QUICKSCAN - CANVAS

Rehabilitation chair

NAME: Rehabilitation chair

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DATE: December 18, 2025 3:56 AM **DESCRIPTION OF TECHNOLOGY**

The rehabilitation chair is a racing-style chair developed for stroke patients. RevSim and Referox aim to build this system by integrating VR elements, therapeutic games, and simulations of daily activities. The goal is to support patients in practicing controlled movements in a motivating and engaging way.

HUMAN VALUES



The Rehabilitation Chair helps users, particularly stroke patients, rebuild a sense of capability and confidence during the recovery process. By performing simulated daily-life exercises in virtual reality, patients can reconnect with meaningful actions such as reaching, grasping, or maintaining balance. This restores part of their pre-stroke identity as independent individuals.

TRANSPARENCY



IMPACT ON SOCIETY



STAKEHOLDERS



- RevSim - RefeRox **SUSTAINABILITY**



HATEFUL AND CRIMINAL ACTORS



DATA



FUTURE



In the future, the rehabilitation chair could evolve into a smart, adaptive system used widely in rehabilitation centers and even home-based care. Initially developed for stroke patients, it could later be adapted for Parkinsons patients or individuals with other motor impairments. The integration of Al and realtime data analysis might personalize therapy sessions and improve recovery outcomes.

PRIVACY



At this stage, it is not yet defined whether the chair will collect personal data. However, if the final design includes sensors or user tracking, it may process movement or session-related data. These aspects will be further specified during the functional requirements phase, following GDPR principles.

INCLUSIVITY



At this stage, no data or algorithms exist that could create bias. However, bias could arise later if motion or performance data are based on a limited user group (such as only younger patients). Therefore, user testing in diverse age and mobility groups will be planned before final development

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QUICKSCAN - CANVAS - HELPSIDE

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HUMAN VALUES



How is the identity of the (intended) users affected by the technology?

To help you answer this question think about sub questions like:

- If two friends use your product, how could it enhance or detract from their relationship?
- Does your product create new ways for people to interact?...

TRANSPARENCY



Is it explained to the users/stakeholders how the technology works and how the business model works?

- Is it easy for users to find out how the technology works?
- Can a user understand or find out why your technology behaves in a certain way?
- Are the goals explained?
- Is the idea of the technology explained?
- Is the technology company transparent about the way their...

IMPACT ON SOCIETY



What is exactly the problem? Is it really a problem? Are you sure?

Can you exactly define what the challenge is? What problem (what 'pain') does this technology want to solve? Can you make a clear definition of the problem? What 'pain' does this technology want to ease? Whose pain? Is it really a problem? For who? Will solving the problem make the world better? Are you sure? The problem definition will help you to determine...

STAKEHOLDERS



Who are the main users/targetgroups/stakeholders for this technology? Think about the intended context by...

When thinking about the stakeholders, the most obvious one are of course the intended users, so start there. Next, list the stakeholders that are directly affected. Listing the users and directly affected stakeholders also gives an impression of the intended context of the technology.

SUSTAINABILITY



In what way is the direct and indirect energy use of this technology taken into account?

One of the most prominent impacts on sustainability is energy efficiency. Consider what service you want this technology to provide and how this could be achieved with a minimal use of energy. Are improvements possible?

HATEFUL AND CRIMINAL ACTORS



In which way can the technology be used to break the law or avoid the consequences of breaking the law?

Can you imagine ways that the technology can or will be used to break the law? Think about invading someone's privacy. Spying. Hurting people. Harassment. Steal things. Fraud/identity theft and so on. Or will people use the technology to avoid facing the consequences of breaking the law (using trackers to evade speed radars or using bitcoins to launder...

DATA



Are you familiar with the fundamental shortcomings and pitfalls of data and do you take this sufficiently into...

There are fundamental issues with data. For example:

- Data is always subjective;
- Data collections are never complete;
- Correlation and causation are tricky concepts:
- Data collections are often biased:...

FUTURE



What could possibly happen with this technology in the future?

Discuss this quickly and note your first thoughts here. Think about what happens when 100 million people use your product. How could communities, habits and norms change?

PRIVACY



Does the technology register personal data? If yes, what personal data?

If this technology registers personal data you have to be aware of privacy legislation and the concept of privacy. Think hard about this question. Remember: personal data can be interpreted in a broad way. Maybe this technology does not collect personal data, but can be used to assemble personal data. If the technology collects special personal data (like...

INCLUSIVITY



Does this technology have a built-in bias?

Do a brainstorm. Can you find a built-in bias in this technology? Maybe because of the way the data was collected, either by personal bias, historical bias, political bias or a lack of diversity in the people responsible for the design of the technology? How do you know this is not the case? Be critical. Be aware of your own biases....

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