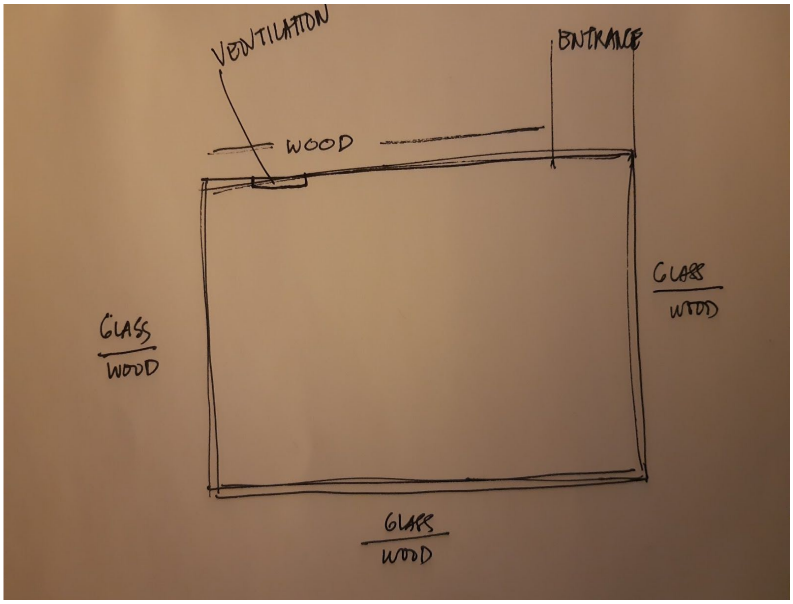
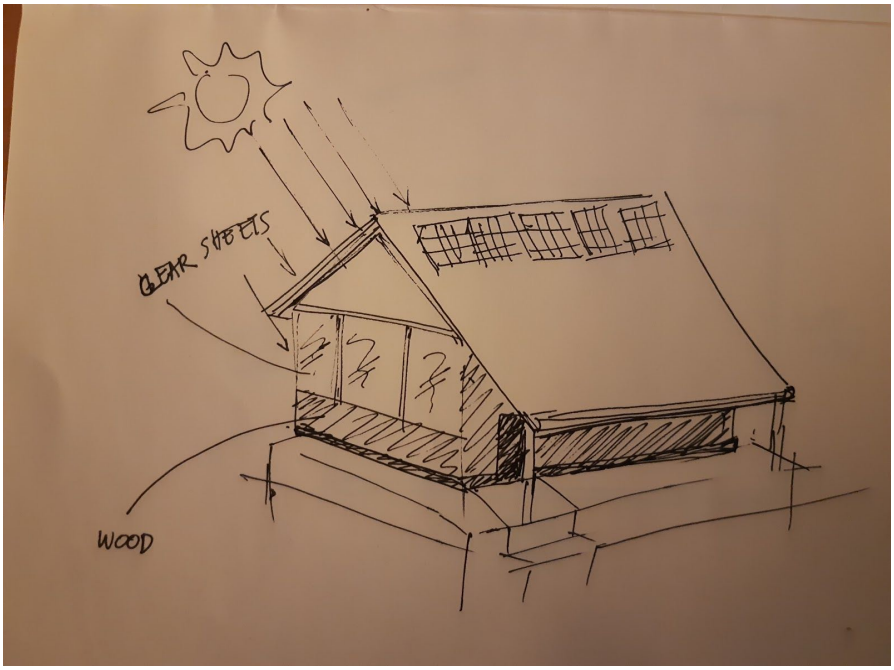
Section B _ Construction Team

PROTOTYPE I & CUSTOMER FEEDBACK

HYPOTHESIS	Constructing a greenhouse to meet the needs of the community of Le Domaine.
PLAN & PROOF	 Greenhouse provides : Insulation, Water Collection, Automatic Ventilation, and Solar Power systems Base: -2 feet elevation for snow depth during winter. Roof :*Saltbox type* -the design itself is fitted for northern climates. - Long side: for the water collection(guttering system) as it could gather more water; it is where most of the solar panels will be placed; - Short side: will be made out of clear panels so that the sunlight could easily go through the plants inside; this side will be facing the east for the sun; solar panels will also be placed. -Guttering system: will placed on the longer side; extended to a st





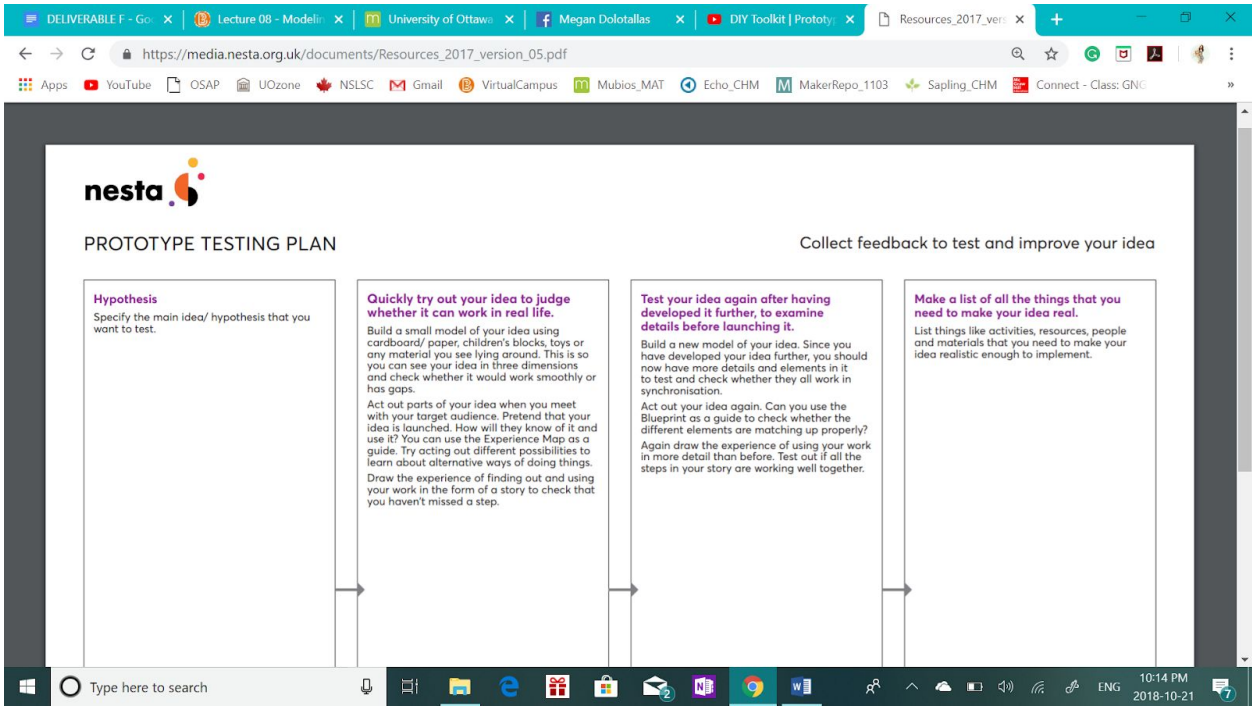
Walls:

- 3 sides will be made out of polyethylene sheets so more light could go through; 2.5 ft from the base will be made out of wood for pest control.
- The remaining side will be made out of wood, to also add insulation.
- On the full wood side, there will be a small opening for automatic ventilation controlled using a thermostat and arduino board.
- The baseboards of the walls will be surrounded(covered) with ‘copper mesh’ to keep the rats away.

	-The inside will be mostly covered by bubble wraps to help insulate the greenhouse. - The openings will only be the door, ventilation, and drain, because half of the greenhouse will be made out of clear panels and sheets.

TEST
Feedbacks
	When meeting with the client we received some feedback from our initial design,
	- A concern was that animals would be able to get into the greenhouse. To solve this we raised the building off of the ground and added wood paneling with copper mesh aboard the bottom
	  - This method has proven highly effective in keeping unwanted animals out of buildings as they are not able to chew through the copper mesh.
	- The client was concerned about air flow and circulation. To solve this we integrated vents and fans to make sure air is always flowing and moving
	  - Fan are typically installed in all greenhouses, they are highly effective and efficient in moving air around the greenhouse. They are low cost and sturdy helping the cost down for maintenance and repairs down in the future as well.
	- Another concern was snow removal, specifically from the roof. This is an issue we are still working on however with the material and texture of the roof it should be fairly easy to manually remove snow.
	  - A highly effective way to remove snow would be with a heater, however the current budget for this project does not allow that. It could be something to consider for later after the greenhouse is installed. Another method to remove snow is placing the solar panels on an angel (on the roof), this allows the snow to fall off on its own accord and has proven highly effective.

MATERIALIZE & STOPPING CRITERIA	- Materials should sum up with the maximum cost of 250 $


DELIVERABLE F - Go
Lecture 08 - Modelin
University of Ottawa
Megan Dolotallas
DIY Toolkit | Prototy
Resources_2017_ver
https://media.nesta.org.uk/documents/Resources_2017_version_05.pdf
Apps
YouTube
OSAP
UOzone
NSLSC
Gmail
VirtualCampus
Mubios_MAT
Echo_CHM
MakerRepo_1103
Sapling_CHM
Connect - Class: GNC
nesta
PROTOTYPE TESTING PLAN
Collect feedback to test and improve your idea
Hypothesis
Specify the main idea/ hypothesis that you want to test.
Quickly try out your idea to judge whether it can work in real life.
Build a small model of your idea using cardboard/ paper, children's blocks, toys or any material you see lying around. This is so you can see your idea in three dimensions and check whether it would work smoothly or has gaps.
Act out parts of your idea when you meet with your target audience. Pretend that your idea is launched. How will they know of it and use it? You can use the Experience Map as a guide. Try acting out different possibilities to learn about alternative ways of doing things.
Draw the experience of finding out and using your work in the form of a story to check that you haven't missed a step.
Test your idea again after having developed it further, to examine details before launching it.
Build a new model of your idea. Since you have developed your idea further, you should now have more details and elements in it to test and check whether they all work in synchronisation.
Act out your idea again. Can you use the Blueprint as a guide to check whether the different elements are matching up properly?
Again draw the experience of using your work in more detail than before. Test out if all the steps in your story are working well together.
Make a list of all the things that you need to make your idea real.
List things like activities, resources, people and materials that you need to make your idea realistic enough to implement.
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