



Design Challenge



WE PROPOSE 3 DESIGN CHALLENGES

- All about music
- Change
- Empower



DESIGN CHALLENGE

- Design challenge
 - Vague and abstract - you need to re-frame it
 - Overwhelming - only the interaction and visual part matter so don't worry about programming and database management
 - To have more ideas of what level of implementation detail is expected from this course, please see a video recommended in this week (LifeKey)



Design Brief 1



3 STEPS

- Domain research
- Competitive analysis
- Formulating DPS



- Follow the suggestions from the DB1
- Expand
- How do you know you have done enough?
 - Paint points identified
 - Some insights are emerging

- Design challenge
 - Change
- First iteration to reframe the challenge
 - How can we help people become physically more active?



DOMAIN RESEARCH – 1ST ITERATION

- Google “How can we help people become physically more active?”
 - Keep a record
 - Put it in your calendar
 - Make it fun
 - Find a friend
 - Figure it out
 - If you drop the ball, pick it up
 - Reward yourself

It's very rough now. Refine further

- Why it's harmful if we don't regularly exercise
 - Risk of disease (purpose of the product)
- Theories on goal setting
- Theories on making it fun (gamification)
- Theories on persuasion with social influence
- Theories on rewards (badges)
- Theories on self-efficacy



COMPETITIVE ANALYSIS

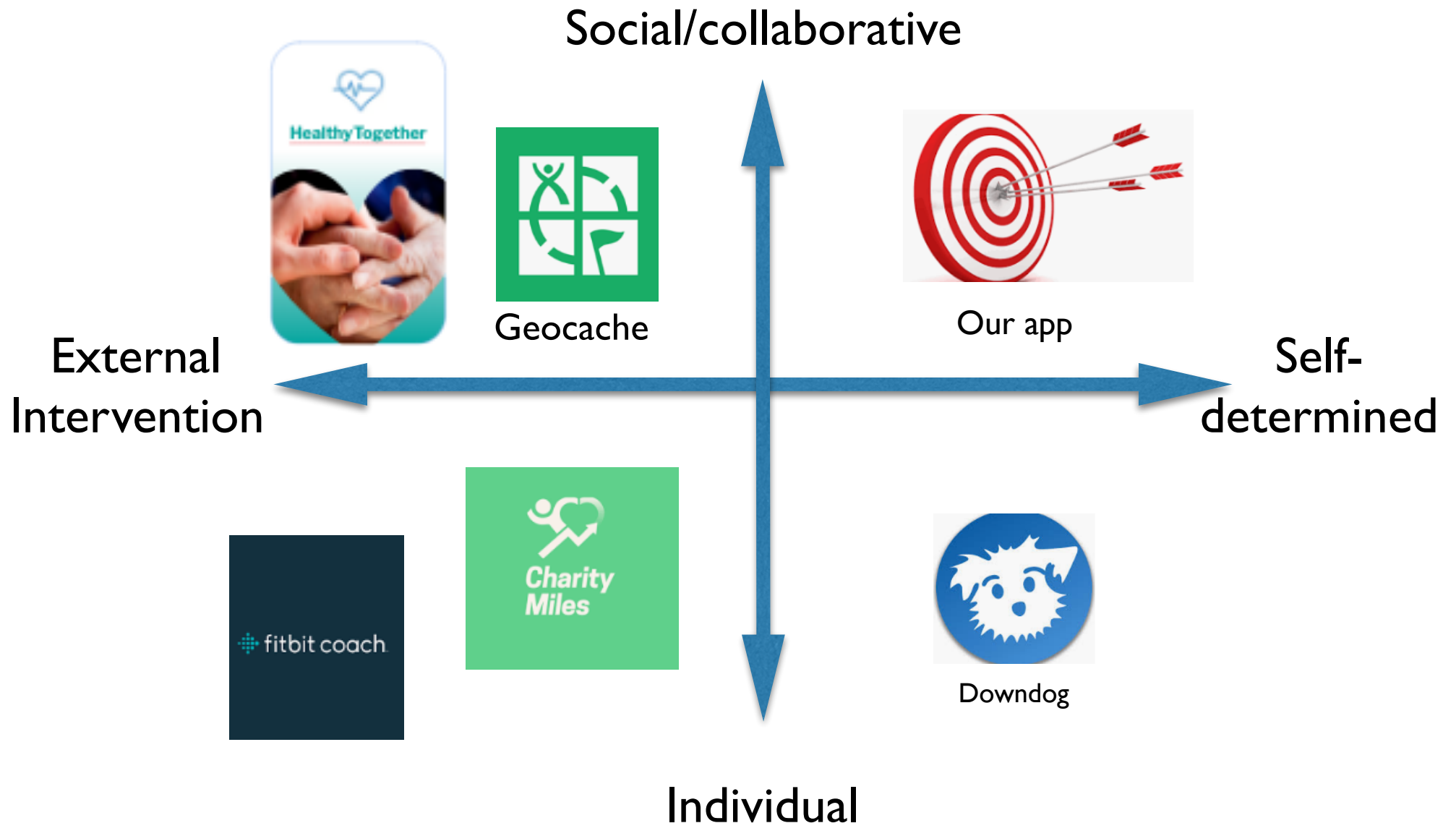
- Survey existing products
- Avoid re-inventing the wheel
- Try to use one or two competitive products yourself
- Important: identify pain points in existing product
- Final step: build a competitive analysis map



LIST COMPETITIVE PRODUCTS

- HealthTogether
- Geocache
- Fitbit Coach
- Charity Miles
- DownDog

PUT THEM ON A CA MAP



- Iterating on the previous two steps should give you a ***Design Problem Statement (DPS)***
 - A DPS is your reframing of the design challenge into an actionable problem statement that will launch you and your group into an ideation of your solution.
 - Three important elements of a DPS: the user, their needs, an insight
 - Important: A DPS is not a solution statement, but sets the general direction for ideation of solutions

First iteration of DPS

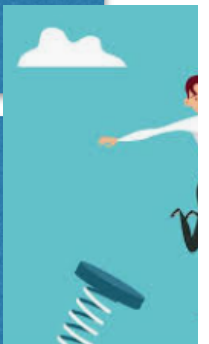
Physical inactiveness is the new smoking. Scientists predict that it will kill millions of people. How can we use technology to help people change their current habits and become physically more active?

This DPS is motivating, but too vague

Second iteration of DPS

New insight - Most apps use social and peer group as incentives, but self-efficacy is a less explored area.

A sedentary person needs an app to find inner strength and self-efficacy to increase his activeness, because when someone is determined to change, it's a much easier journey to overcome barriers and setbacks that may undermine motivation.





DPS EXAMPLE

[USER] needs to [USER'S NEED] because
[SURPRISING INSIGHT]

DPS 1

A teenage girl needs more nutritious food because vitamins are vital to her mental and physical growth

DPS 2

A teenage girl with a bleak outlook needs to feel more socially accepted when eating healthy food, because in her hood a social risk is more dangerous than a health risk.

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Propose solutions to DPS1 and DPS2

DPS1

DPS2

Which DPS gives a better direction for ideation? Why?



WHY DO WE NEED DPS, NOT SOLUTIONS

- In the early stages of design, we intentionally keep a DPS so that we can revisit it when our chosen solutions don't pan out

Three examples from last year



EX 1: INTEGRATE YOUR INSIGHT

Three insights:

- Musical choices are linked to emotions and self identification
- Linguistic style can be revealing as to one's emotional states/goals and identity.
- Most people keep some form of daily diary or journal.

First version of DPS:

An internet user looking for new music online needs a recommendation because it reflects their emotional state and self identification needs.

Re-formulated DPS:

People struggling to find new music **matching their personality and emotional state** need to get recommendations **reflecting content from their digital diaries** because **linguistic style can reveal** complex personal characteristics pointing optimal musical options.



EX 2: INSIGHT IS NOT JUST REASON FOR NEED

First version of DPS:

Depressive people need to listen to music that corresponds to their situation and state of mind because music is a great way to ease a mood change, therefore it can be a good support to other treatments, as music can help transiting slowly from depression to feeling better about oneself.

Re-formulated DPS:

People suffering from depression need to improve their negative moods with the right music **selected for them** because depressed people are **not in a cognitive capacity** to choose music for therapeutic purposes and the **wrong choice could even further exacerbate** their conditions.



EX 3: CONNECT INSIGHT AND NEED

First version of DPS:

An emotional shopper needs to stop their buying because the relief brought by shopping is temporary while the downsides in terms of ecological and ethical aspects remain.

Re-formulated DPS:

An emotional shopper needs to be aware how her **buying behavior impacts the global climate** because her **inclination of being emotional** makes her **susceptible to the ethical appeal** to stop shopping for ecological reasons.

