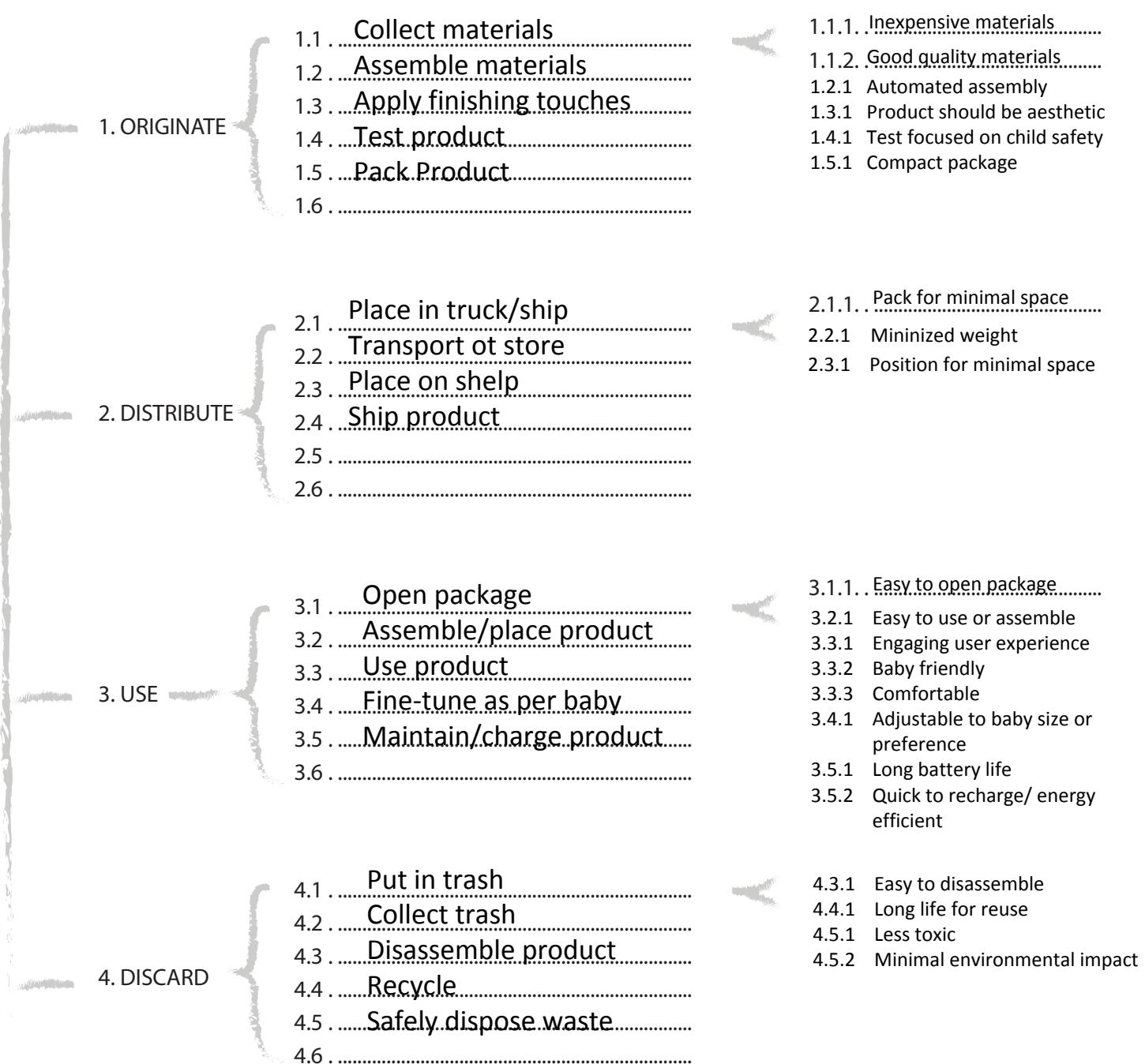


Assignment 5&6

1: Updating and elaborating your list of requirements

Step 1: Creating a Process Tree



1: Updating and elaborating your list of requirements

Step 2: Writing down Requirements

Requirements

- 1. Inexpensive
 - 1. Durable
 - 1. Aesthetic
 - 1. Easy to produce
 - 1. Aesthetic
 - 1. Child safe
 - 1. Portable
 -
 -
 - 2. Light
 - 2. Excellent packaging
 -
 -
 -
 -
 -
 -
 - 3. Easy to use
 - 3. Engaging
 - 3. Comfortable
 - 3. Adjustable
 - 3. Energy efficient
 -
 -
 -
 - 4. Recyclable
 - 4. Environmental friendly
 - 4. Cheap to recycle
 -
 -
 -
 -

Demands

Inexpensive

Durable

child safe

Excellent packaging

Easy to use

Comfortable

Adjustable

Aufgaben

Environm...

Adjustable
Environmental friendly

Wishes

Easy to produce

Aesthetic

Portable

Light

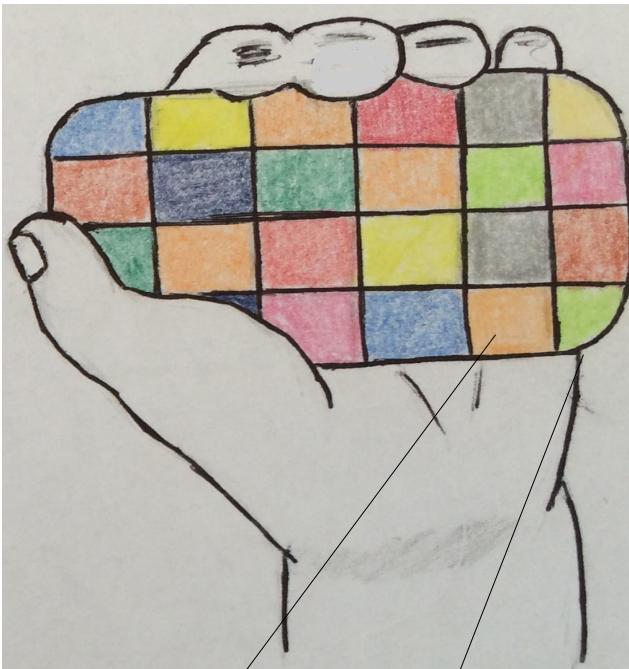
Engaging

Energy efficient

Recyclable

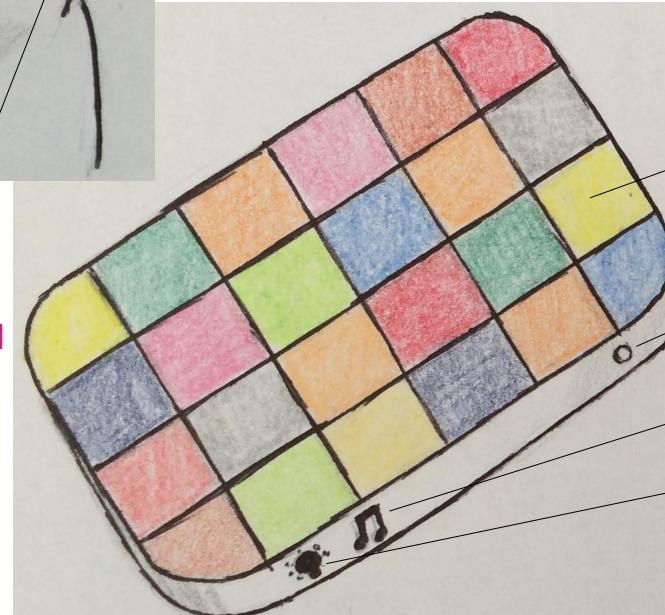
Inexpensive to recycle

2: Developing three concepts



Curved edges for child safety

Light, slim, and compact for easy baby handling.



Tips:

- draw & describe your concept
- draw your concept in the context in which it will be used
- draw in perspective
- include a sketch of a human figure to provide more visual information about the size and shape of your concept

Concept 1

Title of your concept: Hushaby

Description:

Aesthetic and easy to handle item with rhythmic change of colors and music or lullaby.

Why this concept solves your design challenge:

This pacifier of sorts could soothe a baby and, even better, help baby sleep by its calming music and shifting colors; thereby freeing parents.

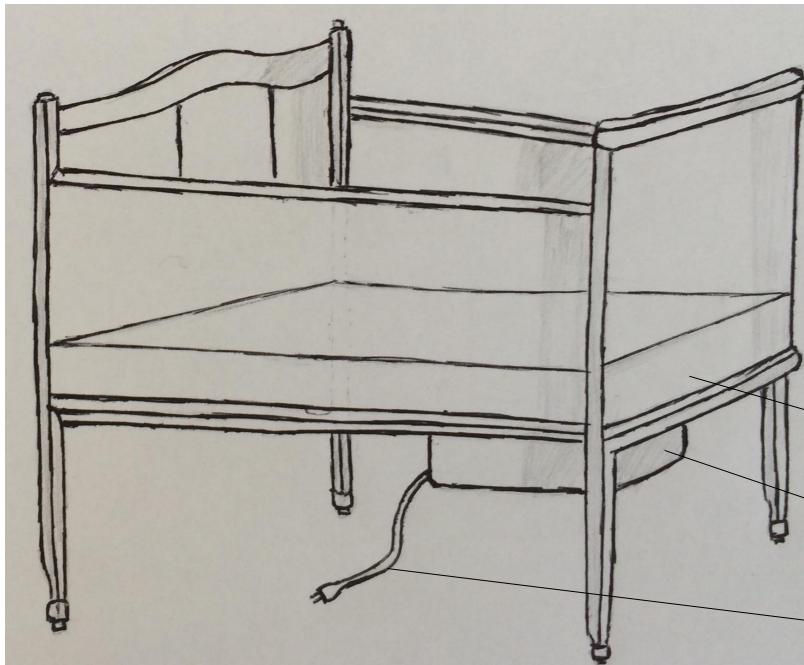
LEDs covered with plastic.
Product has the same form at the other face as well.

Light sensor to adjust LED brightness.

Button to adjust both volume.

Button to select LED rhythm with its corresponding music.

2: Developing three concepts



Tips:

- draw & describe your concept
- draw your concept in the context in which it will be used
- draw in perspective
- include a sketch of a human figure to provide more visual information about the size and shape of your concept

Electric plug



Level mattress

Mattress swelled
on the right

Mattress now
shrunk on the
right

Concept 2

Title of your concept: Cradulous

Description: A sensor to baby's cry would trigger a reciprocating localized expansion & contraction of a mattress to simulate swinging by a pump; while producing a white noise.

Why this concept solves your design challenge:
The cradle's reaction would activate a baby's calming reflex. Parents would only have to change diapers or breastfeed.

Lower half of the mattress is filled with air

Pump fitted with an audio sensor to anticipate baby cry. The pump has air reservoir that it distributes to the left and right side of the mattress in reciprocating fashion. Such suction consequently creates white noise.

2: Developing three concepts



Tips:

- draw & describe your concept
- draw your concept in the context in which it will be used
- draw in perspective
- include a sketch of a human figure to provide more visual information about the size and shape of your concept

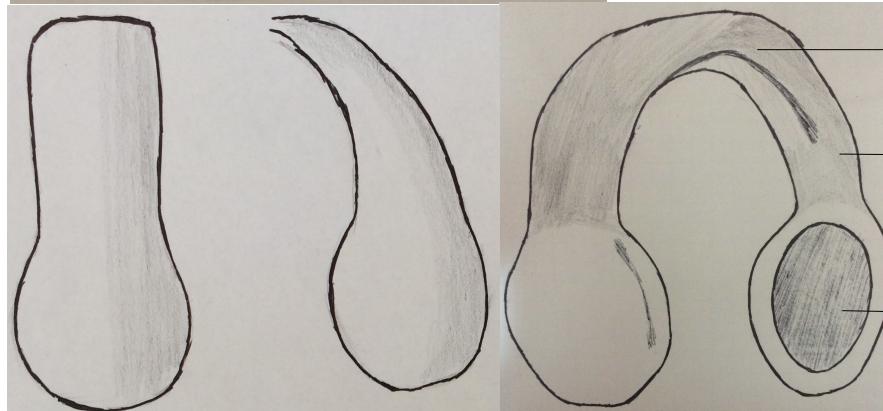
Concept 3

Title of your concept: Serenity

Description: This item attached around head minimizes ambient noise well below arousal threshold. It leverages on the fact that babies should sleep on their back.

Why this concept solves your design challenge:
Baby's hinderance to parent's ritual is greatly minimized as parents could carry on their ritual without tiptoeing.

For use while baby is asleep



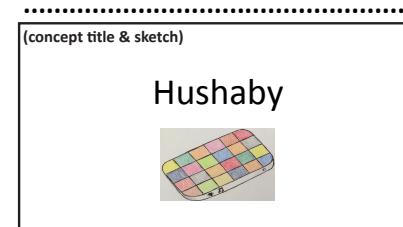
Shapable design

Headphone style shape for easy fit

Soundproof foam inside that would cover the ear area

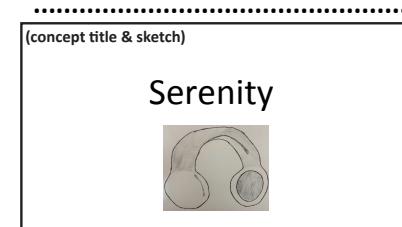
3: Using a Harris Profile to select a concept for further development

List the (most crucial) wishes from your program of requirements here



Engaging

Explain the choice you've made. Use arguments based on the criteria you used in the Harris profile, and why this particular concept provides the best "fit" with your design challenge.



Portable

Aesthetic

(concept title & sketch)	Serenity	
(concept title & sketch)	Cradulous	

Light

The figure consists of two 6x4 grids. The top row of each grid has labels: --, -, +, ++. The left column of each grid has labels: --, -, +, ++. The bottom row of each grid is entirely white. The middle four rows of each grid contain black squares. In the first grid, the black squares are located at (2,2), (3,2), (4,2), (5,2), (6,2), (2,3), (3,3), (4,3), (5,3), (6,3), (2,4), (3,4), (4,4), (5,4), and (6,4). In the second grid, the black squares are located at (2,2), (3,2), (4,2), (5,2), (6,2), (2,3), (3,3), (4,3), (5,3), (6,3), (2,4), (3,4), (4,4), (5,4), and (6,4). A 3x3 block of black squares is highlighted on the right side of both grids.

Energy efficient

I have chosen Hushaby because, it is engaging and portable at the same time. Additionally, a child would usually wake up for reasons that have nothing to do with noise. This product would assist in distracting babies as well as facilitate babies' sleep.