Progrès de l’outil d’avocat

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Quoi?

- Client adore les avocats
- Utilise un outil sous-optimal
- Besoin d’un outil pour l’aider
- Veut un outil a une main
- Concentrée sur la stabilization

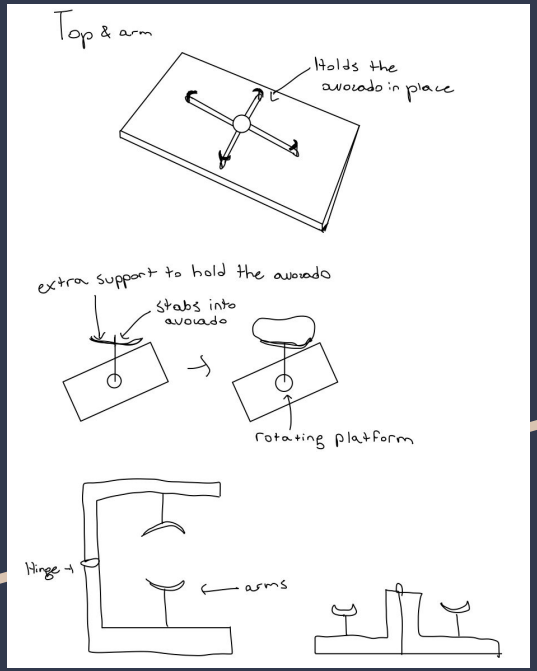
Besoins

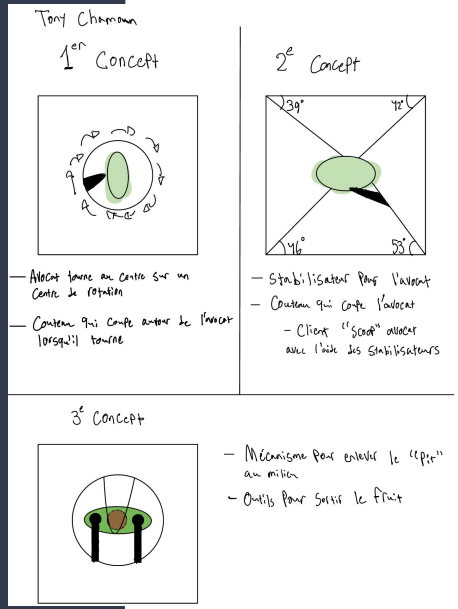
- Simple à laver
- Portable
- Pas plus grand que l’avocat
- Simple à utiliser
- Capable de couper, enlever le noyau et vider
- Utilisable avec une seule main
- Securitaire

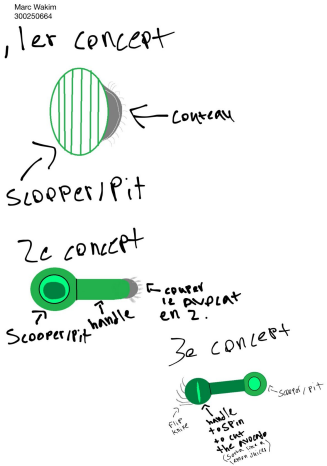
Spécifications cibles

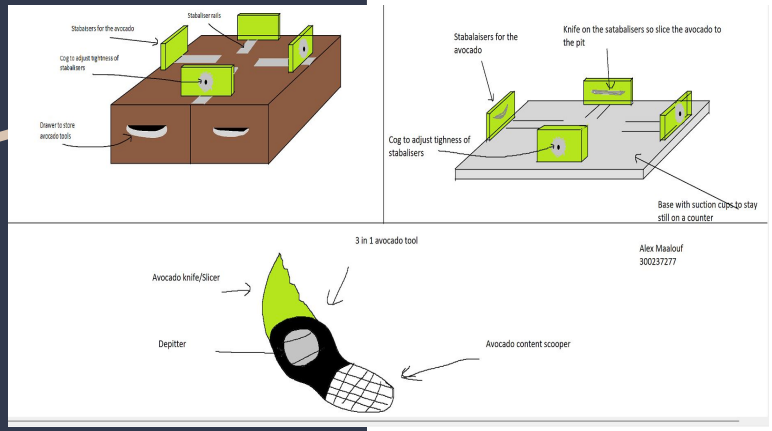
N$_o$ métrique	Métrique	Unité	Valeur marginale	Valeur idéale	Valeur prototype
1	Weight of object	g	≤ 600	≤ 400	<400
2	Rigidity of object	Pa	≥ 35	≥ 40	≥ 40
3	Dimension of the base	m	≤ 0.30 x 0.35	≤ 0.20 x 0.25	0.20 x 0.25
4	Length of blades	cm	≤ 25	≤ 20	8
6	Force required to cut	N	≤ 30	≤ 20	≤ 15
8	Price	$	≤ 50	≤ 30	14$
9	Force required to scoop	N	≤ 20	≤ 15	≤ 10
10	Static friction of the board	N	≥ 30	≥ 40	≥ 50

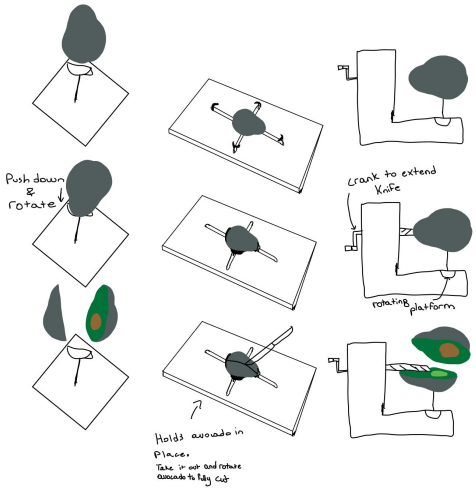
Concepts Initiale

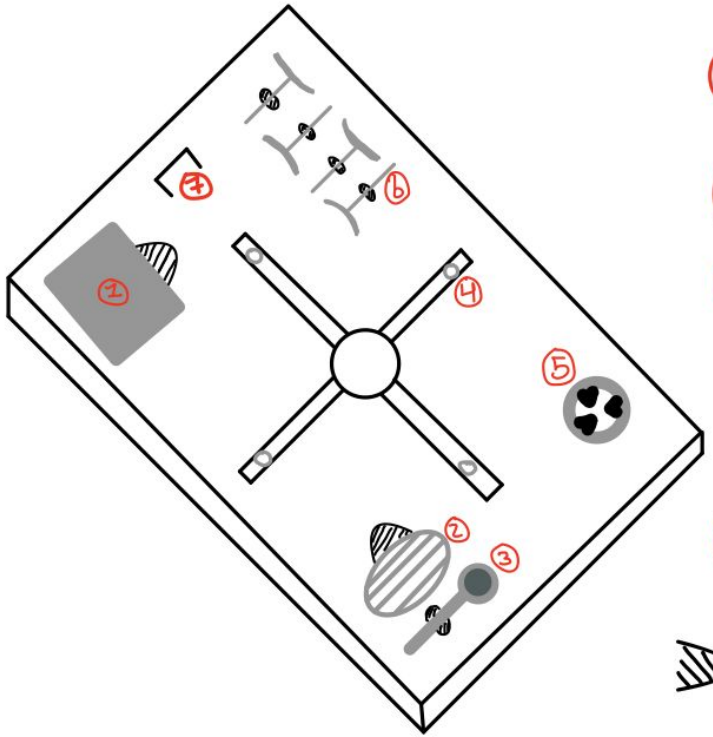












1. A knife implemented in the board which can be raised and held up right to allow for a manual cut of the avocado
2. A slicer tool that allows you to scoop out the fruit from the shell into little slices
3. A spoon tool used to either de-pit or scoop out the avocado
4. Holes which allow for the
6. avocado arms to go into
5. A depitter tool
7. A elevated metal bar that acts as fingers

= Indents in the board to allow for easy removal of the equipment

Étalonnage

Legend:

+1: Better than

0: Neutral

-1: Worst than

Nº of metrics	Nº of needs	Metrics	Importance factors	Unit	Product 1 [1]	Product 2 [2]	Product 3 [3]	Product 4 [4]
1	1,3	Weight of object	0.07	g	-1	+1	-1	0
2	3	Rigidity of object	0.11	Pa	0	+1	-1	-1
3	1,7	Dimension of the base	0.11	m	-1	+1	0	-1
4	1,4	Length of blades	0.07	cm	+1	-1	0	-1
6	4	Force Required to cut	0.07	N	+1	0	0	0
8	9	Price	0.11	$	0	-1	+1	0
9	6	Force Required to scoop	0.15	N	0	0	0	0
10	3	Static friction of the board	0.11	N	+1	+1	-1	-1
Total					+0.07	+0.22	-0.18	-0.40

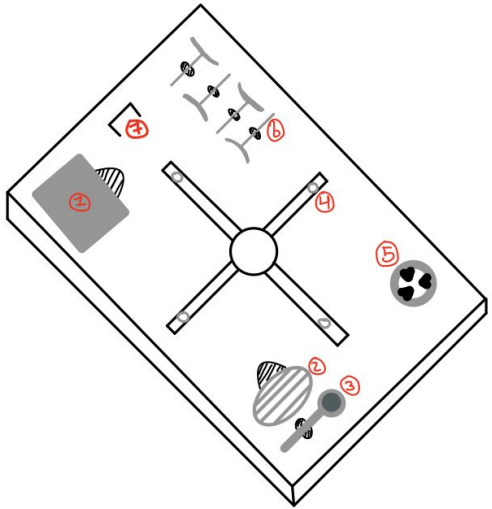
Etude de faisabilité

- Projet est faisable
- Conception Simple
- Matériel n’est pas complexe
- Sécurité (couteau)
- Besoins du client sont simple

Discussion clientele

Aimé:

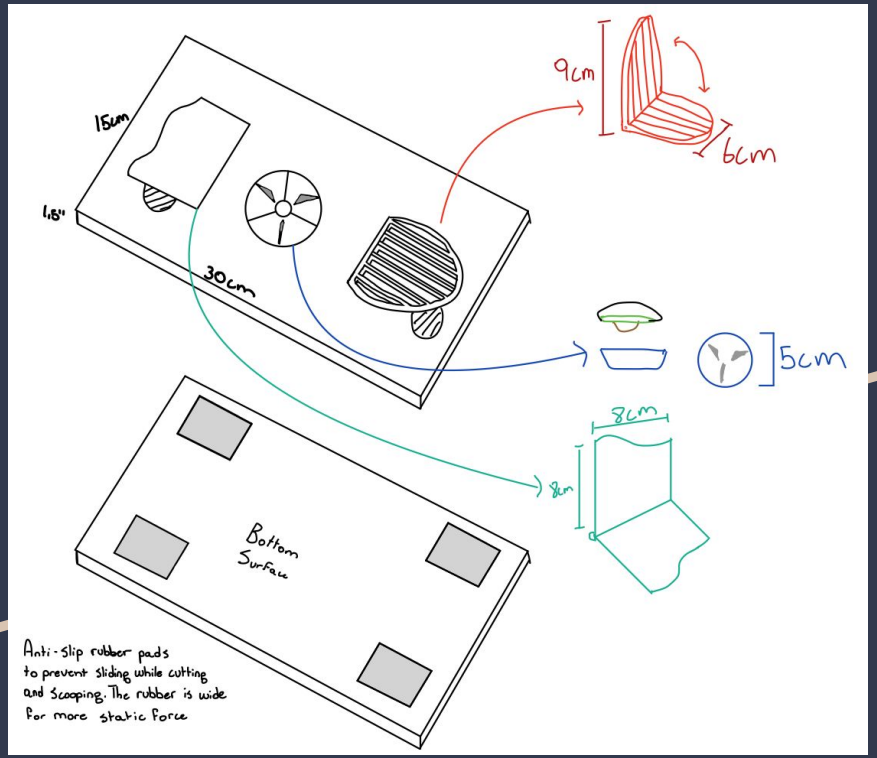
- Le couteau est rétractable
- Les outils peuvent se tenir debout eux même

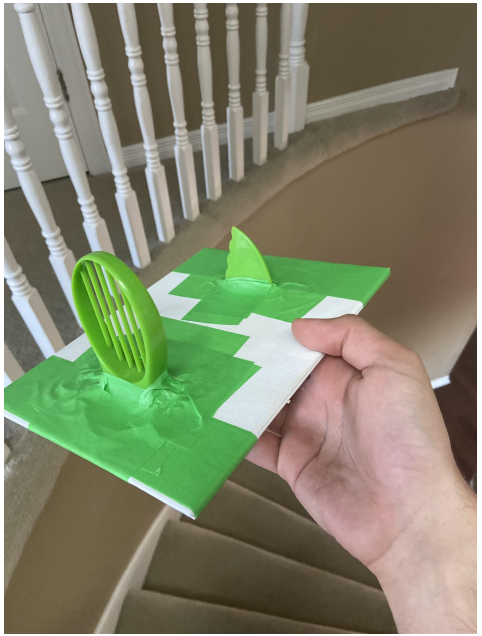


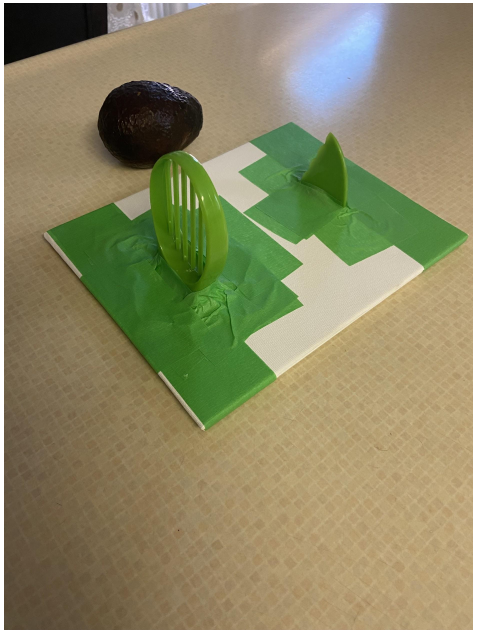
Pas aimé:

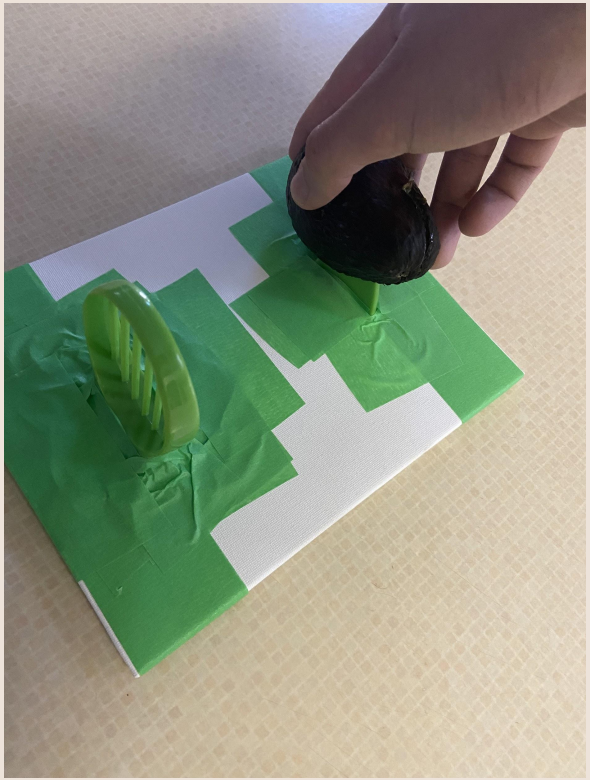
- Trop complex
- Bras stabilisateur
- Materiaux
- Mauvaise expérience de l'utilisateur

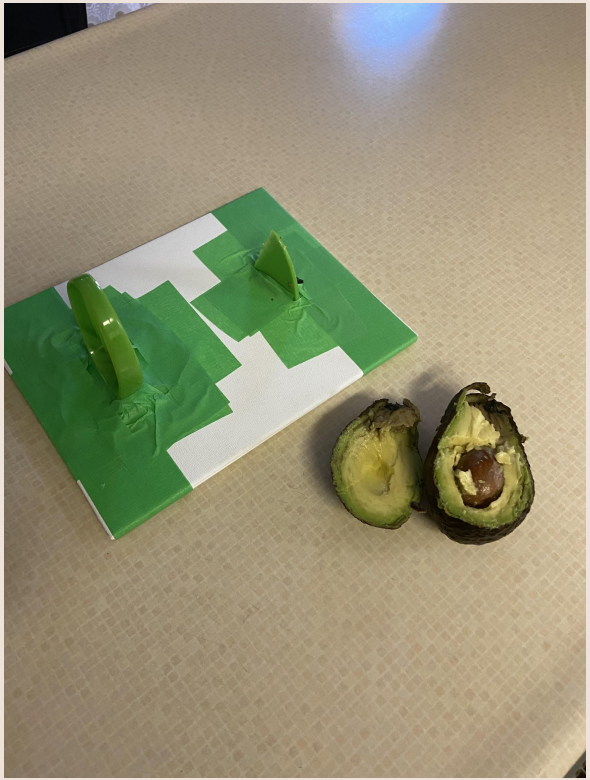
Prototype Initial











Discussion TA et prof

Securité

Materiaux

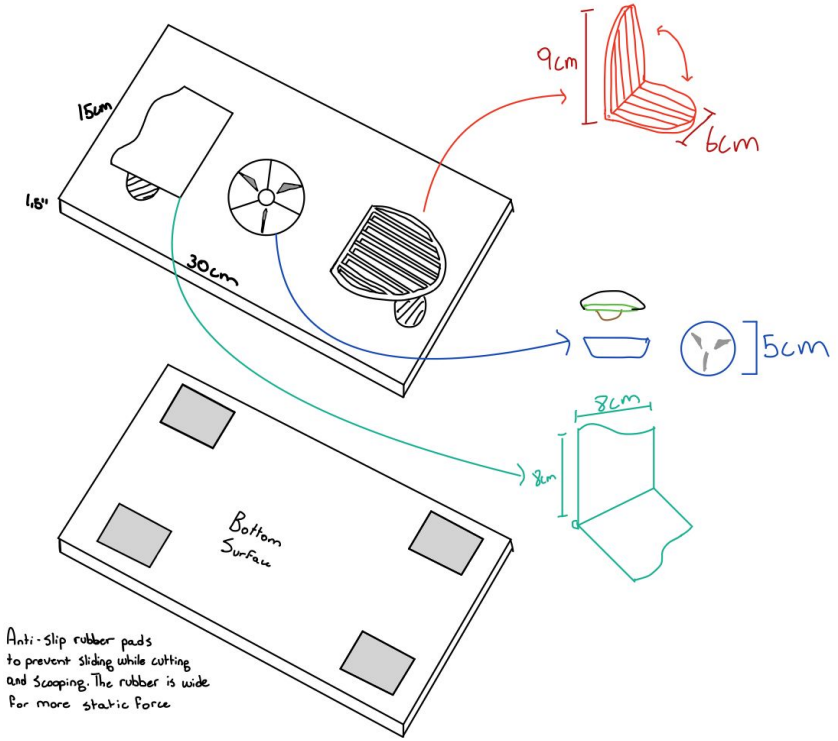
FDA

Discussion TA et prof.

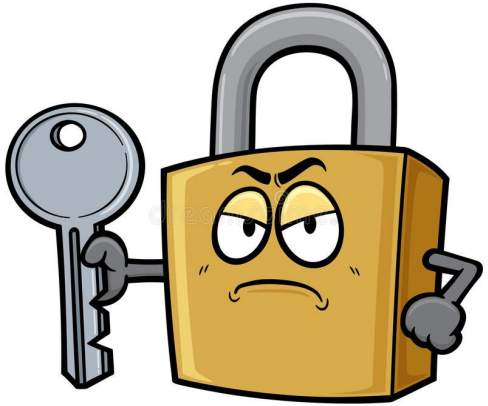
Details:

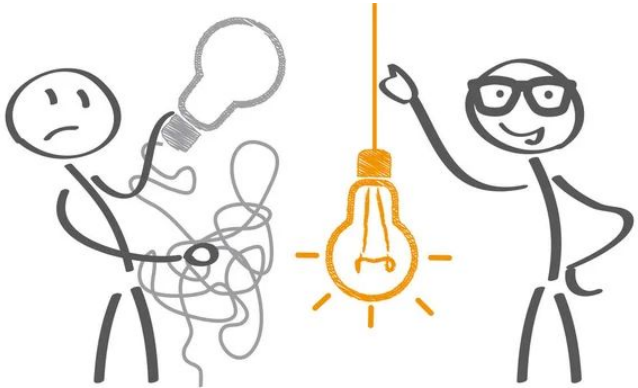
- Mécanisme de rotation

- Mécanisme de verrouillage



Prototype future





Prochaine rencontre

- Que pensez vous d’ajouter de la hauteur
- Que pensez vous des ventouses
- Qu’aimez vous des changements
- Que n’aimez vous pas des changements

Metrique à tester

- Masse de l’objet
- Durée de conservation
- Force statique
- Stabilité
- Rigidité
- Dimension

GuacaMerci

Wrike

https://www.wrike.com/frontend/ganttchart/index.html?snapshotId=V752C2aLn2tVrgA1joBcVWr3n4Mgx5eE%7CIE2DSNZVHA2DELSTGIYA