Deliverable G
Prototype II and Customer Feedback

Alex Cherkassky
Kavinraj Navinaraj
Ludvik Tholen
Matthew Chan-Barcellos

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Client Feedback

Once again, we'd like to clarify that due to time constraints with the meeting with the client where our design was presented, feedback was not received in any capacity. As a result, we are unable to make any significant changes or utilize the critique our Prototype Test Plan relied on. As such, much of what was produced in the last deliverable remains as our main plan. Please keep this in mind as this document reflects the lack of feedback provided for our ideas.

Prototype 2 - Physical Model of Key Component (Canoe-Styled Roof)

Prototype Analysis

Without feedback from the client, this model relies on previously understood requirements. Considering the tests we'd considered to determine flow paths for rainfall onto our uniquely designed roof, we put together a physical model to reflect roughly what we can expect. Our visual predictions made with the last prototype can be compared against and taken into account for any future endeavors.

Why, What, When

Why: To determine optimal water collection and retention strategy for conservation efforts that utilize gray-water to reduce water consumption needs.

What: Apply water to prototype and observe the path taken.

When: Observe until water flow reaches the end of the prototype and falls off.

Justifications

From the original 3D model prototype, we'd identified plausible predictions for water flow along the roof of the structure, however, it cannot be determined with any certainty without a rough model to verify our thoughts. This second prototype will further develop our understanding and provide valuable insight for the final prototype to determine whether our designs are feasible and efficient.

Results

The tests were designed to be short as the model was made of materials that were not resistant to water. We were counting on results being obtained quickly enough that the short life-span of the model would not hinder our results. Initially, water flowed mostly as it was predicted. Though with heavier concentrations than expected traveling parallel down the slope of the roof rather than along the angled roof as we were hoping.

In conclusion, the steepness of our roof appeared to have effects not initially accounted for. With this knowledge in hand, we can now progress to the final model while considering the options of putting the water collection idea aside or to reduce the steepness of the roof. However, with all that being said, the lack of feedback has once again hindered the development process and may impact our performance and final product.

Wrike

https://www.wrike.com/frontend/ganttchart/index.html?snapshotId=zOP9JwGtb6Mey2NGAcSXTzOkZGAMTbVL%7CIE2DSNZVHA2DELSTGIYA