QUICKSCAN - CANVAS

Challenge tool

NAME: Challenge tool

DATE: May 15, 2026 1:02 PM

DESCRIPTION OF TECHNOLOGY

A mobile-first challenge creation tool that enables teachers and content instructors to design programming-dance challenges for children by making movement-based coding concepts. The tool reduces creation time through structured workflows, templates and AI support, while keeping educators in control of their decisions

HUMAN VALUES

Instead of relying on developers or predefined challenges, educators are given the chance to create, adapt and reflect on their own programming-dance challenges. This strengthens their professional identity as active facilitators of learning and supports ownership. The optional AI support is designed to assist without replacing decision-making, ensuring that teachers remain in control.

TRANSPARENCY

The core functionality and goals of the tool are explained through onboarding and UI cues. AI assistance is clearly presented as supportive rather than authoritative. While the business model is not central to daily use, the tool remains transparent about its purpose and role within the educational platform.

IMPACT ON SOCIETY

Teachers and instructors currently need between 45 and 90 minutes to create a single challenge for Body.Scratch. This process is unclear, which creates frustration and limits scalability for schools. Based on interviews and usability testing, this is a real and recurring problem for educators working under time pressure. Reducing it will directly improve adoption, consistency and educational impact, making it a problem worth solving.

STAKEHOLDERS

- Teachers
- Content instructors
- Students

SUSTAINABILITY

The tool is designed mobile-first and lightweight, minimizing unnecessary processing. AI features are optional and used rarely, which reduces continuous computational load. Challenge creation replaces manual developer work, indirectly reducing repeated energy use across the workflow.

HATEFUL AND CRIMINAL ACTORS

The Challenge tool itself does not enable illegal behavior by design. However, potential misuse could occur if teachers upload inappropriate content or misuse recorded movement data. To mitigate this, the tool assumes controlled access via institutional accounts and predefined movement libraries. AI support is limited to suggestion and does not autonomously generate or publish content, reducing risks of misuse or untraceable actions.

DATA

Yes. The design assumes that data can be incomplete, subjective or biased. For this reason, the AI Suggest feature is used only as inspiration and does not make decisions autonomously. Teachers always review, edit and approve content, reducing the risk of over-reliance on imperfect data.

FUTURE

The tool could make creative coding through movement more accessible in education and normalize embodied learning. However, increased use also requires ongoing attention to data privacy, AI transparency and sustainable infrastructure to avoid negative long-term impact.

PRIVACY

The tool may process limited personal data such as teacher account information (name, role) and optional recorded movement videos. No sensitive student data is processed during challenge creation. AI features do not require personal or biometric data and do not analyze childrens movements directly. All recorded data is used strictly for educational purposes and aligns with GDPR principles such as data minimization and purpose limitation.

INCLUSIVITY

Potential bias may exist in AI-generated suggestions due to training data or design assumptions. To mitigate this, AI suggestions are optional and editable. Teachers remain fully in control of the final challenge content, limiting the impact of bias.

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TICT

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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