

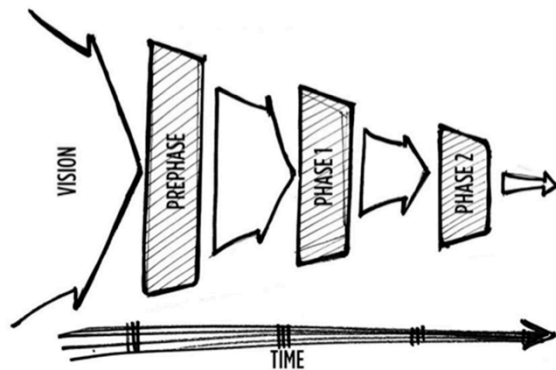
## Design Theory & Methods

: Current members: Euiyoung Kim, Daniel Lim, Ingrid Hong, Serena Chang, (Research Advisors: Prof. Alice Agogino, Prof. Sara Beckman)

# Design Roadmapping: User Experience Focused Strategy

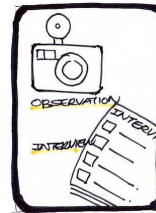
## What is Design Roadmap?

: A canvas that reflects expected core design elements acquired throughout various types of design activities over time.



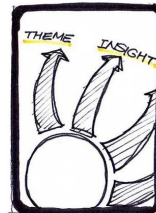
	Phase 1 Jerry the Bear beta (3Q 2012)	Phase 2 Jerry the Bear final (4Q 2013)	Phase 3 Jerry the Bear platform (3Q 2015, estimated)
<b>Design Roadmap</b>			
Core Experience	Make learning about diabetes fun through game play.	Learn about diabetes through a combo of free play and guided play.	A combo of free play and guided play. Take care of Jerry to make sure he is happy and healthy.
Primary User Need	Learning about diabetes should be fun and easy.	Through storytelling, kids relate to Jerry, cope emotions while learning about diabetes.	All kids with chronic diseases want to cope their emotions & learn about their disease through play. Wellness is core to everyone.
Outcome	Newly diagnosed kids love Jerry but too easy for kids who had type 1 diabetes for a longer time.	Able to articulate symptoms, increase in confidence, able to master carb counting for kids with type 1 diabetes.	Emphasis in wellness as a main curriculum paired with disease specific curriculums. Platform is transferable to all diseases. Need more testing with users + Food allergies.
<b>Technology Core Roadmap</b>	Arduino, Mono-color Nokia Screen, Speaker, AA batteries, Build a Bear shell.	Color-touch screen, Speaker, Android-based, Lithium-ion rechargeable battery, Easy to clean asthma friendly fabric.	Core Processor, NFC Tags, light sensors, Application implementation (diagnostic tools, content media), feeding foods, physical accessories & content bundle (epi-pen), NFC tags, content bundle (food Allergies).
<b>Product Roadmap</b>	BGL check, Insulin dosing, feeding foods, 6 injection sites, light sensor color detection based feeding.	BGL check, insulin dosing, feeding foods, 21 interactive storybooks, 6 injection sites & 4 tickle spots, RFID based feeding.	Feeding NFC based, Tablet App different short stories and diagnostic tools. Collect play data via software Bear and Tablet are linked via Bluetooth.

## ➤ 6 Steps of the Design Roadmapping



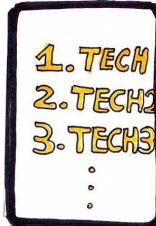
### a. Conduct Comprehensive Design Research

Selective in-depth interviews, behavioral observations for unexplored needs and opportunity spaces for innovation. Comprehensive online surveys. Find out pain points and develop frameworks for identified problems.



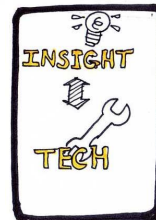
### b. Extract Common Themes and Insights

Synthesize data to create common themes and insights for the future. Narrow down user group focus and create primary and secondary personas and use scenarios. Record key observations and data from these personas and use scenarios.



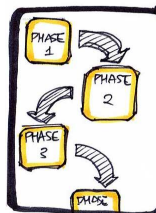
### c. Identify and Prioritize List of Technologies

Research different existing technologies and functionalities. Brainstorm potential new features. Prioritize these technologies based on stages of development. Select which technologies would be beneficial and useful for the target personas.



### d. Map Technologies to Human Insights

Prioritize technologies based on needs that stem from human insights, and examine how technologies can be applied to address opportunity spaces and pain points of target user groups.



### e. Create a Design Roadmap

Combine elements from user research and technology analysis to map out a plan that integrates human-centered solutions with targeted technologies. Create a cohesive collective shared vision for a design team.

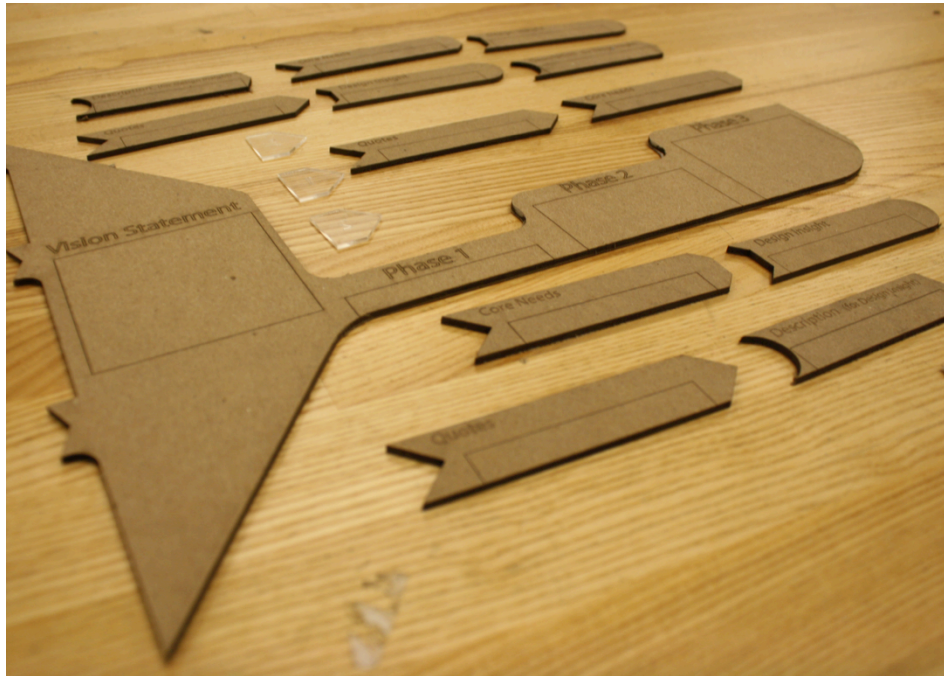
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# Design Roadmapping: User Experience Focused Strategy

## ✓ Tangible Design Roadmapping Puzzles

A set of puzzles for team based activities for managers, designers, and engineers.



## ✓ Tangible Design Roadmapping Worksheets

A set of worksheets for individual design roadmapping exercises.

### Design Roadmapping Worksheet (1/2)

#### Key Quotes

Quotations you found out from design research: observation, interviews, Open-ended survey responses.

e.g., "I tend to not use technology when I workout because it doesn't feel natural. I have to input information and then it spits out numbers at the end of the day, not what I associate with working out like feeling good and that sort of stuff"

#### Core Needs

User's desires. Representative latent, unmet-user needs interpreted from key quotes in the previous step.

e.g., *User Needs to feel in control of their own actions and not feel like they are being told what to do, even if it is for their betterment.*

#### Design Insights

Considering your business, actionable design insights to guide the design of your product/service driven by core needs in the previous stage.

e.g., *Empowered-Recommendation*  
The recommendation given by device should be things that allow user to do something with the data acquired. Not tell them what to do but rather give options that allow the user to make their own choice

1.	1.	1.
2.	2.	2.

### Design Roadmapping Worksheet (2/2)

#### Vision Statement

One-liner statement that does describe the clear mid to long-term goal of your business that specific enough including direction, objective of your product/service as well as how, what.

e.g., creating an environment that can improve a user's experience in a work environment by responding to a user's cognitive and emotional states.

3.	
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#### 3 Phases of Your Product/Service Development

Describe them as a form of one of product, service, prototype, and/or experience.

#### Phase 3 (Long-term)

e.g., Increased Ownership of Daily Life

