
TONIE NGUYEN

VEGOGRAPH

DEVELOPMENT SKETCHBOOK

40414175 INTERACTION DESIGN



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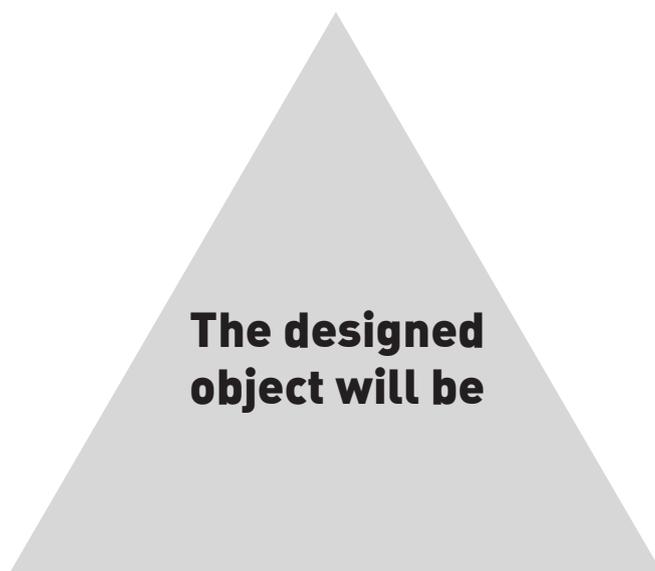
_DEVELOPMENT

For this project you will work within the realm of sonic, screen, projected or online platforms to produce a meaningful, provocative and evoking experience for person, audience, and/or participant.

In the material world humans depend heavily on what they see and a phase of observation to evaluate the world around them. This opportunity can lead designers and artists to generate enlightening experiences. Continuing in the parameters of the Lion's Gate Garden project you will develop an interactive installation for a specific audience/user/participant with the intention of invoking a specific narrative within them.

Your project may be a new concept or may be an evolution of the concept you developed in Project One.

MEANINGFUL



**The designed
object will be**

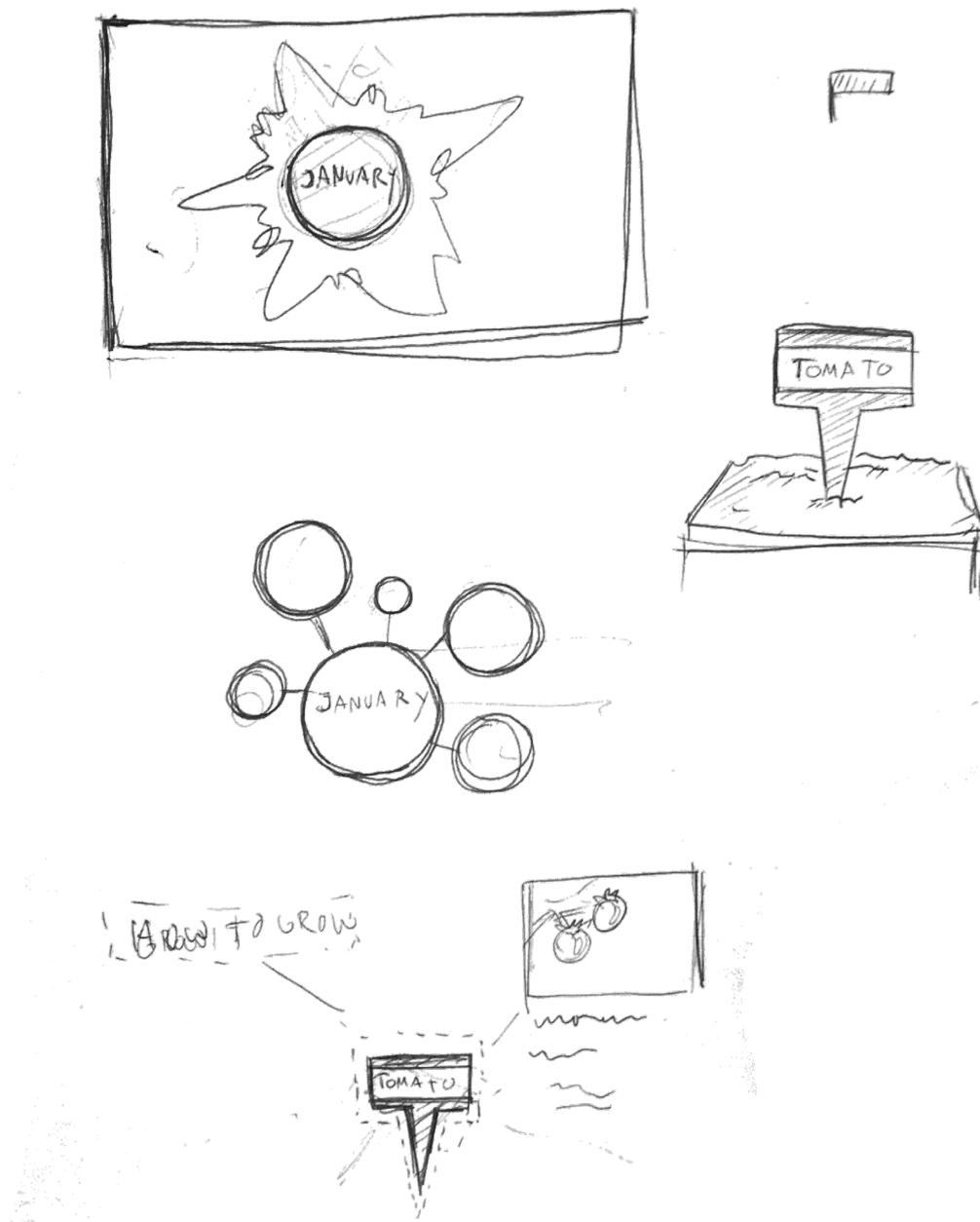
PROVOCATIVE

EVOKING



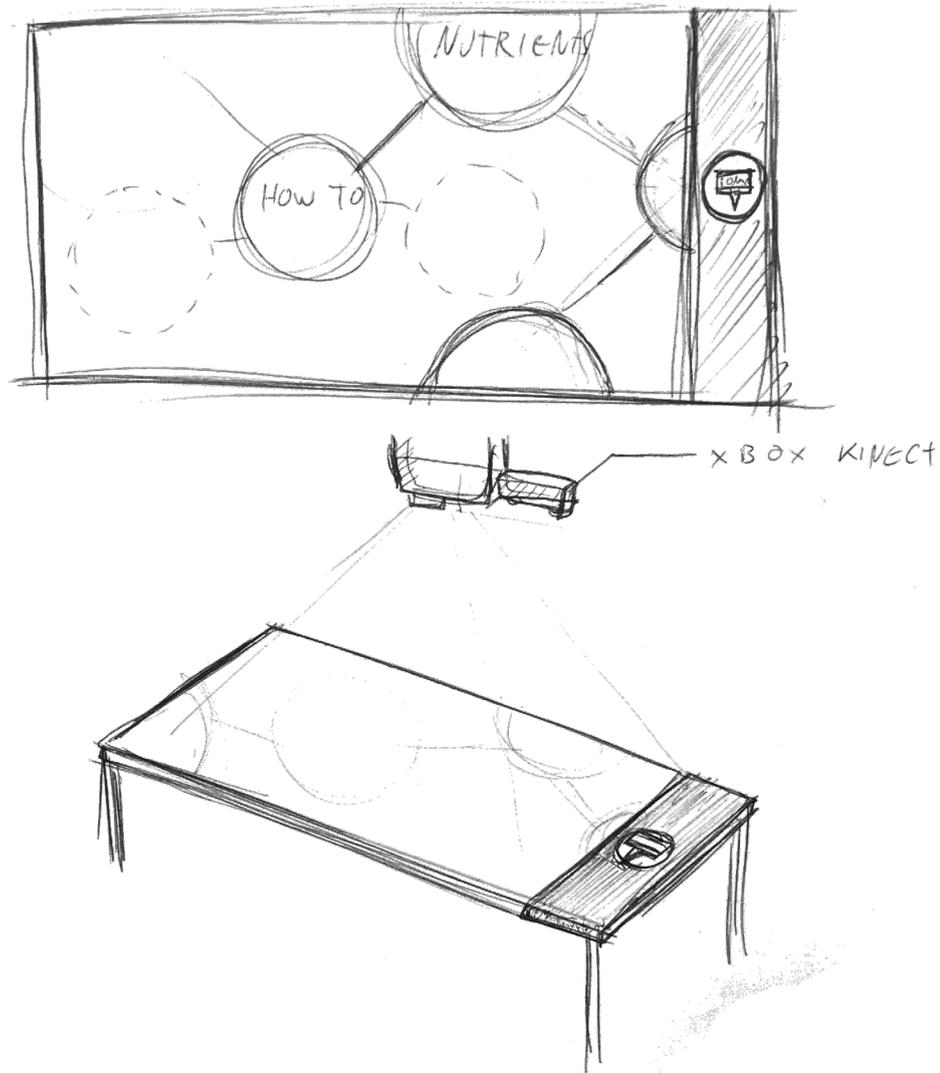
The new brief, which focuses on screen or projection based media was an opportunity to work on Vegograph. Vegograph is a interactive food calendar which informs and teaches people about seasonal vegetables.

The main intention this project tries to achieve is to encourage the people of the university to eat more local and seasonal and in the best case, to start growing vegetable by themselves.



In the first part of the project I focused on the interaction with the object and also thought about how it should display the information in a interesting but still informative way.

Because gardening is a manual work I tried to find an Interaction which could combine the physical and the digital world. That is where I came up with the idea to use RFID chips in plant labels, which could trigger specific actions on the digital system.



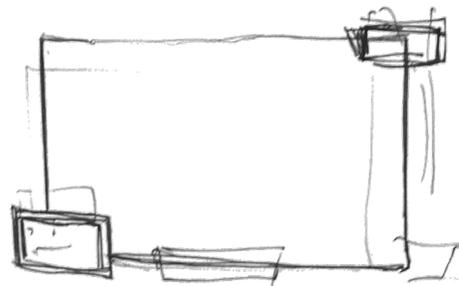
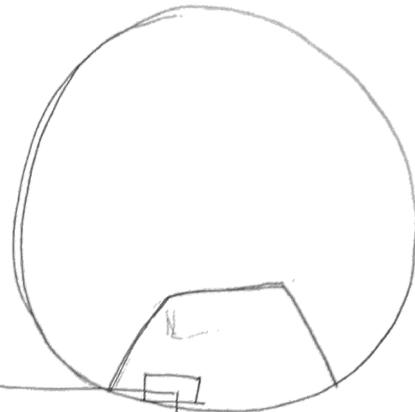
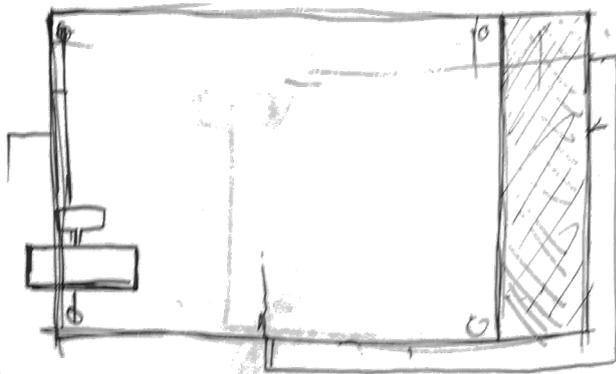
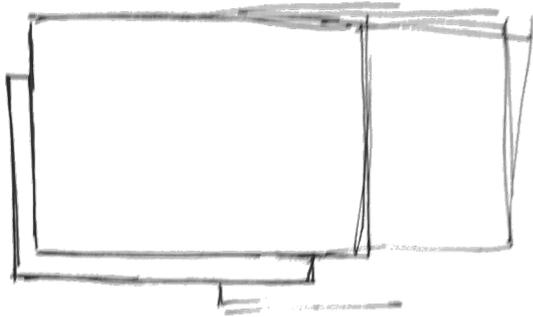
In the first iteration of Vegograph I thought about a work table which is used as the projection surface. Through motion tracking the user is able to navigate through the interface and by placing the label tag on the desk, a tutorial about how to grow the specific plant will pop up.

This is possible by using a xbox kinect, which has the capability to not only track 2 dimensional motion, but also 3 dimensional motion and also colour.



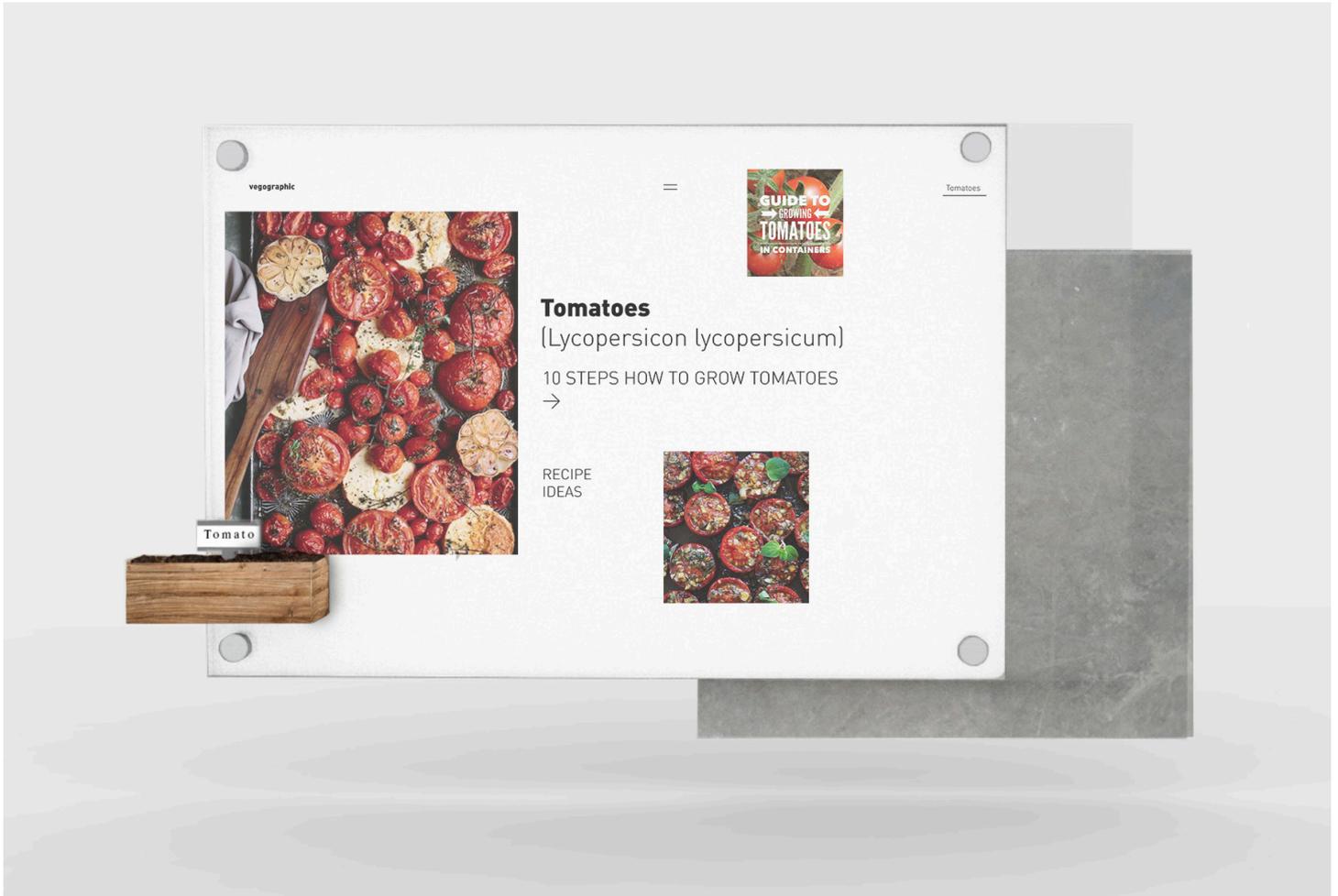
Instead of using a common table as a surface I thought of creating a table which is specially made for the Vegograph. Interaction happens through rotating motions which are tracked by the Xbox Kinect device.

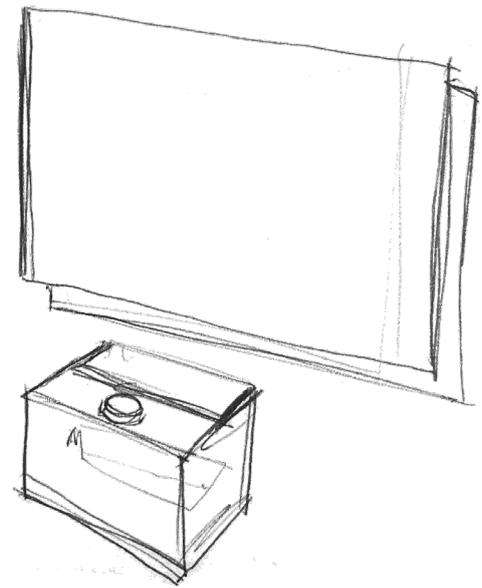
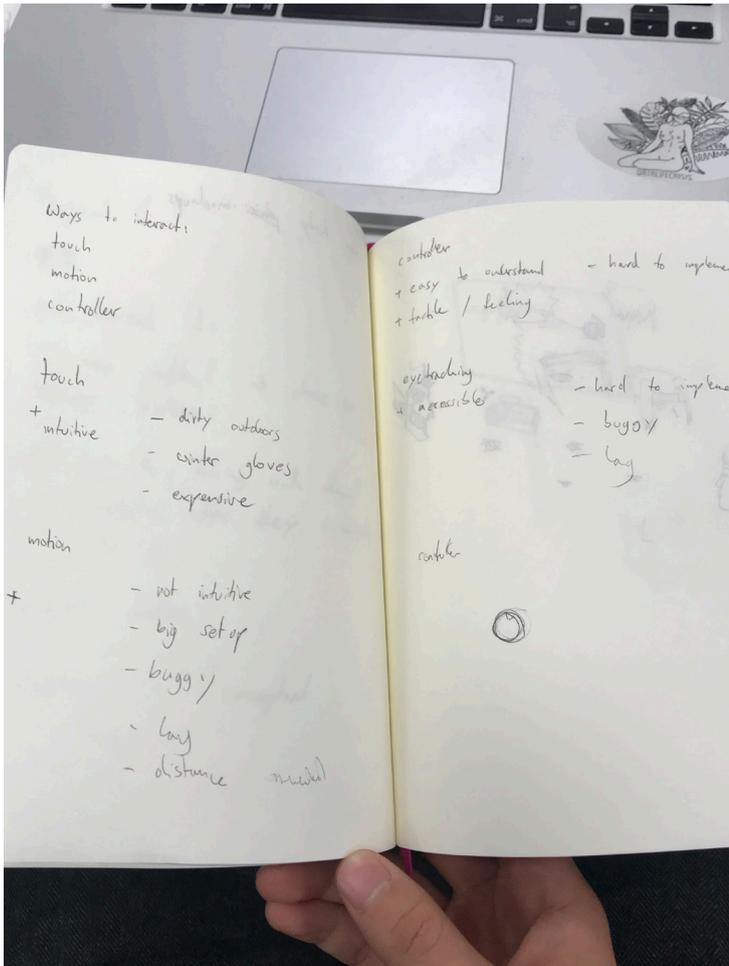
Instead of tracking the plant tag, an Arduino enhanced plant pot is used which scans an RFID chip which is implemented in the plant tag.



A workdesk as a medium of projection turned out to be a problem. The dirt makes it difficult to get a clean projection and the projection itself could disturb the user in his work.

Therefore a it was decided to project on a surface which is mounted to a wall.





By projecting the mockup of the interface in the studio I realized that motion tracking was not the right way to interact with the Vegograph, considering the environment it was supposed to be set up in.

Therefore I had to change the concept of the wall-mounted screen and combine it with a controlling element.

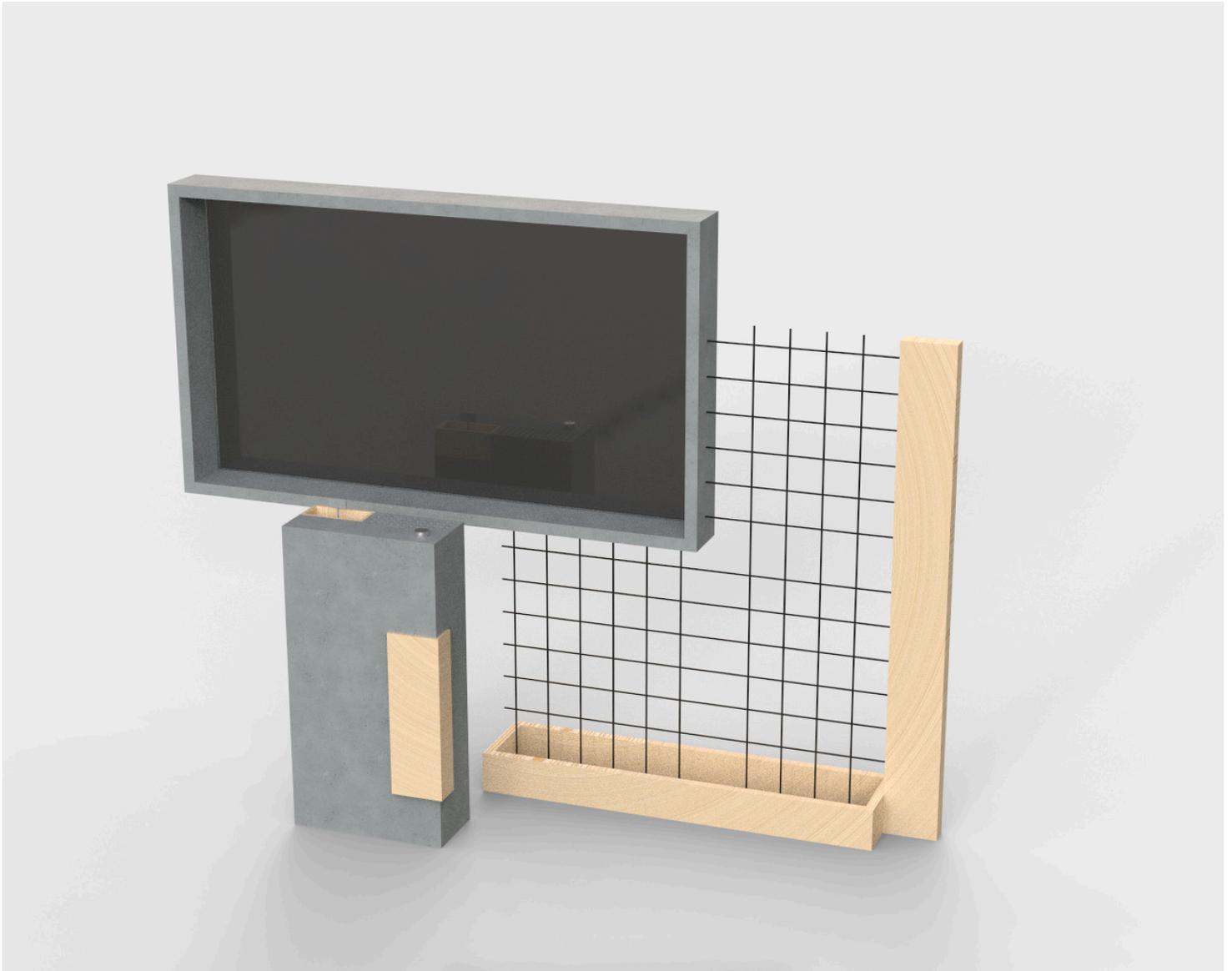


I decided to add a terminal, which consist of the projector, the plant pot and also a controlling push-turn button.

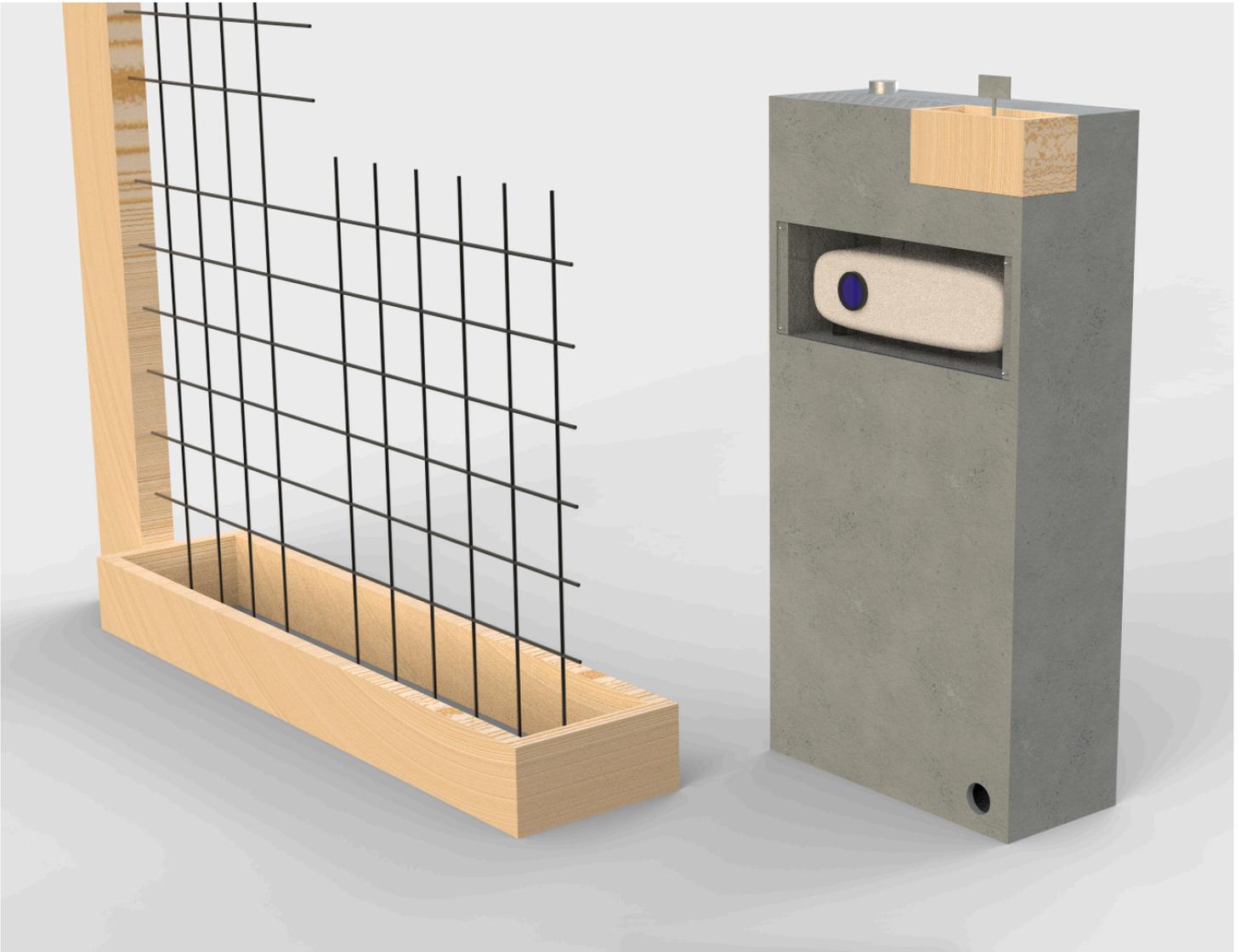
Concrete has been chosen as the main material because it is very durable.



_FINAL DESIGN

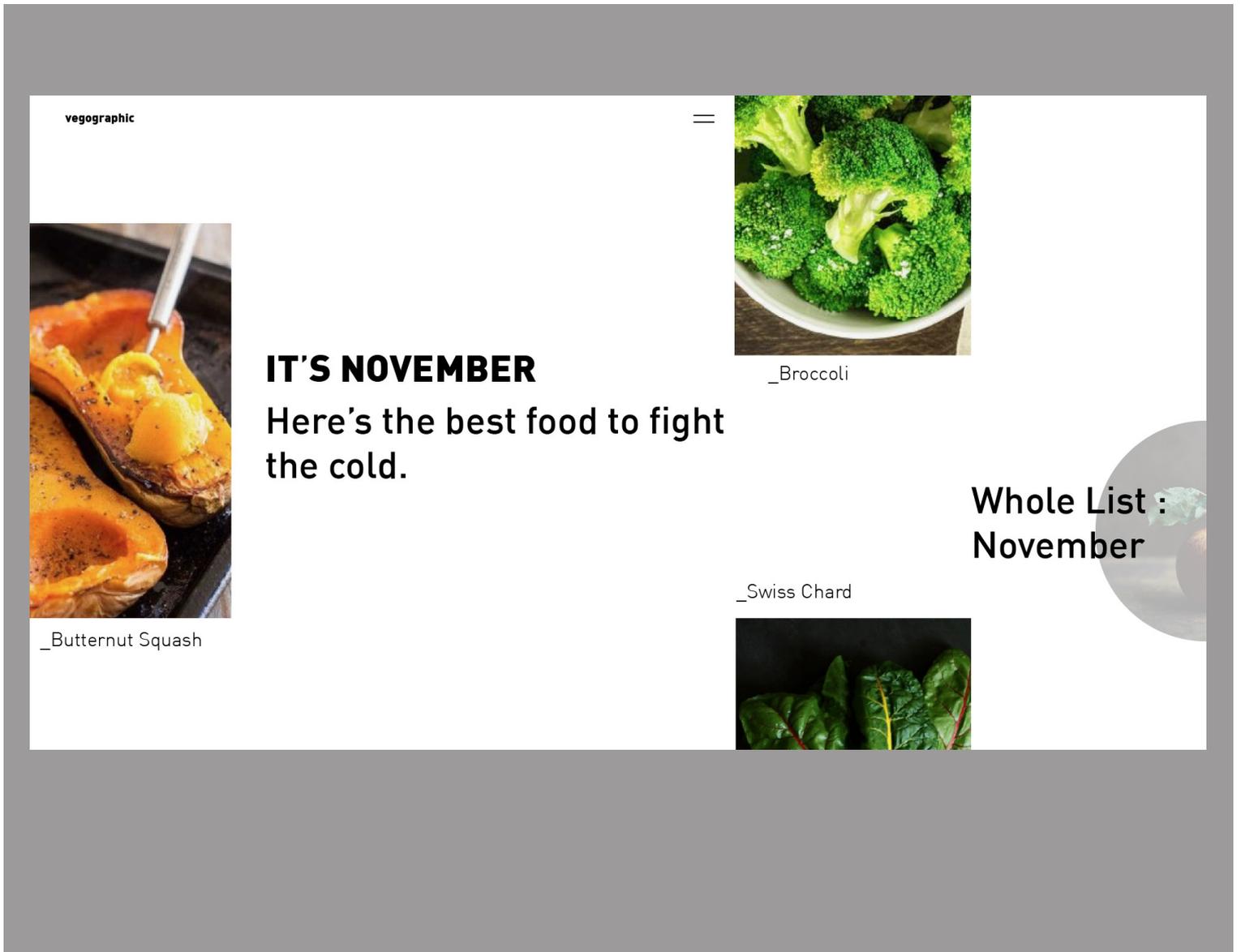


In order to blend in with the garden, more wooden elements have been added and a vertical growing plant pot has been included which should help catching the attention of the people.

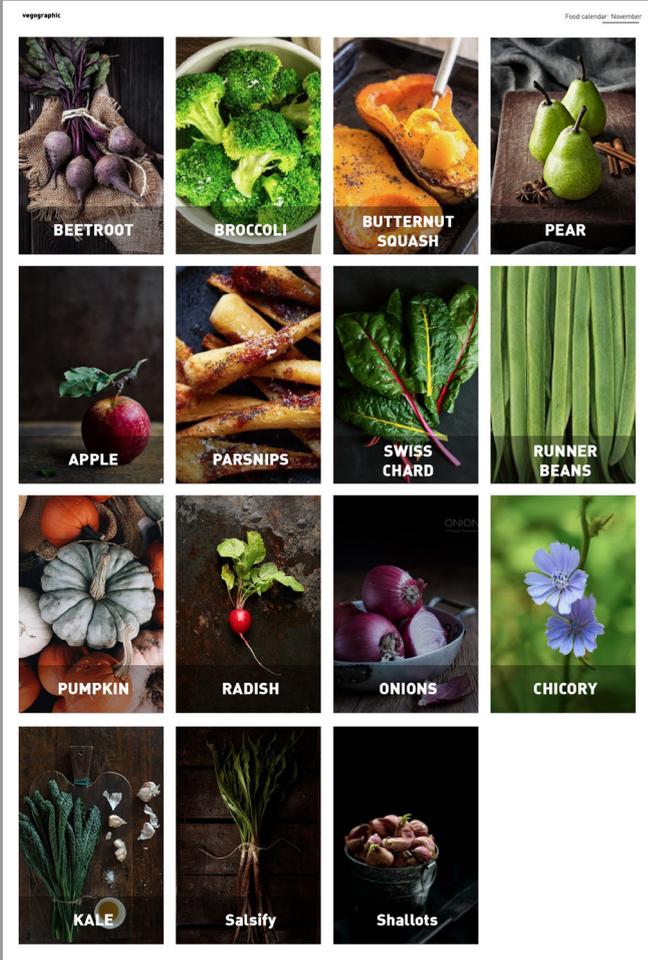


One of the most important aspects of this project for me was to make it realizable. All the elements of this concept has been designed to a level where all the manufacturing details have been set. Every screw and cable tray has been considered in the design process.





3 Scenarios of the final Interface have been developed. The standby screen, the vegetable overview and one tutorial for growing beetroot.




Beetroot
(Beta vulgaris)

Best in:
January, February, March
October, November, December

HOW TO GROW BEETROOT [90 Days] →

How to sow seed



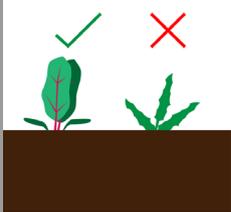



Make a 2cm (0.75in) deep trench with the corner of a rake (or a cane will do) and drop in two seeds every 10cm (4in).

Cover, water well and label - when the seedlings are about 2cm (0.75in) high, remove the weakest of each pair to leave one beetroot seedling every 10cm (4in).

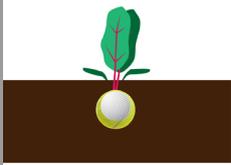
If you want a plentiful supply of beetroot, sow seeds every month, keeping rows 20cm (8in) apart.

Aftercare



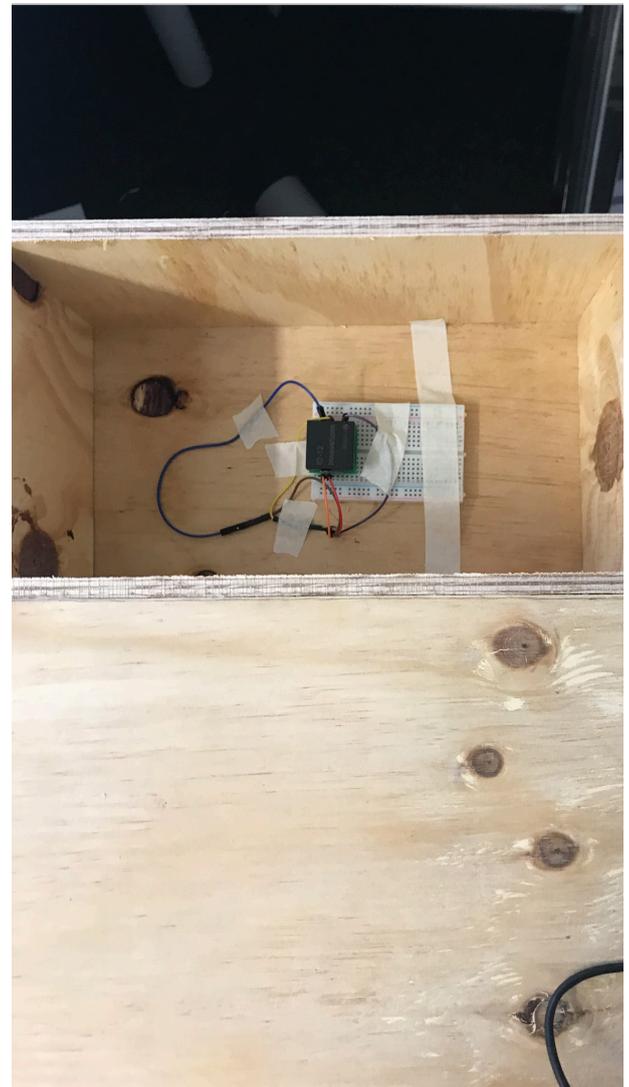
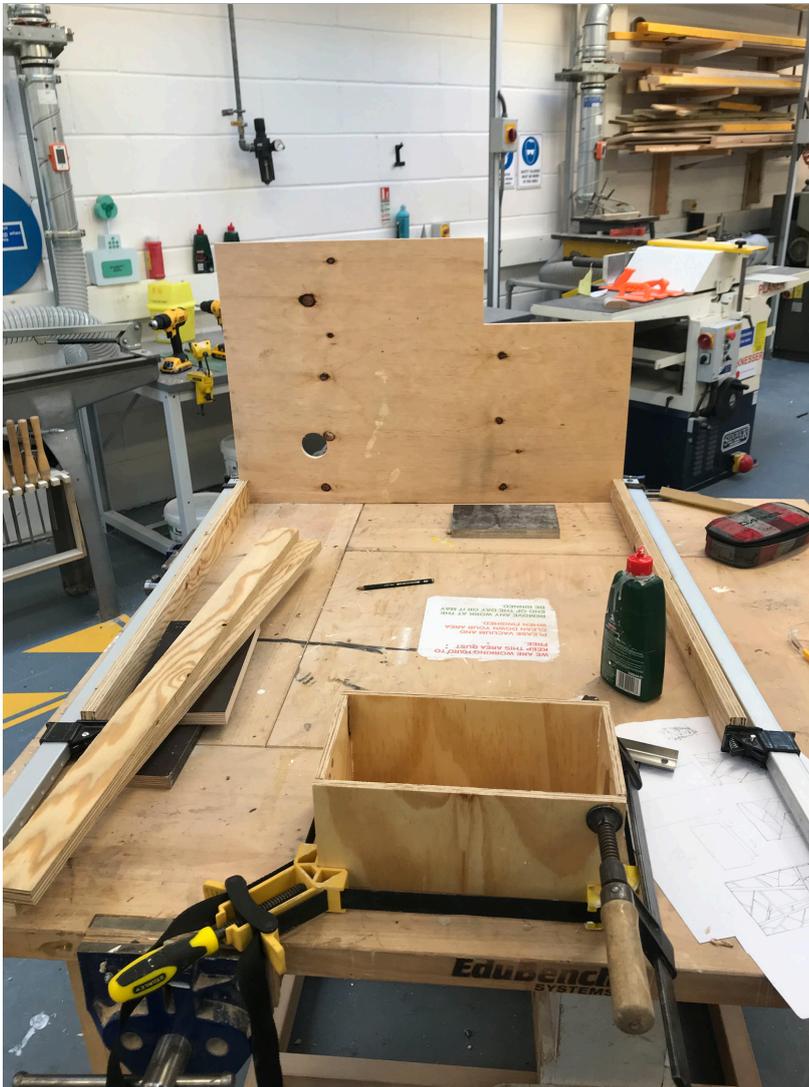
This is really easy. Remove weeds and keep seedlings well watered, especially during dry periods as this will stunt the growth of plants.

Harvesting



Depending on variety, beetroot is ready to be picked when the roots are between the size of a golf ball and a tennis ball - this is usually 90 days after sowing. To harvest, gently hold the tops and lift while levering under the root with a hand fork.

Remove the tops by twisting them off with your hands to prevent the plants bleeding their juice - don't throw these away, they have bags of taste and can be cooked and eaten like spinach.



Modelmaking was an essential part of developing the final design. Every adjustment in measurements gave immediate haptic and visual feedback which made finalizing the technical aspects of this project easier.

