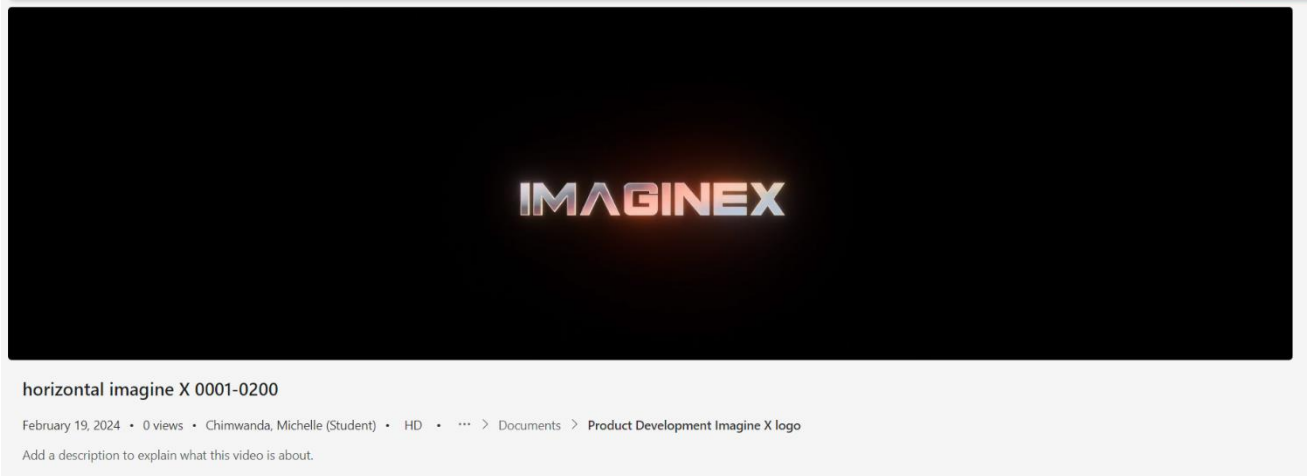


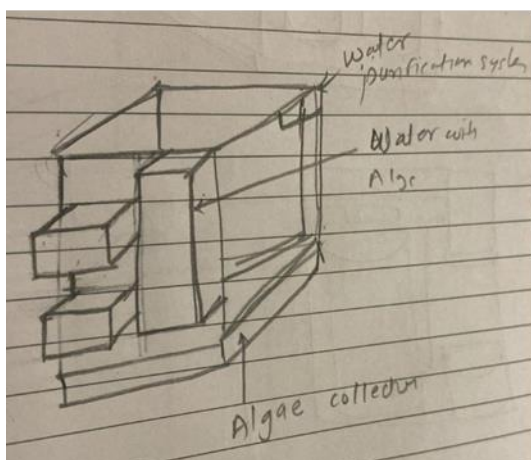
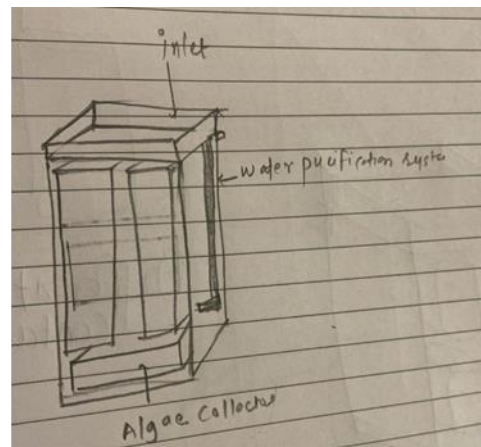
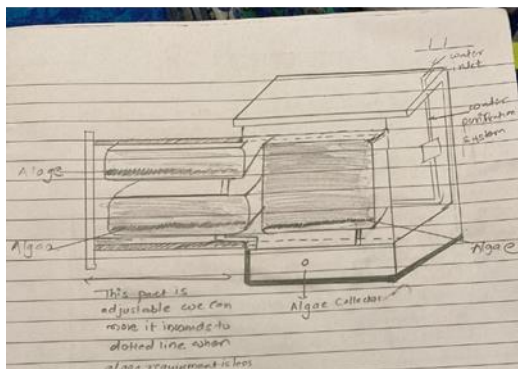
IMAGINEX: Evidence of Work Throughout Project

Early Weeks

We worked on our group branding and took Belbin tests to assist with role assignments.



Early Sketches of compact bioreactors. (More were submitted by all group members as seen in screen shots at end of document).



Ai (Mid-journey) was used to visualise unique implementations of bioreactors in an aesthetic way for living spaces.

INTRODUCING BLOOM PODS

Bloom Pods are modular home units designed to grow microalgae, purify air, and produce food supplements in a sustainable and efficient manner.



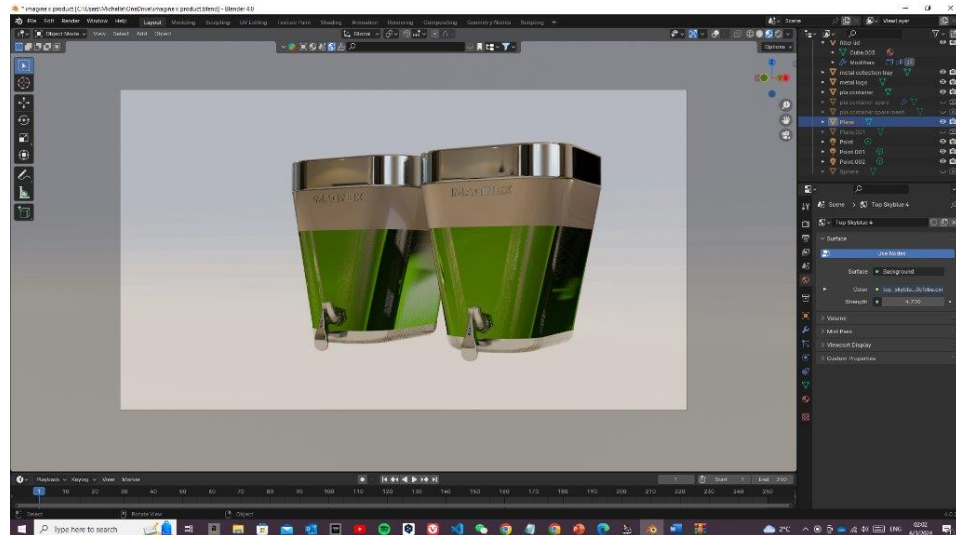
Crafted from biodegradable dielectric materials, are sustainable and immune to algae build-up, ensuring a continuous, eco-friendly growth of microalgae.

IMAGINEX



3D Brainstorming

Various designs were made in Blender 3D. The two designs shown were closer to our initial intended designs of 1-2 litre capacity. They each reached marketing poll stage however were ultimately scrapped.

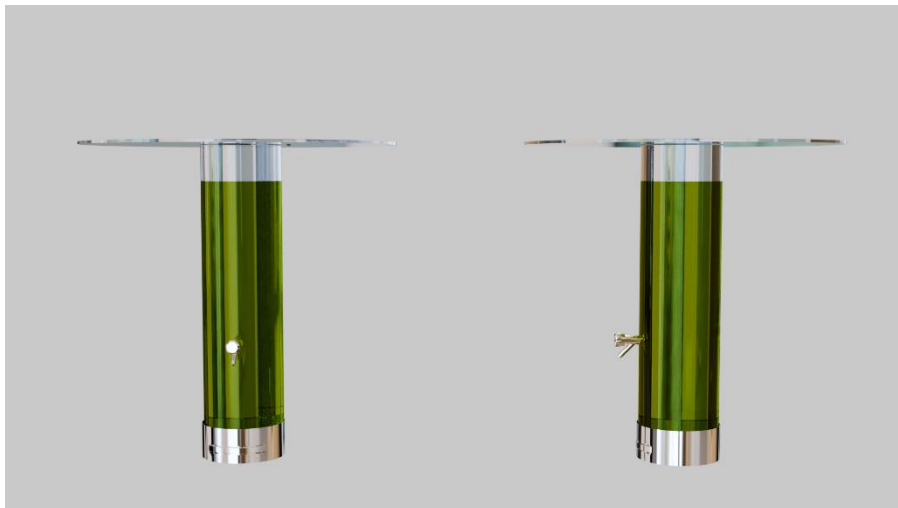


Towards Final Stages

Extensive research on the best materials for the product was used and various designs stemmed from this as seen before.

Property	Glass	Plastic	PLA	PVA	Chitosan
Material Type	Inorganic	Synthetic Organic	Biodegradable Bio-plastic	Synthetic Polymer	Natural Polymer
Source	Sand, Soda Ash, Limestone	Petroleum, Natural Gas	Corn Starch, Sugarcane	Petrochemicals	Exoskeletons of Shellfish
Biodegradability	Not Biodegradable	Depends on Type	Biodegradable	Biodegradable	Biodegradable
Recyclability	Recyclable but limited	Varies by Type	Recyclable	Limited	Not typically recyclable
Composability	Not Compostable	Varies by Type	Compostable	Compostable	Compostable
Transparency	Transparent	Transparent/Opaque	Transparent/Opaque	Transparent	Opaque
Heat Resistance	High	Varies by Type	Moderate	Low	Moderate
Mechanical Strength	High	Varies by Type	Moderate	Low	Moderate
Chemical Resistance	Resistant to chemicals	Varies by Type	Sensitive to some chemicals	Sensitive to water	Sensitive to acids
Usage	Bottles, Windows, Labware	Packaging, Containers	Packaging, 3D Printing	Soluble Support Material	Wound Dressings, Scaffolds
Environmental Impact	Non-renewable, resource-intensive	Resource-intensive	Lower environmental impact	Lower environmental impact	Lower environmental impact

Images of the final product design made in blender. At this stage HOQ was being developed and the PDS was amended to match the new and final concept.



We had recorded meetings on a weekly basis. The earlier links for these recordings have expired so no screenshot is available for them.

Stream ImagineX meeting 1:20240318_180739_Mee6... Search

Record Upload Favorite Playlist Move to Copy to Preview Share

ImagineX meeting 1
March 18, 2024 Expires in 12 days • 1 view • Chimwanda, Michelle (Student) • HD • Documents > Recordings
Add a description to explain what this video is about.

Transcript
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The same the the beginning parts are pretty much the same structure. What I'd made like introducing it kind of like. Talking about what we do and all of that stuff and you've already seen this part so. This part here is gonna be like market research. So we'll be, I did actually manage to find some prices for these things and they're so expensive. Like honestly. Can you imagine? Pete, would you pay £500 for that?

AH Jung Paein Hain 1:05 K. Wow, sounds better.

CM Chimwanda, Michelle (Student) 1:13 And you [Sync to video](#) actually really small. But I yeah, I included the link.

WhatsApp Group Screenshots: These screenshots show snippets of the consistent participation and effort put by all group members throughout the semester. Everyone helped in various tasks and where they could not help they focused on contributing where their strengths lie. This allowed us to make something we are proud of.

