

ONE

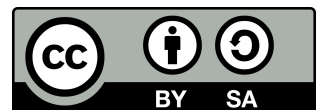
WEEK IN

THE

FUTURE

COLLABORATIVE WORKBOOK

Based on *One Week in the Future: Previs Design Futuring for HCI Research* by <Author Names>



OVERVIEW

This workbook serves as a week-long guide for HCI researchers and designers to collaboratively explore, invent, and speculate on future aspects of a research area of interest. Over the course of following this workbook, your team will rapidly envision future of aspects of a selected research area through an iterative sketching, storyboarding, and pre-visualization (pre-vis) animation rendering process akin to pre-production techniques used throughout the film industry. Through the act of creating these fictional depictions, we anticipate you will encounter tensions, challenges, and opportunities to inform future research. Before getting started, we will review the skillsets and supplies required to perform for the activity.

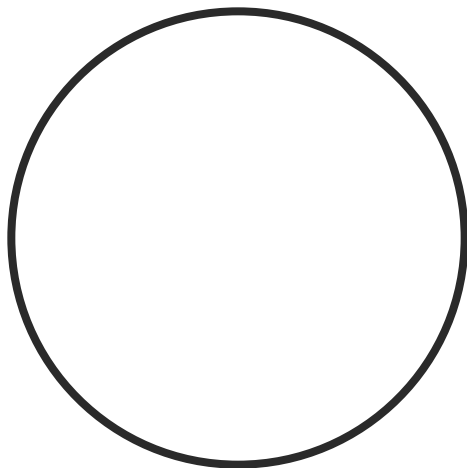
THE TEAM

This workbook has been designed to be collaboratively completed by two people: a Researcher and a Designer with experience producing medium-fidelity concepts videos of fictional scenarios. To get started, decide on who will be the Researcher and who will be the Designer for the week by adding your names and a sketching a self portrait below.



Researcher

Aprox. 4h Commitment



Quickly Sketch a Self Portrait

Write Your Name

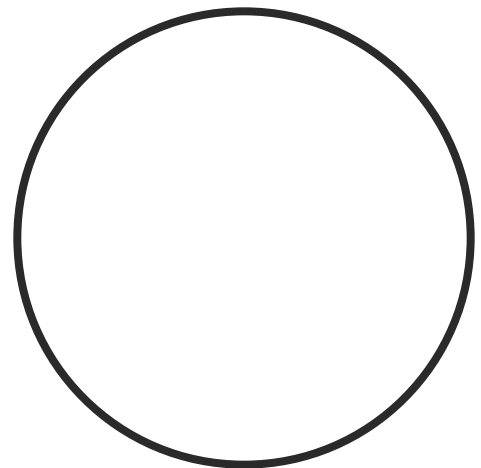
Researcher Checklist

- I have a research topic to explore!
- I'm ready to sketch new ideas!
- I know of some related research!



Designer

Aprox. 35h Commitment



Quickly Sketch a Self Portrait





Write Your Name

Designer Checklist

- I can produce cool video concepts!
- I'm ready to learn about research!
- I'm ready to document my process!

SUPPLIES LIST

Over the course of your One Week in the Future sprint, you will need the following set of supplies. While this workbook assumes that you will be collaborating in a physical space, equivalent remote tools may also substituted.

 <p>Drawing Supplies <i>For Sketching Ideas on Paper</i></p>	 <p>Scissors <i>For Cutting Activities</i></p>	 <p>Timer <i>For Timing Sprints</i></p>	 <p>Video Editing Software <i>For Pre-Vis Production</i></p>
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SPRINT SUMMARY

Your One Week in the Future is comprised of a five day schedule that includes various activities and fiction evoking exercises for both the lead **R** Researcher and **D** Designer. Look out for these symbols throughout the workbook!

Day 1	<p>Ideation Session 2h <i>Collaboratively review research concepts & sketch design fictions.</i></p> <p>R D</p>	<p>Storyboard Development 5h <i>Transform sketched concepts into 1 to 3 cohesive storyboards that highlight aspects of envisioned future research.</i></p> <p>D</p>
Day 2	<p>Storyboard Selection Session 1h <i>Iterate on storyboards & pick a concept to produce.</i></p> <p>R D</p>	<p>Concept Production 6h <i>Use digital production tools to transform the selected storyboard into a medium fidelity previs render.</i></p> <p>D</p>
Day 3	<p>Concept Production 7h <i>Use digital production tools to transform the selected storyboard into a medium fidelity previs render.</i></p> <p>D</p>	
Day 4	<p>Concept Production 7h <i>Use digital production tools to transform the selected storyboard into a medium fidelity previs render.</i></p> <p>D</p>	
Day 5	<p>Concept Review Session 1h <i>Reflect on the concept & decide on final modifications.</i></p> <p>R D</p>	<p>Concept Production 6h <i>Use digital production tools to make the final modifications to the previs render.</i></p> <p>D</p>

DAY 1

IDEATION SESSION 2h



Welcome to the start of your One Week in the Future sprint! In this collaborative session between the Researcher and Designer, you will review related works of research, determine a target audience to design for, and rapidly sketch design fictions. Be sure to have your drawing supplies, scissors, and timer ready before continuing.

Research Review Canvas 30min













To start, take some time to discuss the Researcher's area of study they are interested in explore the session. As a guide for your open discussion, fill out each of the below sections together.

Research Questions <i>What research questions is Researcher interested in answering within their practice?</i>	Current Solutions <i>Outside of the research community, how is the problem currently being solved today?</i>
Related Work <i>What are at least 3 notable related pieces of research that are relevant to the field?</i>	Research Method <i>What unique approach is the Researcher taking to solve this problem and how does it differ from existing solutions and related work?</i>
Target Users <i>Who would benefit from answering this question?</i>	
Future Work <i>What advancements do you imagine will take place in the Researcher's field in the future?</i>	

Sketching Exercise 30min

With an overview of the Researcher's domain, your team is now ready to collaboratively sketch fictional depictions of the future! Cut the cards out along the dotted lines on page below, then place the cards into two respective piles. Cards cut out with a **R** symbol should be placed in one pile for the Researcher, and cards with a **D** symbol should be in another pile for the Designer.

To run the activity, set a 5 minute timer then individually both pick up a random prompt card from your respective pile. Read the prompt and then place it to the side. Quickly write the prompt on a blank piece of paper and sketch as many ideas relating the prompt as possible before the 5 minutes is up! Repeat this process by sketching on a separate sheet of paper for each prompt until all cards have been sketched.

<p>R</p> <p>RESEARCHER PROMPT</p> <p>What potential positive impacts do you imagine your area of research having in the near future?</p> 	<p>R</p> <p>RESEARCHER PROMPT</p> <p>What potential negative impacts do you imagine your area of research having in the near future?</p> 	<p>R</p> <p>RESEARCHER PROMPT</p> <p>What potential positive impacts do you imagine your area of research having in the distant future?</p> 
<p>R</p> <p>RESEARCHER PROMPT</p> <p>What potential negative impacts do you imagine your area of research having in the medium-term future?</p> 	<p>R</p> <p>RESEARCHER PROMPT</p> <p>What potential positive impacts do you imagine your area of research having in the medium-term future?</p> 	<p>R</p> <p>RESEARCHER PROMPT</p> <p>What potential negative impacts do you imagine your area of research having in the distant future?</p> 
<p>D</p> <p>DESIGNER PROMPT</p> <p>What potential positive impacts do you imagine the Researcher's area of study having in the near future?</p> 	<p>D</p> <p>DESIGNER PROMPT</p> <p>What potential negative impacts do you imagine the Researcher's area of study having in the near future?</p> 	<p>D</p> <p>DESIGNER PROMPT</p> <p>What potential positive impacts do you imagine the Researcher's area of study having in the distant future?</p> 
<p>D</p> <p>DESIGNER PROMPT</p> <p>What potential negative impacts do you imagine the Researcher's area of study having in the medium-term future?</p> 	<p>D</p> <p>DESIGNER PROMPT</p> <p>What potential positive impacts do you imagine the Researcher's area of study having in the medium-term future?</p> 	<p>D</p> <p>DESIGNER PROMPT</p> <p>What potential negative impacts do you imagine the Researcher's area of study having in the distant future?</p> 

Sketching Exercise Tips

Try to sketch at least one concept per minute

Refer back to the Research Review Canvas as a source of inspiration

If you get stuck, think about how an existing sketch might change in a different place or with a different end user

Medium-term futures take place in between the near term and distant future

Use different colours and line strokes to emphasize certain aspects of your concepts

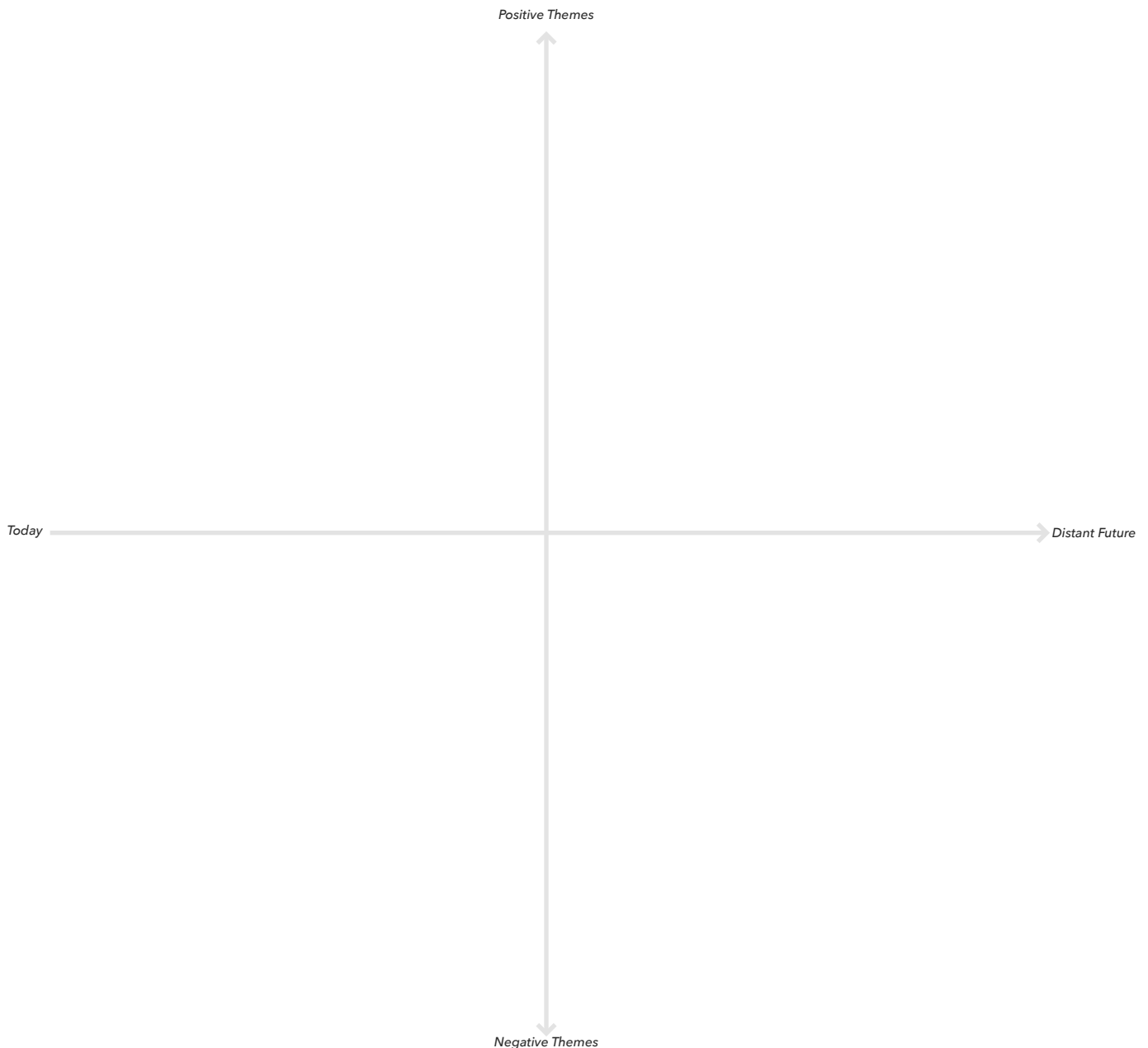
R	R	R
R	R	R
D	D	D
D	D	D

Sketching Theme Identification 45min

Having completed all rounds of the sketching exercise, it is now time to collaboratively review and reflect on the concepts you envisioned. Together, discuss each of the sketches you drew and identify themes that were present during different projected timelines and sentiments of the future. Write themes that you expect to occur in the near future towards the left-hand side of the chart, and more distant futures themes closer to the right side of the chart. Additionally, themes that result in a more positive future should be positioned on the upper half of the chart while more negative future themes should be positioned on the bottom half. If a theme is neither positive or negative it can be vertically positioned at the center of the chart. After writing down different themes identified in your sketches, take a few minutes to fill in missing gaps in the chart. For example, if there are not any themes written in the negative near term future, ideate together and add them in to complete the chart.

Negative Near Future Themes

Positive Near Future Themes

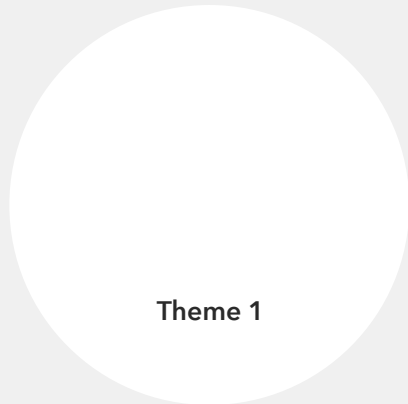


Negative Distant Future Themes

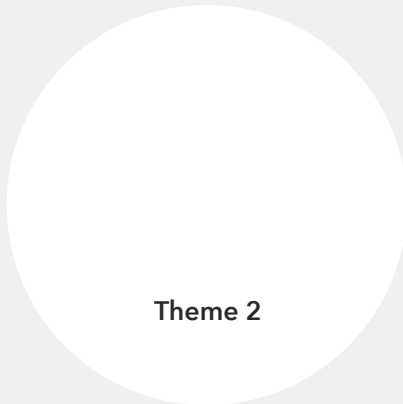
Positive Distant Future Themes

Theme Selection 5min

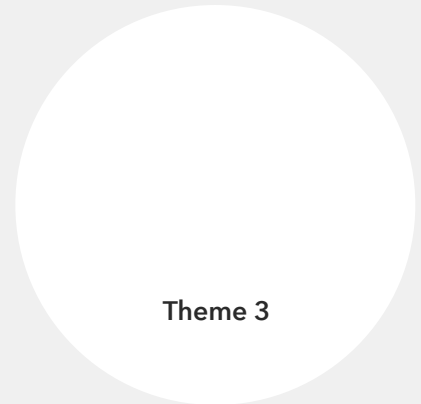
Using the themes identified on the previous page, decide on three key themes you are interested in developing further over the course of the week and write them in the circles below.



Theme 1



Theme 2



Theme 3

Target Audience Canvas 10min

To wrap up the ideation session and prepare the Designer for the upcoming next Storyboarding phase of the sprint, have a discussion about the target audience and format of the final artifact that will be produced. With only a few days to produce the concept, the Designer should ensure that the scope is well suited for the available time in the sprint. While questions and design constraints can vary greatly depending on the medium of the final design fiction, below are some design considerations to get the conversation started.

<p>Audience Segments <i>Identify at least one target audience group that will view the artifact. Examples: Social media followers, fellow researchers on campus.</i></p>	<p>Distribution Channels <i>Where will you share the final artifact and how will people view it?</i></p>
<p>Target Sentiment <i>What emotions and feelings do you want your audience to feel after viewing the artifact?</i></p>	<p>Inspiration Sources <i>List examples inspirational videos, images, literature and related work that serve as sources of inspiration for the artifact.</i></p>

STORYBOARD DEVELOPMENT 5h



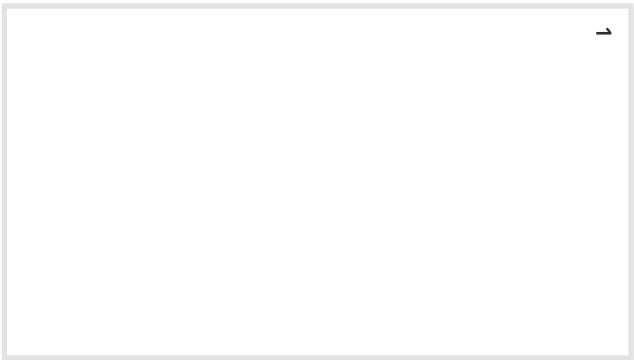
This next segment of the sprint is intended for the Designer to follow individually after the collaborative Ideation Session. With the identified research themes and inspirational sketches created in the previous exercise, it is now time to develop 1-3 storyboard concepts. Using your drawing supplies, sketch sequences of events that convey one or more research themes within a cohesive story. Be sure to include descriptions below each storyboard frame while communicating key camera movements and character actions by annotating the shots. It is also important to consider the technical complexity of producing the storyboard by the end of the week, as certain effects and camera techniques can be challenging to accurately recreate in a short period of time. Over the next 3 pages we provide a storyboard template suitable for short form vertical social media videos, however if you decide to develop a different format of content you may substitute your own storyboard template.

Use the space below to document design decisions and questions that arise during the development of the storyboards. Once complete, prepare to present your storyboards and documented design notes to the Researcher.

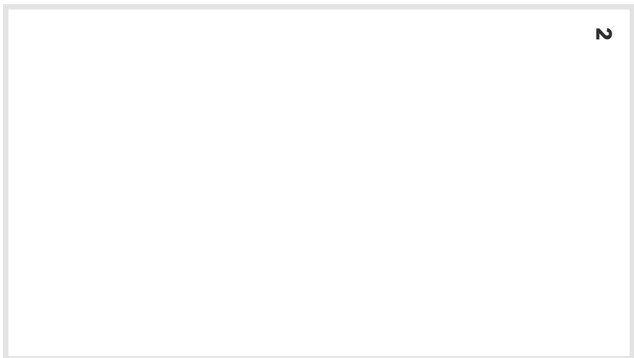
Storyboarding Questions & Design Decisions

Storyboard #1 Title

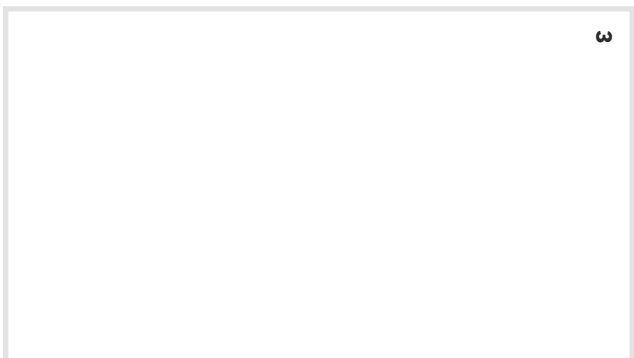
1



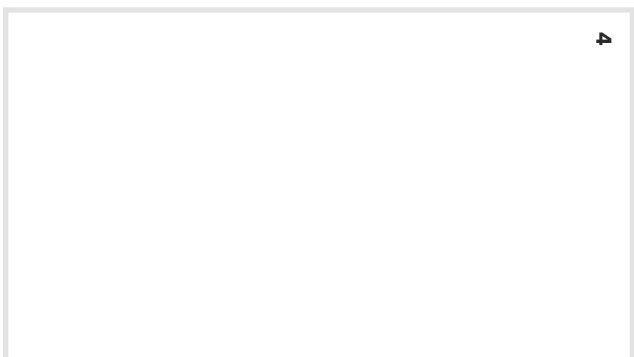
2



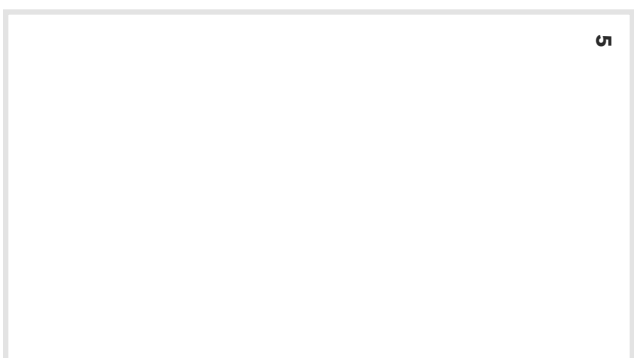
3



4



5



Description

Description

Description

Description

Description

Notes

Notes

Notes

Notes

Notes

Storyboard #2 Title

1	
2	
3	
4	
5	

Description	Description	Description	Description	Description
Notes	Notes	Notes	Notes	Notes

Storyboard #3 Title

1

Description

2

Description

3

Description

4

Description

5

Description

Notes

Notes

Notes

Notes

Notes

DAY 2

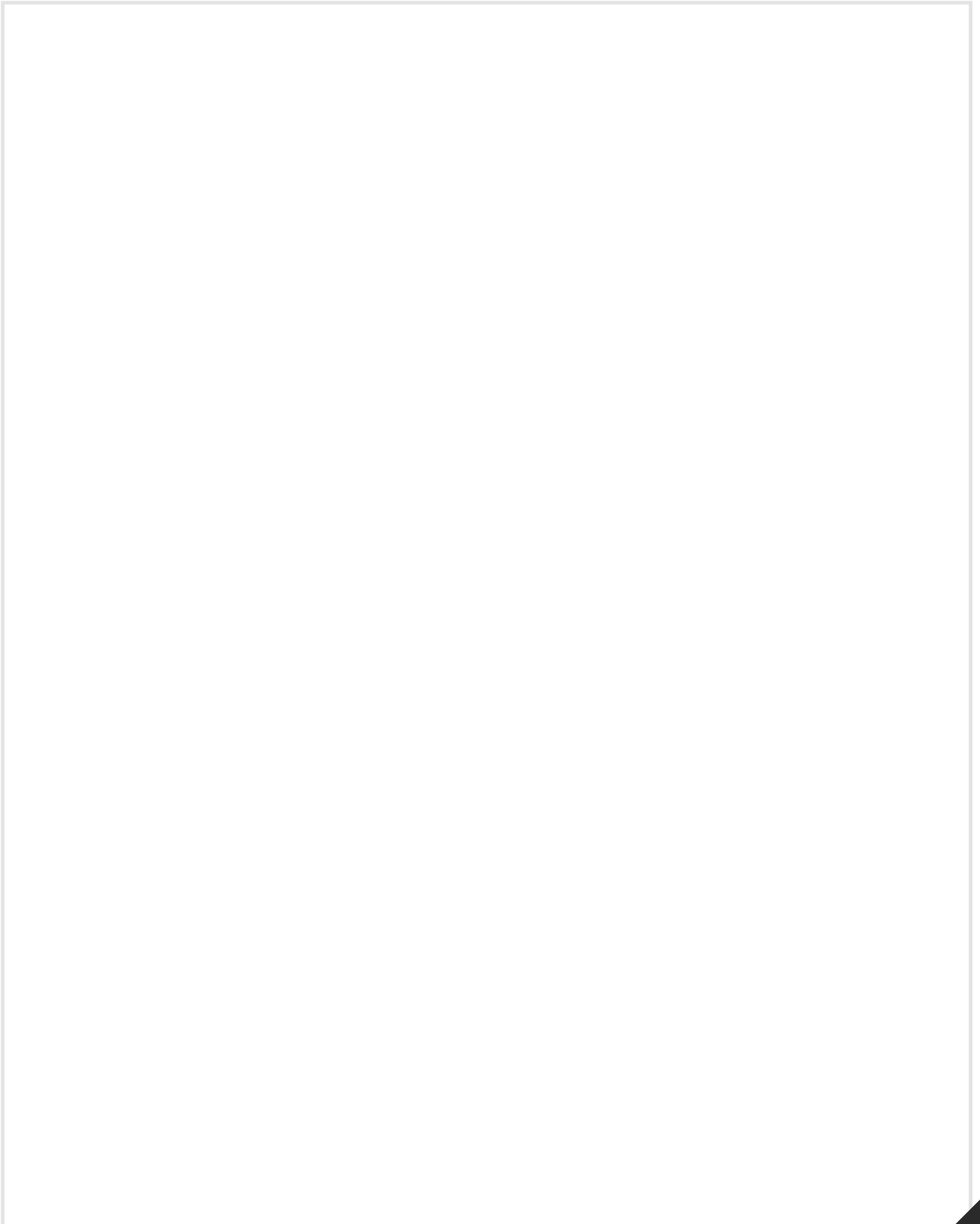
STORYBOARD SELECTION SESSION 1h



Welcome to the second day of your One Week in the Future sprint! Today, the Designer will present storyboard(s) to the Researcher while discussing some of the design decisions and questions that emerged during their development. Use the storyboards as a starting point for collaboratively generating variations of the presented concepts. Document new ideas that the storyboards provoke, inaccuracies with the depicted scenes, and attempt to reduce ambiguity by filling out the tables below. For each inaccuracy you encounter, write it in the *Inaccuracies* section of the storyboard table and write and come up with a way that the story could be modified to resolve it in the *Modifications* Section. After reviewing all of the storyboards together, select a modified storyboard to develop for the remainder of the sprint.

Storyboard 1:	Storyboard 2:	Storyboard 3:
Notes & Ideas	Notes & Ideas	Notes & Ideas
Inaccuracies	Inaccuracies	Inaccuracies
Modifications	Modifications	Modifications

You are welcome to use this page as a workspace for sketching new ideas and modifications to the storyboards.



CONCEPT PRODUCTION 6h



With a storyboard selected, it is now time for the Designer to use previs rendering and video editing software to produce the medium fidelity concept itself. In total, the Designer will have 3 days (approximately 20h) to produce the concept, plus an additional day (6h) to iteratively make modifications before sending the final concept to the Researcher. While your approach may vary depending the format of the concept being produced, we will provide guidance for the development of a previs animation render created with Blender 3D.

On this first production day, we recommend you collect footage, media, and assets to compose a basic scene. With a limited amount of time, you will not be able to create all assets yourself, so be sure to leverage existing free online catalogs. Below are recommended resources that we found helpful when for creating previs animations in Blender.

Recommended Previs Production Resources

In a one-week sprint, these resources can help save you time and reduce the cost of paying for expensive 3D models and other assets. While each of the websites below offer a range of free materials available for you to use in your projects, many of them also require you add attributions through a Creative Commons licensing agreement.



Sketchfab

A catalog of free and paid 3D models.
sketchfab.com



Mixamo

A collection of rigged 3D character models.
mixamo.com



Unsplash

Free images and photos.
unsplash.com



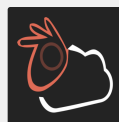
Pexels

Free stock video footage.
pexels.com



BlenderKit

Free HDRIs, materials & models in Blender.
blenderkit.com



SheepIt

Render Blender projects online for free.
sheepit-renderfarm.com

As you craft a vision of a future world the Researcher is developing, you will encounter design challenges that push you to make creative design decisions the envisioned concepts. Throughout the production of the concept over the next few days, try your best to catch moments when you are making these decisions and document them in the creative decision panels on the respective following pages. At the end of the week, you will review and discuss these decisions with the Researcher to question how they may be resolved in a fictional future world.

Day 2 Production Decisions

In the separate blocks on the page this page, jot down the different creative decisions and questions that arise as you produce the envisioned concept. At the end of the week, they will be discussed with the Researcher. If you are following this workbook digitally, be sure to attach screenshots of the project's development tool!

DAY 3

CONCEPT PRODUCTION 7h

Day 3 Production Decisions

In the separate blocks on the page this page, jot down the different creative decisions and questions that arise as you produce the envisioned concept. At the end of the week, they will be discussed with the Researcher. If you are following this workbook digitally, be sure to attach screenshots of the project's development too!

DAY 4

CONCEPT PRODUCTION 7h

Day 4 Production Decisions

In the separate blocks on the page this page, jot down the different creative decisions and questions that arise as you produce the envisioned concept. At the end of the week, they will be discussed with the Researcher. If you are following this workbook digitally, be sure to attach screenshots of the project's development too!

For tomorrow, prepare a concept render to show the Researcher. If you are producing a video, you can modify your project settings to output at lower resolutions or frame rates to reduce the rendering time for the draft.

DAY 5

CONCEPT REVIEW SESSION 1h



On this final day of your sprint, you will be reviewing an early render of the concept the Designer has developed and decide on some minor final changes.

Concept Presentation 30min

Collaboratively watch the prepared concept, then follow the canvas below to guide your discussions.

Initial Reactions <i>What was the Researcher's immediate reaction after seeing the concept?</i>	Estimated Year <i>What approximate year do you estimate the concept depicts?</i>	Estimated Sentiment <i>How positive or negative of a society is portrayed in the concept?</i>
The Role of Self <i>Where do you see yourself in the year depicted in the concept? How do you imagine you would personally interact with the depictions in the presented vision of the future?</i>	Likelihood of Occurrence <i>How likely is the future concept to occur someday in reality? What parts are more or less likely to occur?</i>	

Concept Modification 30min

Next, the Designer will review some of the creative design decisions and questions that arose during the artifact's development. Together, flip through the previous *Production Decisions* sections of the workbook. During the review, the Designer should do their best to justify as many creative decisions as possible, and the Researcher should attempt to answer as many questions as they can. With some of the creative decisions and answered questions in mind, collaboratively ideate on different ways the render could be changes to depict a more accurate representation of the future. If the Designer feels there is time to make the changes by the end of the day, write them in the left hand column of the chart below, and if there is not enough time, write the change in the right hand column.

Modifications for the Sprint <i>Write changes that the Designer agrees can be made to the concept before the end of the day here.</i>	Future Potential Modifications <i>Write down more large-scale changes that cannot be easily completed by the end of the day here.</i>
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CONCEPT PRODUCTION 6h



After the review session, the Designer makes all final changes to the concept video. If there are changes that cannot be made, or other creative decisions that arise during the final stage of production, write them down below. After the final concept is produced, share the final artifact and workbook with the Researcher to conclude the sprint.

Day 5 Production Decisions
