TUDelft

IDE Master Graduation Project

Project team, procedural checks and Personal Project Brief

In this document the agreements made between student and supervisory team about the student's IDE Master Graduation Project are set out. This document may also include involvement of an external client, however does not cover any legal matters student and client (might) agree upon. Next to that, this document facilitates the required procedural checks:

- Student defines the team, what the student is going to do/deliver and how that will come about
- Chair of the supervisory team signs, to formally approve the project's setup / Project brief
- SSC E&SA (Shared Service Centre, Education & Student Affairs) report on the student's registration and study progress
- IDE's Board of Examiners confirms the proposed supervisory team on their eligibility, and whether the student is allowed to start the Graduation Project

STUDENT DATA & MASTER PROGRAMME
Complete all fields and indicate which master(s) you are in

Family name	An	IDE master(s)	IPD ☐	DfI ☐	SPD ✔
Initials	Y.A	2nd non-IDE master			
Given name	Yutong	Individual programme (date of approval)			
Student number	5812720	Medisign	✔		
		HPM	☐		

SUPERVISORY TEAM
Fill in he required information of supervisory team members. If applicable, company mentor is added as 2nd mentor

Chair	Armagan Albayrak	dept./section	HCD
mentor	Tingting Wang	dept./section	HCD
2nd mentor			
client:			
city:		country:	

optional comments: Armagan Albayrak and Tingting Wang are from the same section; however, their expertise in this project is complementary. Tingting specializes in digital patient experience design, while Armagan focuses on health journeys. The health journey approach at the beginning of the project will provide a thorough analysis of the context and a starting point for the design process.

! Ensure a heterogeneous team. In case you wish to include team members from the same section, explain why.

! Chair should request the IDE Board of Examiners for approval when a non-IDE mentor is proposed. Include CV and motivation letter.

! 2nd mentor only applies when a client is involved.

APPROVAL OF CHAIR on PROJECT PROPOSAL / PROJECT BRIEF -> to be filled in **by the Chair** of the supervisory team

Sign for approval (Chair)

Name	Armagan Albayrak	Date	04/03/2024	Signature	_(signature)_

CHECK ON STUDY PROGRESS
To be filled in **by SSC E&SA** (Shared Service Centre, Education & Student Affairs), after approval of the project brief by the chair.
The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total _____ EC

Of which, taking conditional requirements into account, can be part of the exam programme _____ EC

X	YES	all 1st year master courses passed
	NO	missing 1st year courses

Comments:

Sign for approval (SSC E&SA)

Name __Robin den Braber__   Date __11-03-2024__   Signature _RdB_

Does the composition of the Supervisory Team comply with regulations?

YES	V	Supervisory Team approved
NO		Supervisory Team not approved

Comments:

Based on study progress, students is …

V	**ALLOWED** to start the graduation project
	NOT allowed to start the graduation project

Comments:

Sign for approval (BoEx)

Name __Monique von Morgen__   Date __12/3/2024__   Signature _MJvonMorg_

Name student Yutong An   **Student number** 5812720

Project title
Develop a gamification toolkit for digital patient experience designers

Please state the title of your graduation project (above). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

Introduction

Describe the context of your project here; What is the domain in which your project takes place? Who are the main stakeholders and what interests are at stake? Describe the opportunities (and limitations) in this domain to better serve the stakeholder interests. (max 250 words)

Context: In the expanding landscape of digital healthcare, the significance of patient experience is increasingly evident. Tingting Wang et al.'s study on digital patient experience and Yun Wang's web-based design and evaluation guidelines aim to generate design guidelines for further improving the patient experience in digital healthcare. This project will use their research and design as a database to create a more interactive, entertaining, and accessible form of presenting knowledge, perhaps in the form of cards, games, or a series of training sessions, and to validate the feasibility of this form.

Domain: Digital patient experience design, design education

Main stakeholders:
Direct: Medisign students, (future) digital healthcare designers, design professionals, design educators
Indirect: Patients, healthcare provider, medical institution, healthcare experts

Opportunities: Despite the demonstrated effectiveness of the design guide in previous studies, its complexity on a website format for knowledge sharing have hindered its practical use by healthcare designers and limited its adoption in design education. Therefore, how to use gamification to enhance storytelling, diverse content presentation, enhance website functionality, and better engage with patients will be opportunities for the project.

➜ *space available for images / figures on next page*

introduction (continued): space for images

image / figure 1   Case: A card game that helps people understand the fundamentals of algorithms and mechine learning
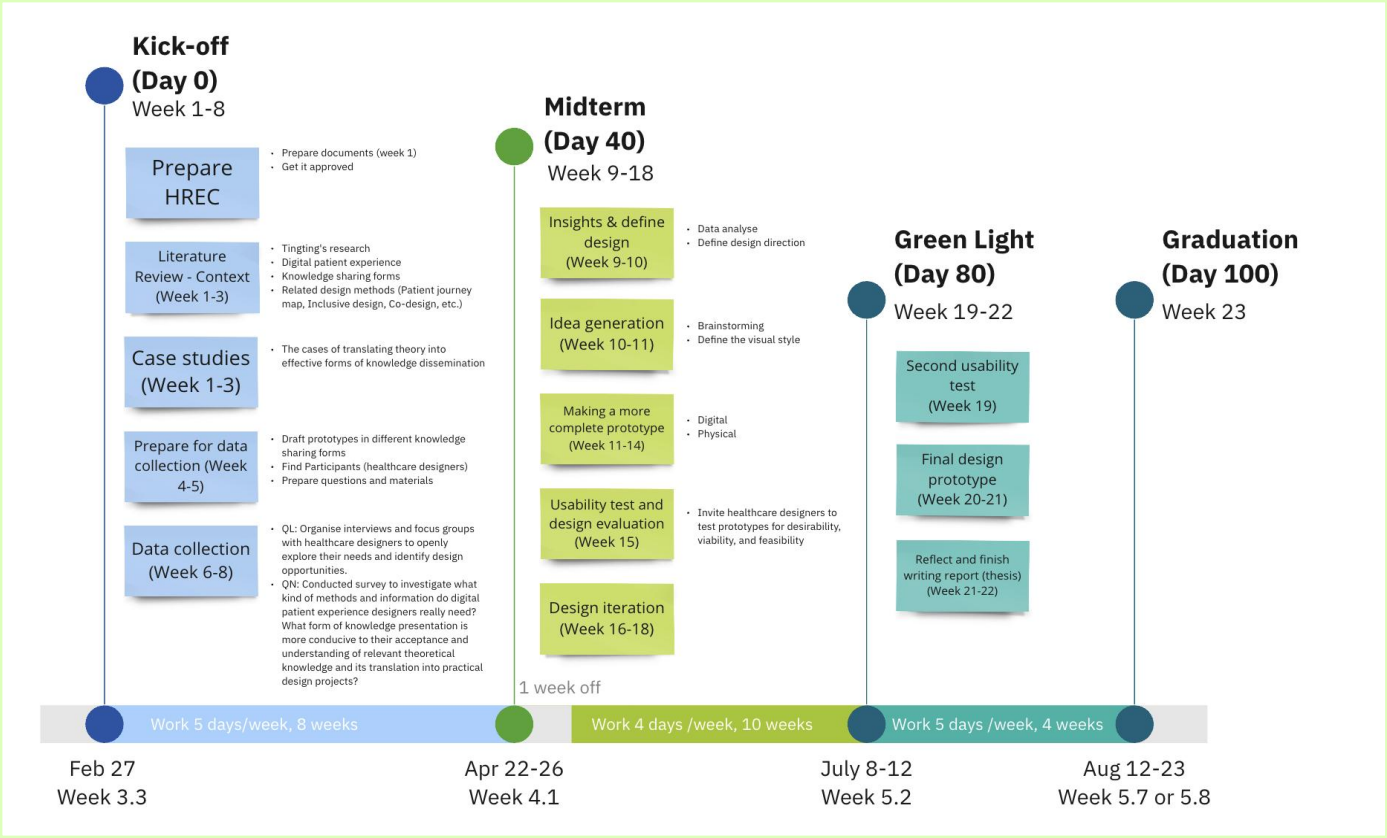
image / figure 2   Graduation project timeline

Problem Definition

What problem do you want to solve in the context described in the introduction, and within the available time frame of 100 working days? (= Master Graduation Project of 30 EC). What opportunities do you see to create added value for the described stakeholders? Substantiate your choice.
(max 200 words)

There is already a wealth of theoretical knowledge and a variety of methodologies about improving digital patient experience. But in such a huge database, what kind of methods and information are really needed by digital patient experience designers? What kind of knowledge presentation form can be more conducive for them to accept and understand the relevant theoretical knowledge and translate it into real design projects?
After creating the prototype, I will validate the effectiveness of my design by doing usability test with healthcare designers and iterate.

If possible: How can we provide designers with more specific and targeted design guidelines, such as the use of AI and big data technologies for information filtering, in a particular healthcare domain and application scenario, for a particular patient group, or even according to the individual experience and capabilities of healthcare designers?

Assignment

This is the most important part of the project brief because it will give a clear direction of what you are heading for.
Formulate an assignment to yourself regarding what you expect to deliver as result at the end of your project. (1 sentence)
As you graduate as an industrial design engineer, your assignment will start with a verb (Design/Investigate/Validate/Create), and you may use the green text format:

Create an interactive knowledge sharing approach (e.g. a toolkit) to help (future) digital healthcare designers better understand and engage patients, familiar with the design process in real design scenarios, and evaluate patient experience in complex healthcare system

Then explain your project approach to carrying out your graduation project and what research and design methods you plan to use to generate your design solution (max 150 words)

The project follows the double diamond model.1. I'll review Wang et al.'s study and related digital patient experiences to familiarize myself with the set of knowledge. 2. I'll explore case studies on translating research into practical design toolkits for teaching and learning. Then I will summarize and compare the design principles and elements of these cases. 3. I will conduct preliminary prototypes in different forms, and then distribute surveys to Medisign students, healthcare designers, and educators to explore what kind of design guidelines are more effective and appealing to them.4. Following this, co-creation sessions or focus groups with designers and healthcare experts will refine the design direction. 5. The subsequent phase involves developing the first toolkit prototype, conducting usability tests with Medisign students and designers, iterating for improvement, and validating usability and accessibility. 6. I'll reflect on the design process to inform future research and design endeavors.

Project planning and key moments

*To make visible how you plan to spend your time, you must make a planning for the full project. You are advised to use a Gantt chart format to show the different phases of your project, deliverables you have in mind, meetings and in-between deadlines. Keep in mind that all activities should fit within the given run time of 100 working days. Your planning should include a **kick-off meeting, mid-term evaluation meeting, green light meeting** and **graduation ceremony**. Please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any (for instance because of holidays or parallel course activities).*

Make sure to attach the full plan to this project brief.
The four key moment dates must be filled in below

Kick off meeting	Feb 27

Mid-term evaluation	Apr 22-26

Green light meeting	July 8-12

Graduation ceremony	Aug 19-23

In exceptional cases (part of) the Graduation Project may need to be scheduled part-time. Indicate here if such applies to your project

Part of project scheduled part-time	✔
For how many project weeks	23
Number of project days per week	4-5

Comments:
In Q4, I need to take an elective course, so I will work 4 days a week.

Motivation and personal ambitions

Explain why you wish to start this project, what competencies you want to prove or develop (e.g. competencies acquired in your MSc programme, electives, extra-curricular activities or other).

Optionally, describe whether you have some personal learning ambitions which you explicitly want to address in this project, on top of the learning objectives of the Graduation Project itself. You might think of e.g. acquiring in depth knowledge on a specific subject, broadening your competencies or experimenting with a specific tool or methodology. Personal learning ambitions are limited to a maximum number of five.
(200 words max)

I am interested in the field of Medisign especially digital patient experience. In my previous master studies, I chose as many projects and research topics related to Medisign as possible, and I also hope to graduate with a degree in Medisign. I hope to continue my Phd in the field of Medisign especially in the field of digital patient experience, so I would like to have a more in-depth and systematic knowledge of this field during my graduation project.

Recognizing design's practical nature, I intend to explore the interplay between design research, education, and practice. This project is an opportunity to chart a fitting path for my future development.

Despite specializing in SPD during my master's, my strong interest in user experience design persists. Previous internships in user experience and digital design equip me to leverage my design and research background effectively in this project.

Require
Project brief

Clarifying project requirements

Prepare
Management plans

Creating a project plan

Discover
User needs

Conducting desk or field research

Define
Design goals

Framing design problems

Design
Design concepts

Generating design concepts

Validate
Prototypes

Evaluating design concepts

Develop
Technical foundation

Developing design solutions

Commercialize
Business models

Making market release & maintenance

	Require	Prepare	Discover	Define	Design	Validate	Develop	Commercialize
WHAT activities do you see the need for design tools	Discussion and identification of specific target group; Consult professionals; Domain-related literature and knowledge; Internal co-creation/discussion sessions with other team; Understand context (e.g. a specific disease)	Informants recruitment (e.g. patients, medical experts); Understand context (e.g. a specific disease); Develop a realistic research plan; Internal co-creation/discussion sessions with other team; Can't predict difficulties in the future (time measure)	Field research (e.g. Observations, interview, questionnaires); Understand patients (e.g. their motivations and capabilities); Understand context (e.g. a specific disease); Domain-related literature and knowledge; Informants recruitment (e.g. patients, medical experts); Research on medical-related knowledge and terminology; Market research and new trends; Design the research process & materials; Understand the system; Co-creation sessions; Convincing; Patient journey map	Focusing on **one** most important problem; Summarizing and integrating insights; Convincing; Data analysis; Creativity and sparkle in design; Determine an appropriate design goal that meets the client's needs, the patient's needs, the healthcare professional's needs, time, and cost; Internal co-creation sessions with other teams to align the findings; Supporting analyses of specialized vocabulary; System map, Service blueprint, User journey map, Persona	Idea generation (e.g. brainstorming prompt); Co-creation sessions (e.g. with users); Evaluation concepts (e.g. make criteria visualise performance and screen out bad ideas); Convincing; Transfer research insights to design concept; Domain-related literature and knowledge; Design iteration; Specialized healthcare icons; Market research and new trends	Prototyping methods and tools; Define evaluation metrics; Convincing; How to design tests and analyze results; Co-creation sessions; Reach out to the target users; Service blueprint (different aspects/ stakeholders)	Team analysis; Complementary staff; Ensure the design complies with legal requirements	Service Blueprint; Profit Model; Investment team resources; Branding; Strategic roadmap (plans of developing & maintenance)
WHO will you use the tool/ toolkit with	Clients; Myself (Designer); Healthcare providers; Medical Experts; Design team; Patients	Design team; Myself (Designer); Medical Experts; Mentors; Patients; Clients	Patients; Design Teams; Myself (Designer); Healthcare Providers; Medical Experts; NGO; Community Staff; Patients Relatives	Myself (Designer); Design team; Clients; Medical experts; Patients	Design team; Medical experts; Myself (Designer); Medical experts; Clients; Other stakeholders involved; Team-mates (colleagues)	Design team; Clients; Myself (Designer); Patients; Healthcare providers	Clients; Healthcare providers; Patients; Myself (Designer)	Design team; Myself (Designer); Patients; Clients
WHERE will you use the tool/ toolkit	Office; Online meeting; Patient's home; Clients' office; Hospitals; Workshops/ Class	Office; Online meeting; Workshops/ Class; Home; Clients' office	Hospitals; Online meeting; Workshops/ Class; Patient's home; Office; Home; Clients' office	Workshops/ Class; Clients' office; Home; Office	Office; Workshops/ Class; Home; Online meeting; Clients' office	Office; Workshops/ Class; Home; Online meeting	Office; Home; Hospitals	Office; Clients' office
WHY you need a tool/ toolkit	For Communication and Creating common understandings; Make agreement with other team and clarify the project; Narrow the scope of the problem to find a more appropriate angle of entry; Provide consistency & standardization; Get sufficient support; Understanding professional medical terminology and the current state of the industry	Learn new (specialised) knowledge; Make agreement with other team and keep the project on track; A place where resources are organised (e.g. which doctors, patients, hospitals I can contact); Share knowledge; Help to organise thoughts; Team building	Create common understandings; Provide consistency & standardization; Communicate with patient/HCP smoothly Help doctors express themselves, e.g. by mapping their own workflows; Understand users & Avoid bias; Analyse and summarise insights; Increase efficiency& accuracy; Learn new knowledge; Collect **rich** information; Facilitate creative thinking; Previous successful cases and experiences	Provide consistency & standardization; Keep the project on track; Clarify design goals; Facilitate creative thinking; Analyse and summarise insights; Make agreement with other team and clarify the deliverable	Provide consistency & standardization; Facilitate creative thinking; Analyse and summarise insights; Tools to help evaluate and screen ideas; Create common understandings; A collection of healthcare-related industry trends that are easy to find; Quickly taught me how to create a workshop toolkit, guiding me through the process based on the workshop type.	Provide consistency & standardization; Create common understandings; Quickly making prototype; Selection of the most appropriate validation method and validation criteria; Improve shortcomings; Keep the project on track; Facilitate creative thinking; Get real user feedback	Ensure that your design (presentation, graphics) etc. complies with local legal requirements and is not ambiguous; Improving shortcomings	Get support from different knowledge backgrounds; Create common understandings; Provide consistency & standardization; Facilitate creative thinking
HOW does the design tools/ toolkit look like	Templates and checklists; Canvas and maps; Website; Card decks; Step-by-step guide	Knowledge-based tool; Website; A list of healthcare design methods; Templates and checklists; Step-by-step guide; Card decks; Canvas and maps	Canvas and maps; Card games; A list of healthcare design methods; Knowledge-based tool; Templates and checklists; Website; Card decks; Expressive tools (collage, play dough, lego and other construction kits); Metaphor words and pictures; Step-by-step guide	Step-by-step guide; Canvas and maps; Card games; A list of healthcare design methods; Metaphor words and pictures; Templates and checklists; Lego and other construction kits	Website; Metaphor words and pictures; Expressive tools (collage, play dough, lego and other construction kits); Templates and checklists; Card decks; Canvas and maps	Canvas and maps; Website; Lego and other construction kits; A list of prototyping design methods; Templates and checklists; Canvas and maps; Knowledge-based tool	Templates and checklists; Knowledge-based tool	Website; Canvas and maps; Templates and checklists

Informed Consent

You are invited to participate in an online interview study and subsequent usability test for a design prototype, focusing on your preferences for knowledge-sharing formats, particularly the integration of theoretical knowledge of digital health design into practical design projects. This study is being done by design researchers from the Delft University of Technology, aiming to create an interactive knowledge sharing approach to help (future) digital healthcare designers better understand and engage patients, familiar with the design process in real design scenarios. The study will be conducted online via Teams and is estimated to take approximately 60 minutes.

Your input, which includes sharing your previous design experience and preferences for different design methods and tools, is vital for this investigation. The interview and usability test will involve audio recording and written notes, with transcriptions converting recordings to text. Only the research team will have access to the raw data, and the original recordings will be destroyed after transcription. Your anonymous data will be securely stored in Project Storage at Delft University of Technology for analysis, research presentations, publications, and the thesis.

As with any online activity the risk of a breach is always possible. To the best of our ability your answers in this study will remain confidential. We will minimize any risks by making the the interview completely anonymous, any of your personal information (name, gender, address, company name, etc.) wouldn't be used in thesis or further publications.

Your participation in this study is entirely voluntary and you can withdraw at any time without giving any reasons. You are free to omit any questions.

PLEASE TICK THE APPROPRIATE BOXES	Yes	No
A: GENERAL AGREEMENT – RESEARCH GOALS, PARTICPANT TASKS AND VOLUNTARY PARTICIPATION		
1. I have read and understood the study information dated [/ /], or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction.	☐	☐
2. I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.	☐	☐
3. I understand that taking part in the study involves: data will be collected during the research, such as *notes, photos, and audio recordings*. I give permission for collecting this data and for making photos and audio	☐	☐

PLEASE TICK THE APPROPRIATE BOXES	Yes	No
recordings during the research. Data will be processed and analysed anonymously (without my name or other identifiable information). The data will only be accessible to the research team. The audio recording will be destroyed after transcribed as text, and the photos will be not recognisable in publications and reports about the project.		
B: POTENTIAL RISKS OF PARTICIPATING (INCLUDING DATA PROTECTION)		
4. I understand that the following steps will be taken to minimise the threat of a data breach, and protect my identity in the event of such a breach: *Anonymous data collection, transcription, blurring image, voice modification.*	☐	☐
5. I understand that personal information collected about me that can identify me, such as *my name and my workplace*, will not be shared beyond the study team.	☐	☐
6. I understand that the (identifiable) personal data I provide will be destroyed after 6 months.	☐	☐
C: RESEARCH PUBLICATION, DISSEMINATION AND APPLICATION		
7. I understand that after the research study the de-identified information I provide will be used for master graduation thesis, reports, and publications.	☐	☐
8. I agree that my responses, views or other input can be quoted anonymously in research outputs	☐	☐

Signatures

_____   _____
Name of participant [printed]   Signature   Date

[Add legal representative, and/or amend text for assent where participants cannot give consent as applicable]

I, as legal representative, have witnessed the accurate reading of the consent form with the potential participant and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

_____   _____   _____
Name of witness   [printed]   Signature
Date

I, as researcher, have accurately read out the information sheet to the potential participant and, to the best of my ability, ensured that the participant understands to what they are freely consenting.

_____   _____   _____
Researcher name [printed]   Signature   Date

Study contact details for further information: [*Name, phone number, email address*]

Participants: 2-10+ (one facilitator needed)

Time: 60-90 minutes, depending on the level of detail you want to collect.

This toolkit is designed for (digital) health designers to address the complexity of coordinating multiple stakeholders in healthcare projects. It helps designers gather, organize, and prioritize insights from target users (patients, healthcare providers), clients (healthcare institutions, companies) and other stakeholders.

The toolkit guides you through visualizing and prioritizing stakeholder information using a Honeycomb diagram. It incorporates 7 key dimensions to help you define a clear and achievable design goal:

- Who are your **target users**?
- In what **contexts** will they use this solution?
- What **value** does your design provide to these users (patients, providers, etc.) and other stakeholders (clients, medical institutions)?
- What **impact** (measurable outcomes) do you aim to achieve with your design, and how will you measure it (KPIs)?
- What are the milestone **deliverables** needed?
- What specific **interaction qualities** should exist between the users and the design solution?
- What is the **project plan** to achieve this outcome?

Of course, the information and dimensions you include will depend on your project's context, as every project is unique. As the designer, you also have the flexibility to add or replace dimensions based on what's most important for your project.

Ultimately, the toolkit helps you prioritize these inputs, enabling you to define **a shared design goal** that aligns the interests of all stakeholders. This results in a final **design goal statement** that clarifies and unifies the project's objectives across the board.

Step 1
Stakeholders

Duration: 5 mins

1. List the stakeholders involved in this project, along with their roles or responsibilities.

Jane

Chronic disease patients, Target user

2. Participants can pick a Lego mini-figure to represent each role.

Jane

Diabetic patients, Target user

3. Add a tag in the top right corner of the card for each, to identify it in the next step using a sticker.

Jane **P**

Chronic disease patients, Target user

Google "Lego Minifigures" for more different styles...

Name... **D**

Designer/ Design Lead

Name... **HP**

Healthcare Provider

Name... **C**

Client, Company A

Name... **P**

Patient, target user

Name... **E**

Healthcare Expert

Name... **?**

Roles or responsibilities...

Name... **?**

Roles or responsibilities...

Name... **?**

Roles or responsibilities...

Name... **?**

Roles or responsibilities...

Name... **?**

Roles or responsibilities...

Step 2
Project Plan

Duration: 15 mins

(can be completed before the co-creation session, with only uncertain parts discussed during the session)

1. What are the key milestones in this design project? Schedule key meetings in advance.

2. What key (design or research) activities need to be done in each phase?

3. To complete those activities and achieve the design goal, who can help? And what resources they can provide (time, money, personnel, knowledge)? Use the tag in Step 1

Project Plan

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8

Milestones (Key Meetings)

Meeting 1 — Midterm — Meeting 2 — Meeting 3 — Final Pre

Key Activities

Activity 1...   Activity 3...   Activity 4...   Activity 6...   Activity 7...

Activity 2...   Activity 5...
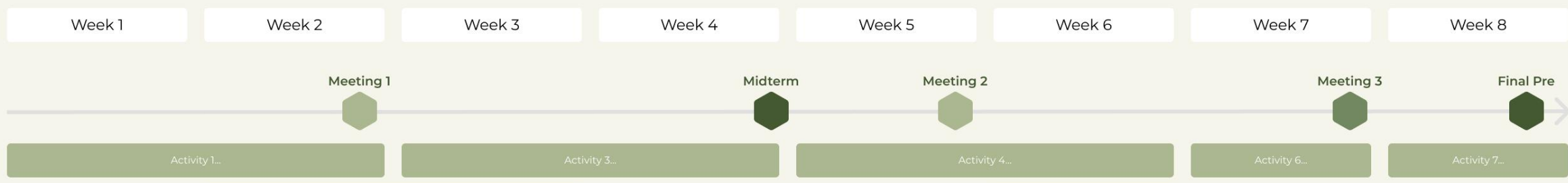
Stakeholders (Who Can Help)
D C P HP E

Resources

3 Information Cards

Duration: 10 mins

Start by understanding the 6 dimensions through the provided information cards.

- Dark-colored cards: These contain definitions and key trigger questions for each dimension.
- Light-colored cards: These are for brainstorming and inspiration later on.

Tips:

Since each digital health project varies in background and details, the cards are meant to guide your understanding of what each dimension may include, but they aren't a strict formula to follow. Whether you use all the cards depends on the facilitator and the participants' familiarity with the dimensions. For example, a designer experienced in healthcare design may already know these concepts, but other stakeholders might not be familiar with terms like "interaction qualities" or "values."

Impact

Impact
The measurable outcomes or changes that result from implementing the solution

- What impact do you hope to achieve with your design?
- What are the KPIs for your design? How will you measure user engagement, satisfaction, and health outcomes?

1. Patient Outcomes

Health Improvement:
Does your design lead to better health outcomes for patients?

Patient Satisfaction:
How does the design affect the overall satisfaction of patients with their healthcare experience? Are patients more engaged and proactive in their health management?

2. Healthcare Provider Efficiency

Workflow Optimization:
Does the design help healthcare providers (doctors, nurses, etc.) work more efficiently?

Error Reduction:
Does your design help reduce the likelihood of medical errors?

3. System-Level Impact

Cost Reduction:
How does your design contribute to reducing healthcare costs, both for providers and patients?

Scalability:
Is your design easily scalable across different regions, populations, or healthcare settings? Can it adapt to various technological infrastructures or regulatory environments?

4. Social and Economic Impact:

Access to Care:
Does your design improve access to healthcare services, particularly for underserved populations?

Health Equity:
Does the design promote health equity by ensuring that diverse populations, regardless of socioeconomic status, ethnicity, or location, can benefit from it?

5. Long-Term Sustainability

Behavioral Change:
Does your design encourage long-term positive behavioral changes in users?

Environmental Impact:
Does your design reduce environmental impact by minimizing resource use or waste?

Target Users

Target Users
The specific group of people who will use the design solution

- Who are your target users? What are their capabilities, needs, and limitations?
- What are their age, gender, ethnicity, class, and social position?

1. Capabilities

Knowledge, Skills, and Confidence

How familiar are users with technology?

Do they have prior positive or negative experiences with digital health?

Do they struggle with skills or misunderstand tasks, and how can their confidence be improved?

2. Opportunities

Identity and Health Status

What demographic factors affect access?

Are users younger or older, and how does their socioeconomic status impact access?

Are users in the early stages of illness where digital health might be more beneficial?

Do they have advanced chronic diseases or cognitive barriers that could complicate use?

3. Motivation

Perception and Mindset

How do users perceive the benefits of digital health?

Do they see it as empowering, or are they concerned about privacy, face-to-face care, or information overload?

Are they motivated or experiencing anxiety and loss of interest?

Interaction Qualities

Interaction Qualities
The nature of the interaction between the user and the digital health solution

- How can you create a tailored, attention-grabbing, simple, and consistent layout with appealing graphics, coherent colors, suitable fonts, and striking button design?

Interaction Qualities
The nature of the interaction between the user and the digital health solution

- How easy and natural is it for users to understand and use?
- Is there a clear navigation or instruction design

1. Personalized Design

How well does the design offer individualized feedback and customization options?

Are users able to choose the topics, content, and language of the messages they receive?

Can users select the timing and frequency of delivered interventions?

2. Navigation Design

How clear and intuitive is the navigation?

Does the design provide instruction manuals, user training, or technical support?

Is there any confusion or frustration due to unclear navigation or instructions?

3. Visual Design

How appealing and functional is the visual design?

Is the health data well organized with a simple, consistent layout?

Are the interface elements (font size, color schemes, buttons) easy to use?

Is there any low visibility of the content?

4. Information Design

How is the information structured and delivered?

Is the information source reliable, trusted, and up-to-date?

Is the tone of communication motivating, polite, and relatable?

Are there risks of information overload or the use of overly technical language that could confuse users?

Values

Values
What people consider important in life

- What values does your design provide to its users (patients, providers, etc.)?
- What values does your design provide to other stakeholders (clients, medical institutions, etc.)?

1. User-Centered Value

How does the solution improve the user's life?

Does it enhance patient empowerment, health outcomes, or ease of use?

Does it provide personalized care?

2. Clinical Value

Does the design streamline clinical workflows or improve diagnosis accuracy?

How does it enhance communication between patients and providers?

3. Social and Economic Value

Does it make healthcare more accessible to underserved populations?

Does it reduce disparities in care?

Will the solution reduce healthcare costs for patients or the system?

Does it provide a return on investment?

4. Ethical and Privacy Value

How does it respect patient data and ethical considerations?

Does the design ensure privacy, security, and informed consent?

Context

Context
The environmental, cultural, and technological factors that influence how the design solution will be used

- In what environment will the users interact with the solution? (in hospital, home, etc.)
- What existing technology does the solution need to integrate with?
- What are the legal and regulatory constraints?

1. Healthcare Environment

Where will the solution be used?

Identify if it's in hospitals, clinics, or home settings.

How will it fit into existing workflows?

Consider current processes and how the solution integrates with them.

2. Cultural and Social Factors

What cultural norms might affect user interaction with the solution?

(e.g., beliefs, practices)

How does the social context influence user engagement?

(e.g., family involvement, community support, language preferences)

3. Regulatory and Legal Framework

What are the relevant health regulations and data privacy laws?

How will the solution ensure compliance with these laws?

What legal considerations need to be addressed?

Consider any legal aspects related to the implementation and use of the solution, such as consent forms or data protection measures.

Deliverables

Deliverables
The tangible or intangible outputs produced during the design process

- What are the key deliverables for your project? (e.g. user personas, wireframes, prototypes, etc.)
- How will these deliverables contribute to achieving the design goals?

Add…

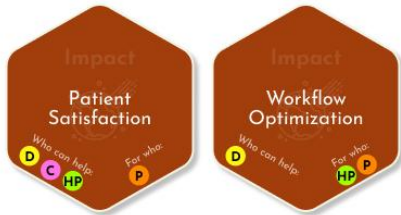You can add dimensions as needed.

4 Brainstorming

Duration: 30-40 mins

1. Brainstorming for each dimension. There is no fixed order between the dimensions. You can start with the one you find easiest.
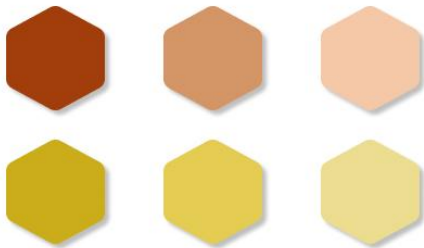
2. Don't forget to mention:
   · Which stakeholder can help with this dimension?
   · Who is this dimension for?
   · Add their tag from step 1.

For example:

Impact
Patient Satisfaction
Who can help   For who
D C HP   P

Impact
Workflow Optimization
Who can help   For who
D   HP P

3. After completing all dimensions, participants can discuss and use darker colors to indicate priorities.

More important ⟵·················· Less important.

4. Prioritize by voting if necessary.

Impact — Add text... / Add text... / Add text...
Who can help   For who

Target Users — Add text... / Add text... / Add text...
Who can help   For who

Interaction Qualities — Add text... / Add text... / Add text...
Who can help   For who

Values — Add text... / Add text... / Add text...
Who can help   For who

Context — Add text... / Add text... / Add text...
Who can help   For who

Deliverables — Add text... / Add text... / Add text...
Who can help   For who

Add text... / Add text... / Add text...
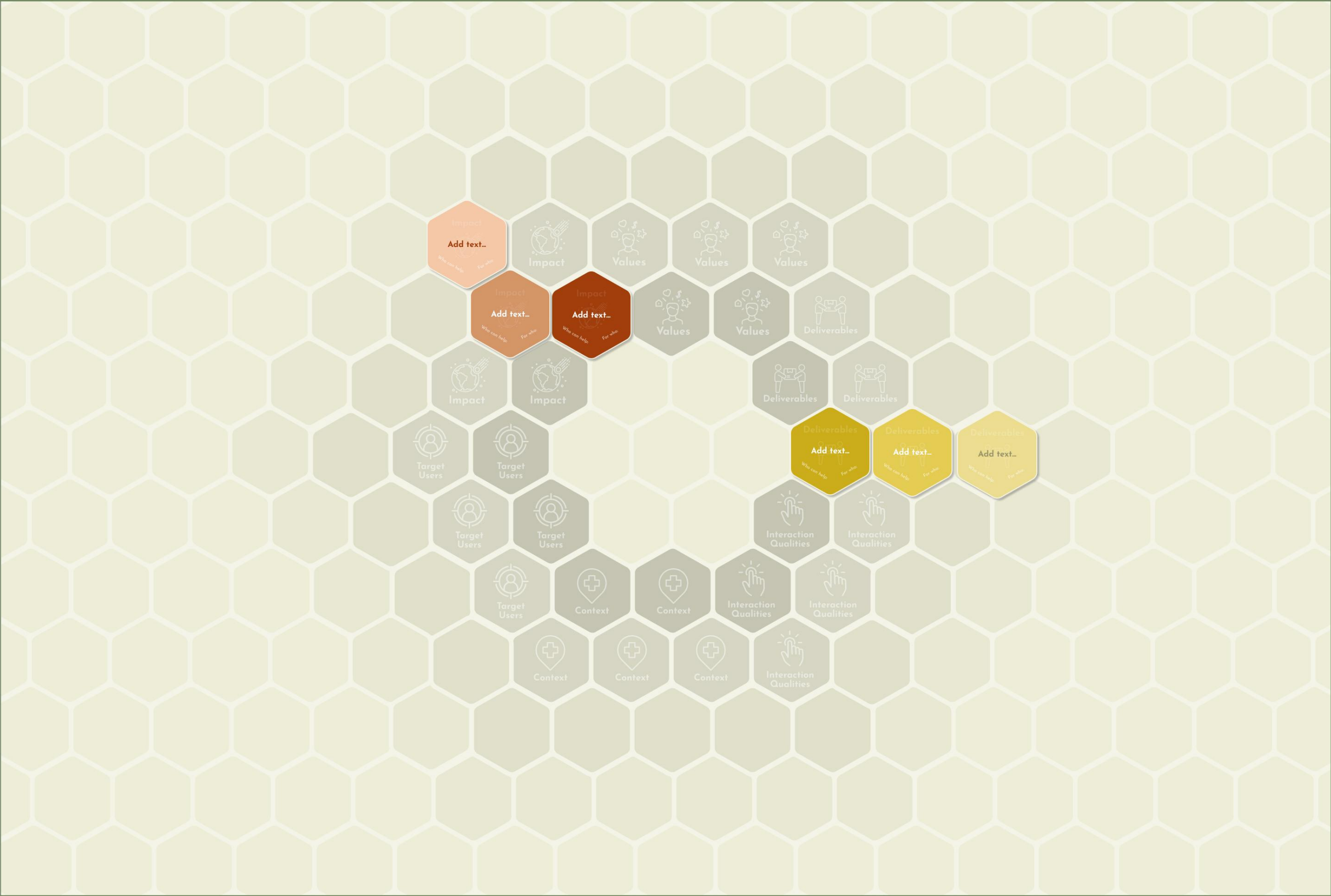Who can help   For who

Step 5
Map on the Honeycomb

Duration: 30-40 mins

Move the sticky notes you identified as important in the previous step onto this honeycomb diagram.

Information placed closer to the center represents what's most critical to achieving the design goal or holds greater importance for multiple stakeholders. Notes placed toward the edges are relatively less important.

The key here is to continuously discuss and weigh these elements with the group, fostering mutual understanding and alignment on a shared goal.

Impact
Add text...
Who can help   For who

Impact

Values

Values

Values

Impact
Add text...
Who can help   For who

Impact
Add text...
Who can help   For who

Values

Values

Deliverables

Impact

Impact

Deliverables

Deliverables

Target Users

Target Users

Deliverables
Add text...
Who can help   For who

Deliverables
Add text...
Who can help   For who

Deliverables
Add text...
Who can help   For who

Target Users

Target Users

Interaction Qualities

Interaction Qualities

Target Users

Context

Context

Interaction Qualities

Interaction Qualities

Context

Context

Context

Interaction Qualities

6 Final Design Goal Statement

Duration: 10 mins

Discuss with all participants and craft the final design goal statement based on the outcomes from Step 5. Use the provided template and example for inspiration.

Tips:

Continuously consider which elements in each dimension should take priority and why.

Example:

Design a user-friendly chronic disease management app for adults aged 55-75 with diabetes and hypertension.

This app will offer a simple, supportive, and empowering experience, prioritizing privacy and inclusivity. It will be optimized for low-connectivity environments and seamlessly integrate into users' daily routines.

The project will span 8 months, aiming to increase medication adherence by 20%, reduce hospital readmissions by 15%, and improve patient satisfaction by 30%. Major milestones will include user personas, prototypes, and a fully functional app.

Template:

Design a (final deliverable) tailored for (target user).

This (deliverable) will offer a (interaction qualities) experience, emphasizing (key values). It will be optimized for use in (specific contexts).

The project will span (project duration and plan), aiming to create (desired impact). Major milestones will include (key deliverables).