

# Case Studies : Fairness 1

## Case 1 : Analyzing values in an existing product

### Context:

Values play an important role in responsible design: they represent what people (e.g. designers, users) think is good and important. This activity is designed to help you get familiar with values by first reflecting on the values that are important to you. In a second step, you will look at existing products and the values they implement. Since values are varying in importance between stakeholders, groups, individuals, etc. they can create tensions. Identifying these tensions could help to prevent harms or to make design choices more inclusive.

### Part 1 - Your own values

1. Fill out the "Own values questionnaire" (appendix 1.1).
2. Compare with your neighbor, what are your conclusions about the nature of values?

### Part 2 - How values can manifest in products

Let's analyze **Google Maps** through the lens of values and Schwartz's theory!

Look at:

- the *advertisement* website <https://google.com/intl/en/maps/about>.
- the different *features* of Google Maps in a web browser (make sure to use a private window).

Which values are promoted and/or implemented?

Fill out the "Artifact values questionnaire" (appendix 1.2). Describe how each value is manifested.

### Part 3 - How stakeholders's values are affected by a product

We will now focus on 3 particular stakeholders:

Name	What they want	What they fear
Kai (user)	Kai is an adventurous spirit who thrives on discovering new experiences, from hidden cafés to local events and cultural spots. Sharing honest, thoughtful reviews is crucial to Kai, even if it means leaving negative feedback, because they believe that helping others make informed choices is essential.	Kai is highly conscious of their public image. They worry that a single misstep, like a poorly chosen activity shared with others could lead to social judgment. This makes them meticulous about how they present themselves online and in person, with a strong concern for how others perceive them.
John (indirect stakeholder)	John is deeply committed to the well-being of his community. He volunteers at the local community center, organizes neighborhood clean-ups, and is always committed to making the neighborhood a better place for everyone.	John becomes anxious when the main street of his village becomes congested, which means vehicles are redirected by navigation apps through the streets near his home. He fears for the safety of his children playing outside or walking to school.

Amani (user)	Amani is a chef at a bustling restaurant in a vibrant cosmopolitan city. Constantly on the move, she values staying organized and in control. For her, mastering her schedule and being punctual despite unpredictable traffic is not just important, it's essential.	Amani takes great pride in her work as a chef, but the thought of negative reviews on Google keeps her on edge. Every dish she plates is carefully crafted, and she worries that even a small misstep could affect her reputation.
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1. For each of the stakeholders, identify 2 values that you can relate to Google Maps and specify whether they are benefited or harmed by Google Maps. Fill the table below:

Stakeholder	Key values	Manifested	Benefits	Harms

2. Draw the value tension map for the values you have found.  
Reminder of the methodology (take a look at the cheatsheet):
  - a. First draw the values
  - b. Then for each value indicate the associated stakeholders and specify whether they get a value benefit (+) or a value harm (-).
  - c. Draw lines representing the tensions.
3. Compare and discuss with your neighbor the values and tensions you have found.  
See if new tensions appear when you merge your respective tables.

## Case 2 : Inclusive Design

### Context:

As a responsible software engineer, you know the importance of inclusive design and its principles.

For your next job, you have to design an app for the town of Geopolis.

The town of Geopolis would like to propose a parking spot finder to facilitate people visiting the city center. The city would like that the app (i) suggests times during the week when the city center is less busy to reduce pressure during rush hour and (ii) propose specific parking places that are immediately available (iii) work for both residents and tourists. The businesses and environmental

advocates think that it is reasonable for people to walk up to 500m from their parking spot to their desired destination, but feedback from some citizens suggests that this is too far. There may be other issues to consider as well.

**Exercise:**

The goal of this exercise is to make you use the strategy “Inclusive design” seen in the videos. You have to apply the 04 stages procedure to design the parking app following inclusive design principles.

Use the human capabilities table for stage 01 (appendix 1.3), then use the user table template (appendix 1.4) to write your answers for each stage.

## Appendices

### 1.1 Own values Questionnaire

1 = Not all important      2 = Not important      3 = A little important      4 = Moderately important      5 = Important      6 = Very important

	1	2	3	4	5	6
Power-Resources (POR) Power through control of material and social resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Power-Dominance (POD) Power through exercising control over people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Achievement (AC) Personal success through demonstrating competence according to social standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hedonism (HE) Pleasure and sensuous gratification for oneself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stimulation (ST) Excitement, novelty and challenge in life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Self-Direction Action (SDA) The freedom to determine one's own actions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Self-Direction Thought (SDT) The freedom to cultivate one's own ideas and abilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Universalism-Tolerance (UNT) Acceptance and understanding of those who are different from oneself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Universalism-Concern (UNC) Commitment to equality, justice, and protection for all people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Universalism-Nature (UNN) Preservation of the natural environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humility (HUM) Recognizing one's insignificance in the larger scheme of things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Benevolence-Dependability (BED) Being a reliable and trustworthy member of the in-group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Benevolence-Caring (BEC) Devotion to the welfare of in-group members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tradition (TR) Maintaining and preserving cultural, family, or religious traditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conformity-Interpersonal (COI) Avoidance of upsetting or harming other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conformity-Rules (COR) Compliance with rules, laws, and formal obligations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Security-Societal (SES) Safety and stability in the wider society	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Security-Personal (SEP) Safety in one's immediate environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Face (FAC) Security and power through maintaining one's public image and avoiding humiliation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**1.2 Artifact Values Questionnaire**

	Yes	No	DK
Power-Resources (POR) Power through control of material and social resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manifestation:			
Power-Dominance (POD) Power through exercising control over people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manifestation:			
Achievement (AC) Personal success through demonstrating competence according to social standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manifestation:			
Hedonism (HE) Pleasure and sensuous gratification for oneself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manifestation:			
Stimulation (ST) Excitement, novelty and challenge in life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manifestation:			
Self-Direction Action (SDA) The freedom to determine one's own actions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manifestation:			
Self-Direction Thoughts (SDT) The freedom to cultivate one's own ideas and abilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manifestation:			
Universalism-Tolerance (UNT) Acceptance and understanding of those who are different from oneself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manifestation:			
Universalism-Concern (UNC) Commitment to equality, justice, and protection for all people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manifestation:			
Universalism-Nature (UNN) Preservation of the natural environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manifestation:			
Humility (HUM) Recognizing one's insignificance in the larger scheme of things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manifestation:			
Benevolence-Dependability (BED) Being a reliable a trustworthy member of the in-group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manifestation:			
Benevolence-Caring (BEC) Devotion to the welfare of in-group members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Manifestation:			
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Manifestation:			
Security-Personal (SEP) Safety in one's immediate environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manifestation:			
Face (FAC) Security and power through maintaining one's public image and avoiding humiliation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manifestation:			

### 1.3 Human capabilities table

Perceive	Vision	Detect objects, discriminate surfaces, etc.
	Hearing	Discriminate tones/speech, localize sounds, etc.
	Touch & Haptic	Discriminate pressures, detect temperature, etc.
	Smell	Detect odors, discriminate odors, etc.
	Taste	Detect 5 basic tastes, detect temperature, etc.
Think	Thinking	Process info., attention, memories, select appropriate responses, etc.
	Communication	Understand others, express oneself, etc.
Act	Locomotion	Move around, bend down, climb steps, etc.
	Reach & Stretch	Put arm(s) out in front of body/above head/behind back, etc.
	Dexterity	Fine finger manipulation, pick up, carry/grasp/squeeze objects, etc.

### 1.4 Template of the user table for all stages.

Stage 01 Capability	Stage 02 Identified NAU	Stage 04 Solution
Stage 03 Capability+	Stage 03 Identified NAU+	Stage 04 Solution

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