

Iteration in Isolation

Finding Success as a Solo VR Developer During a Global Pandemic

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I love



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Music Videogames Nature Learning



How it all started

Making a VR Game to flee from the pandemic "to stay grounded"

- . Teaching Game Dev hobby
- . VR exercise
 - Scuba diving
 - . Tunnel vision
 - . Spatial recognition
 - . Don't make it (too) hard







Features of the game

SaberGuns



Slow-down time whenever you like and find your strategy to crack the high score

Fitness stats like squats and calories burned are tracked and displayed

Base score on the **strength** of hits in combination with **precise slashing and shooting** mechanics

Unique soundtrack featuring a song composed specifically for each world

Worlds inspired by modern **sci-fi and fantasy** films and novels

Skills and resources needed for VR

Games + music + teaching => rhythm game teaching action choreo

Make a **dream come true** - see it through to the end

Great opportunity to **learn a lot** – fail, fail and fail again until it works

Unity and Unreal are both great – prefer Unity

Think efficiently – development for a **mobile chip** targeting 72 – 90 fps

Challenges during development

Pandemic - cut off from most social contacts



Iterations - cycling around a fixed idea with little feedback

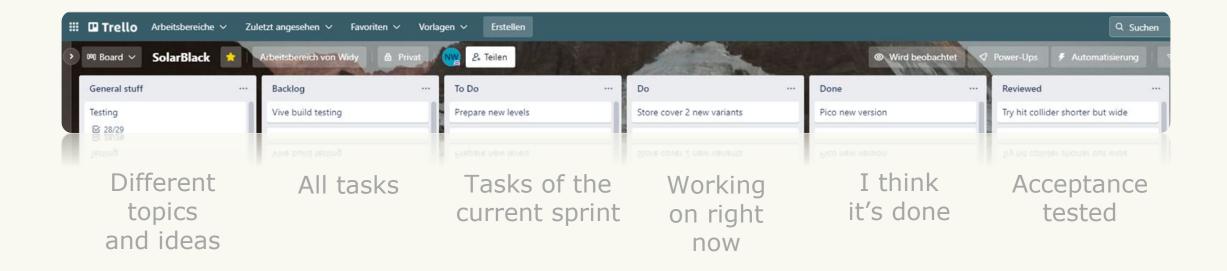
Designing in isolation - I initially made the game much too hard



Technical challenges - keeping up with the speed of SW/HW development



Staying organized



Single Dev – day-to-day

Stay organized - **SCRUM**

Write it down - brain dump - **Trello**

Step by small step – avoid too much pressure

Keep it clean – clean coding structure

Meditate and enjoy life



Porting for mobile VR platforms

It is now easily possible to use **different XR SDKs** in one project

Use **defines** to make specific code for each platform

Adapt the **controller layout** and **SDK features** for each platform

Platforms are similar – chip, integration, controllers, features

Extensive testing and optimization (FFR, rendering features)



Finding the perfect partner

Why find a partner?

Pitching

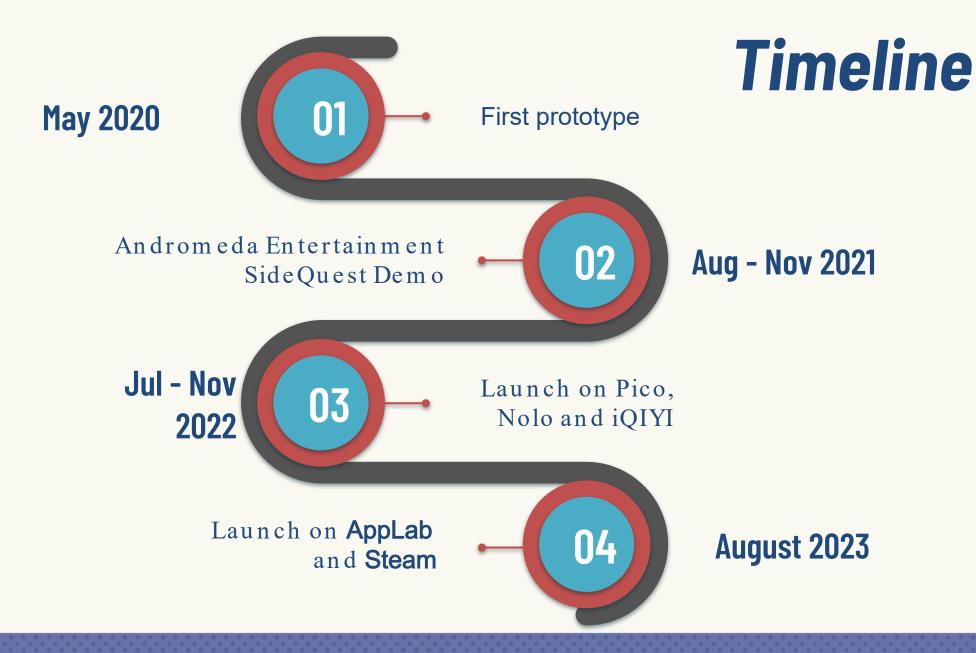
Contacting publishers

Recognize the right partner

Get a **contract** and stay cool – legal aspects sorted out







Shipping and making everybody happy

Polishing... never really finished

Testing, testing with everybody you know

Get an opinion and really listen, write it down right away

Be realistic about what you want to change

Integrate and **test again**



Tools used

- Unity
- Blender
- Affinity, Gimp
- Cubase
- Trello

Recommended

- Soundtrap, band lab
- Fruity Loops



Lession Learned

- Build a core loop, that is easy to test and understand
- Test early and often decide on your audience and test the difficulty
- Plan more than 50% time testing and refining
- Use a project management tool (e.g. Scrum, Kanban) for knowledge management and brain dump
- Don't get lost in details too early
- Fun first, polish the most gameplay-relevant parts first
- Prioritize from your core loop
- Anticipation action reward micro loop can be applied to every design choice



Where to go next?

- Jaron Lanier Dawn of the New Everything
- Keijiro Takahashi unity extensions and visualization https://www.keijiro.tokyo/
- Ian Hubert Blender/Photo mapping <u>https://www.youtube.com/c/mrdodobird/videos</u>
- Uncle Bob Clean Code https://youtu.be/7EmboKQH8IM



#anaburn https://www.youtube.com/watch?v=NMf14-vxmCY



THANKS!



Questions?

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Wishlist on Steam





