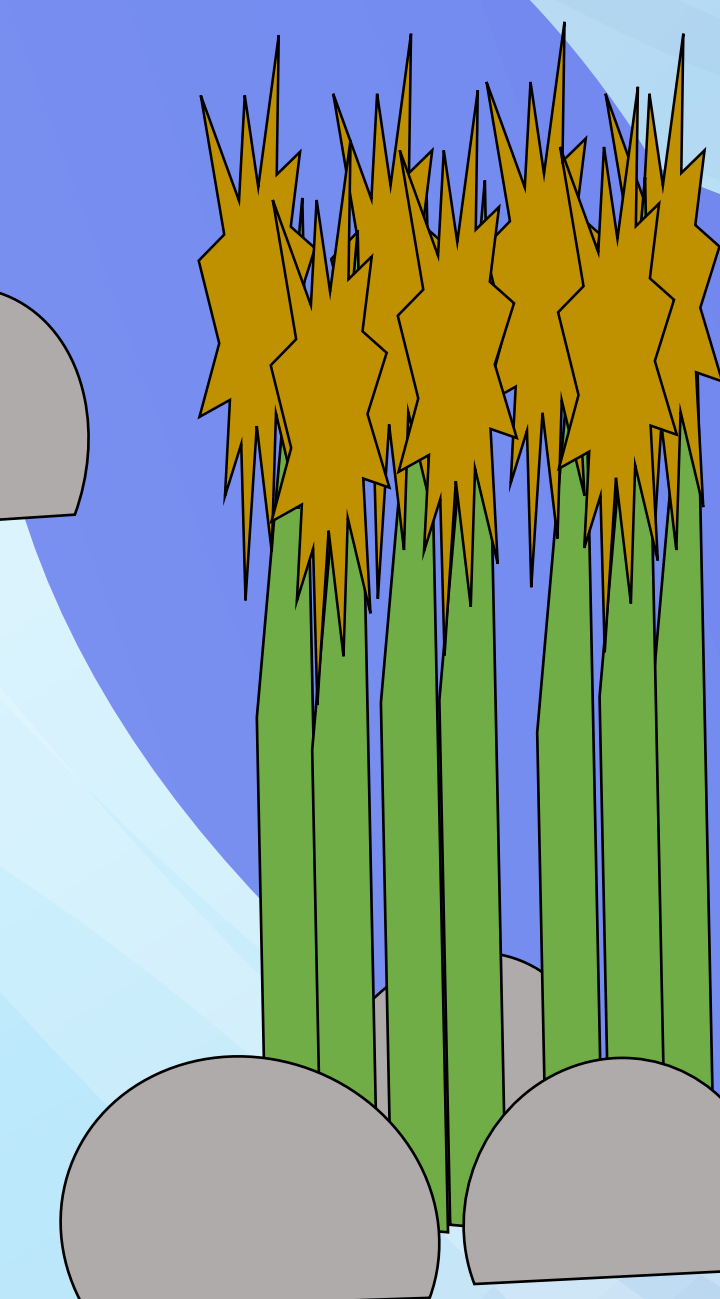
Meetings were held with Martin Burt to figure out what the orchestra wants to add to their collection of recycled instruments

Brainstorm ideas for design and collect the materials needed to create the prototypes



Test different design prototypes such as different kinds of mallets and tubing to find the best possible sound and design

Construct the final instrument based on data collected through prototyping and testing



Tune and correct any issues with the instrument by sanding down the length of the PVC piping so it is ready to be played in the H2O Orchestra



## PROJECT GOALS

- Prototype an instrument that can be easily dismantled, reassembled, and created
- Get kids interested in music and water conservation
- Further educate people about water pollution

## METHODOLOGY

Research and collect the items commonly found in rivers and litter elsewhere in the environment.

Calculate lengths of PVC piping needed for each note of a scale.

Use tools like handsaws and sandpaper to create the lengths of pipe needed while checking tuning regularly.

Use the same tools to create a wooden stand that is friction fitted so it may be dismantled and portable.