VR Tutorial

A VR Tutorial that is targeted towards users with little to no experience in VR or gaming in general. This tutorial is supposed to be the base of an expandable Tutorial system that can help developers easily add and remove sections from the tutorial. The main focus however, is trying to get the inexperienced users to learn VR controls easily without forgetting them throughout certain trainings.

Created by: BendeVries
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Context of use: Education
Level of education: Bachelor

Impact on society

What impact is expected from your technology?

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

This VR Tutorial is made to figure out what good methods are to teach inexperienced users VR controls. This is a big problem as it is noticed that inexperienced users get easily overwhelmed with this new technology. And when these users get overwhelmed they will often end up with a very negative view on VR. So this VR tutorial can end up benefitting the company (in this case Enversed Studios).

Are you sure that this technology is solving the RIGHT problem?

Yes, it attempts to.

How is this technology going to solve the problem?

Make VR easier for inexperienced users. Giving them the opportunity to focus more on the training self than the controls.

What negative effects do you expect from this technology?

None.

In what way is this technology contributing to a world you want to live in?

Nothing. It is a tutorial, it does not fix a problem that affects the world.

Now that you have thought hard about the impact of this technology on society (by filling out the questions above), what improvements would you like to make to the technology? List them below.

Not all functionalities from the requirement list have been implemented into the Tutorial that could improve the effectiveness of the tutorial. A few are: Speech, Controller animation and Virtual assistent. A good idea that was given was to create a control scheme based on the experience from the user. I also would like to test this with a bigger audience, for even better feedback.

Hateful and criminal actors
What can bad actors do with your technology?

In which way can the technology be used to break the law or avoid the consequences of breaking the law?
If users can learn and memorize the controls better, they won't have to focus on them too much. With this, they can focus more on the training itself. These trainings are usually official and can grant a certificate. So, it does not really "avoid breaking the law", but they will get better at doing their job.

Can fakers, thieves or scammers abuse the technology?
No

Can the technology be used against certain (ethnic) groups or (social) classes?
Yes, if a developer with bad intentions created "tutorial sections". But the company will definitely punish the developer.

In which way can bad actors use this technology to pit certain groups against each other? These groups can be, but are not constrained to, ethnic, social, political or religious groups.
By importing controversial art or actions.

How could bad actors use this technology to subvert or attack the truth?
Maybe the use of images. But it is a tutorial... so spreading fake news or something will not have an impact on the user as they will just turn it off.

Now that you have thought hard about how bad actors can impact this technology, what improvements would you like to make? List them below.
In terms of the tutorial itself, there are not really bad actors. The worst someone can do is not take the tutorial seriously.
A developer might create a room that is controversial, but the company will immediately have consequences for these actions. So, no improvements are needed in this aspect.

Privacy

Are you considering the privacy & personal data of the users of your technology?

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

No, no personal data is needed. If the user, uses a Meta Quest then it might use personal data. But that is out-of-scope for this assignment.

Do you think the technology invades the privacy of the stakeholders? If yes, in what way?

No

Is the technology is compliant with prevailing privacy and data protection law? Can you indicate why?

Yes, it does not use personal data.

Does the technology mitigate privacy and data protection risks/ concerns (privacy by design)? Please indicate how.

N/A

In which way can you imagine a future impact of the collection of personal data?

N/A

Now that you have thought hard about privacy and data protection, what improvements would you like to make? List them below.

The tutorial does nothing with personal data. The only thing I can advice if you care a lot about privacy, is to maybe use a different VR Headset. But again, that is out-of-scope.

Human values
How does the technology affect your human values?

How is the identity of the (intended) users affected by the technology?
The goal of the VR Tutorial is to give people motivation and show them that VR is not as bad as some say it is.
Users should have a more positive experience as they complete tasks that were given inside the Tutorial.

How does the technology influence the users' autonomy?
The technology is supposed to make the user independant inside VR. It is a guided tutorial.

What is the effect of the technology on the health and/or well-being of users?
Users can get motion sick. And it might impact eye sight for users of a young age.
Both are due to it being VR and not specifically the technology (tutorial) this Cycle is about.

Now that you have thought hard about the impact of your technology on human values, what improvements would you like to make to the technology? List them below.
For user-friendliness maybe the personalized controls scheme mentioned before. But other than that, there are no improvements in this aspect. Only thing I can think of, is that you might want to add a minimum age. As VR can be damaging to the eyes of young users.

However, that is not the target audience and is out-of-scope.

Stakeholders

Have you considered all stakeholders?

This category is only partial filled.

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

Name of the stakeholder
Customers of Enversed Studios

How is this stakeholder affected?
The customers of Enversed Studios are usually other companies that buy trainings from Enversed. Their employees are the actual users of these products.
Stakeholder is not consulted as the current iteration does not directly affect them as the current tutorial is very general. (That's also why there is a stakeholder called "Inexperienced VR users")

Did you consult the stakeholder?
No

Are you going to take this stakeholder into account?
Yes

Name of the stakeholder
Enversed Studios (Particularly: Developers and Product Owners)

How is this stakeholder affected?
Developers will directly come in contact with product to use it as an example or will expand on the product.
Product Owners are in direct contact with the customers.

Did you consult the stakeholder?
Yes

Are you going to take this stakeholder into account?
Yes

Name of the stakeholder
Inexperienced VR users

How is this stakeholder affected?

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This stakeholder is here as the "general" stakeholder. The employees of the customers are are usually inexperienced VR users. So in that case, this product affects all Inexperienced VR users as these can be seen as the target audience.

Did you consult the stakeholder?
Yes

Are you going to take this stakeholder into account?
Yes

Did you consider all stakeholders, even the ones that might not be a user or target group, but still might be of interest?
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Now that you have thought hard about all stakeholders, what improvements would you like to make? List them below.
Multiple improvements in this regard have been mentioned before. The use of the tutorial (and trainings in general) need to be as easy as possible for all users.

Data

Is data in your technology properly used?

This category is not applicable for this technology.

Inclusivity
Is your technology fair for everyone?

Will everyone have access to the technology?
No, you need a VR headset.

Does this technology have a built-in bias?
All choices made within this product, were based on Research that was done beforehand. There is no bias, unless the sources of the research are.

Does this technology make automatic decisions and how do you account for them?
It does not make decisions.

Is everyone benefitting from the technology or only a a small group? Do you see this as a problem? Why/why not?
Only a small group directly as it is not directed to the public. This is not a problem as the products made by Enversed Studios are also not for the public.

Does the team that creates the technology represent the diversity of our society?
I think the team is diverse enough.

Now that you have thought hard about the inclusivity of the technology, what improvements would you like to make? List them below.
Not applicable at this moment.

Transparency

Are you transparent about how your technology works?

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

The product has been tested with the developers and target audience. Within these tests, motive and goals were explained.

If the technology makes an (algorithmic) decision, is it explained to the users/stakeholders how the decision was reached?

N/A

Is it possible to file a complaint or ask questions/get answers about this technology?

Of course, companies are always able to ask questions or file complaints. Feedback is always welcome.

Is the technology (company) clear about possible negative consequences or shortcomings of the technology?

N/A

Now that you have thought hard about the transparency of this technology, what improvements would you like to make? List them below.

Feedback is always welcome.

Sustainability

Is your technology environmentally sustainable?

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

I do not understand this question, but if we are literally talking about energy. Then, the current iteration is very low on graphics and very minimal. This saves a lot of battery life on the VR headset.

If this is not what is meant with this question, then I have no clue.

Do you think alternative materials could have been considered in the technology?

My technology is not physical.

Do you think the lifespan of the technology is realistic?

Yes, it is expandable.

What is the hidden impact of the technology in the whole chain?

There is not hidden impact. The technology can be put on any VR headset. It is expandable, so a new "base" does not need to be made.

Now that you have thought hard about the sustainability of this technology, what improvements would you like to make? List them below.

Make the game look better, but optimize it better. Maybe use newer hardware to safe battery life.

Future
Did you consider future impact?

What could possibly happen with this technology in the future?
Personally, I think that is would have a positive impact if many people use this product. It can be improved on in terms of feedback or maybe even mods.

The tutorial is also made in a modular way, so every user should be able to create their own tutorial easily by using the base of the tutorial and expanding on it.

Sketch a or some future scenario (s) (20-50 years up front) regarding the technology with the help of storytelling. Start with at least one utopian scenario.
N/A

Sketch a or some future scenario (s) (20-50 years up front) regarding the technology with the help of storytelling. Start with at least one dystopian scenario.
N/A

Would you like to live in one of this scenario's? Why? Why not?
N/A (I don't understand how to create a Utopian/Dystopian scenario for a VR tutorial)

What happens if the technology (which you have thought of as ethically well-considered) is bought or taken over by another party?
If someone bought it, it would have no problem. This product is expandable. It could even be made an open-source product in which the community can create their own tutorials.

Impact Improvement: Now that you have thought hard about the future impact of the technology, what improvements would you like to make? List them below.
Nothing. In an unrealistic scenario where this product is released to the public, I think it can only have a positive impact.