



Design Requirements

What are they and why do we need them?

Nicole Meng-Schneider

A good HCI project starts with understanding the problem you are solving.

Defining a problem

People don't know what they need:

What they want:
“Faster Horses”



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The actual problem:
Faster from A to B

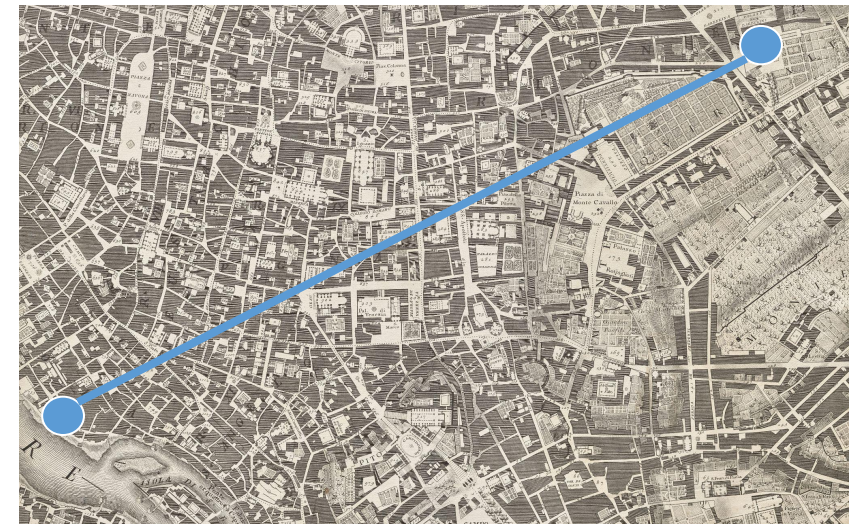
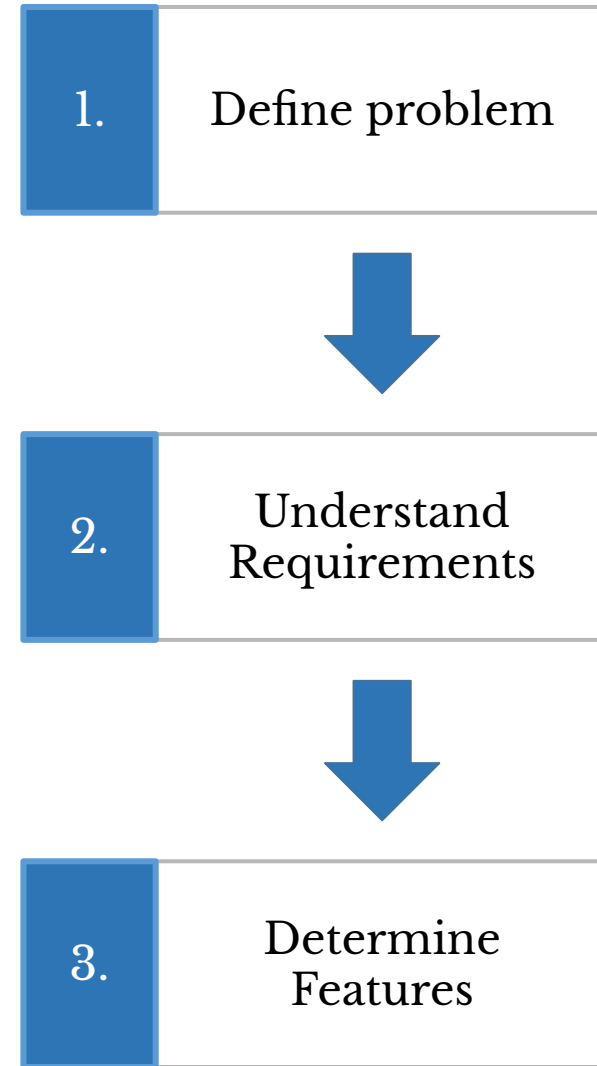


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Defining a problem



Features are not requirements

- It's common to get a request that looks like:

*Build an app for new UG1 and MSc students
that lists course locations.*

- There are a pile of “features” here:
 - Focuses on “app” as a solution
 - Assumes user group is only UG1 and MSc, but other users might be involved
 - Often comes with list of required features
- Step 1: shift feature requests to requirements

Requirements

- Requirements are goals that the system needs to accomplish.
- Solutions fulfill the requirements, but they are not requirements by themselves.
- What tasks do users need/want to accomplish?
 - How are they currently doing those tasks?
 - What do they dislike about the tasks?
 - Or: Why are they looking for a new solution?
 - What would they like to be doing?

Requirements Examples

BRIEF:

Build an app for new UG1 and MSc students that lists course locations.

1. We want to build an app
 - a. Why app? Why not a map?
2. Suitable for UG1 and MSc students
 - a. Why not also new PhDs and staff?
 - b. Are these the only users of the new system?
3. User must be able to find a course
4. User must be able to get information on location

Requirements Examples

BRIEF:

Build an app for new UG1 and MSc students that lists course locations.

Req1: Find a course

- search for it?
- find in a list?
- find in personalised list?

Req2: Get information on location

- view on a map?
- get coordinates?
- link to external application like Google maps?
- Simple listing of location?

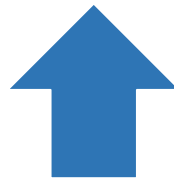
Requirements Examples

BRIEF:

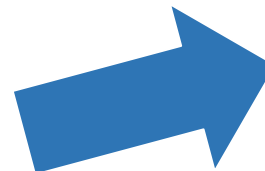
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Req1: Find a course

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Features



Req2: Get information on location

- view on a map?
- get coordinates?
- link to external application like Google maps?
- Simple listing of location?

Usability

Usability

- Often, we want our systems to be USABLE
- To understand usability we need to define it for our system
- Usable for what?
 - What are the tasks that you want the system to fulfil?
 - Is it fulfilling the tasks in a way that is suitable for the user group?
 - Does your system fulfil your requirements?
- Usability is reflected in the requirements.



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