Video communication

- Clear communication who we are and highlight two aspects
 - Why we are different
 - Things you can do here

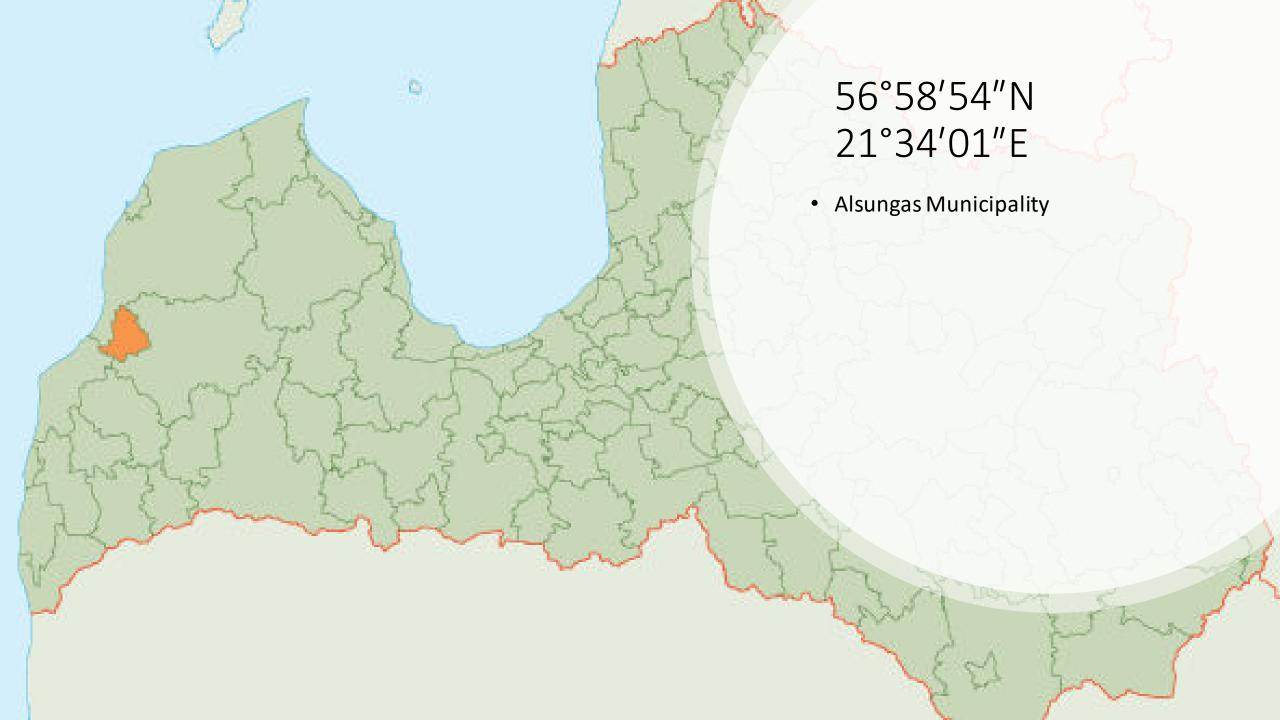
Who can help in creating an video

- Local town folks of course, no actors can reproduce who we are
- Five days of acting and filming, everybody chipped in

Results

- We attracted local tourism, multiple groups came to visited us
- Material which we
 - Use in communication who we are
 - Use to raise awarness who we are
 - Use to highlight most important things about who we are
 - https://www.youtube.com/watch?v=Y6uU5afrVxc
 - https://www.youtube.com/watch?v=2CMitF-d0eY&t





Kristaps Vītoliņš

17 years in IT field

Enterprise Architect at Atea

Owner of Hot Code SIA

kristaps.vitolins@gmail.com



Reality

• The state of things as they are, rather than as they are imagined to be

https://dictionary.cambridge.org/dictionary/english/reality

Augmented Reality

• Images **produced by a computer** and used together with a view of the real world

https://dictionary.cambridge.org/dictionary/english/augmented-reality?q=Augmented%0BReality

Kids do augment really daily

- Sofa get bed sheets and now it is a fort
- Table I will sit under it and eat, it is my house
- Cardboard box A house, a boat, a car
- A stick a sword, a gun, a spear, a rod

Kids do augment really daily

- Sofa get bed sheets and now it is a fort
- Table I will sit under it and eat, it is my house
- Cardboard box A house, a boat, a car
- A stick a sword, a gun, a spear, a rod



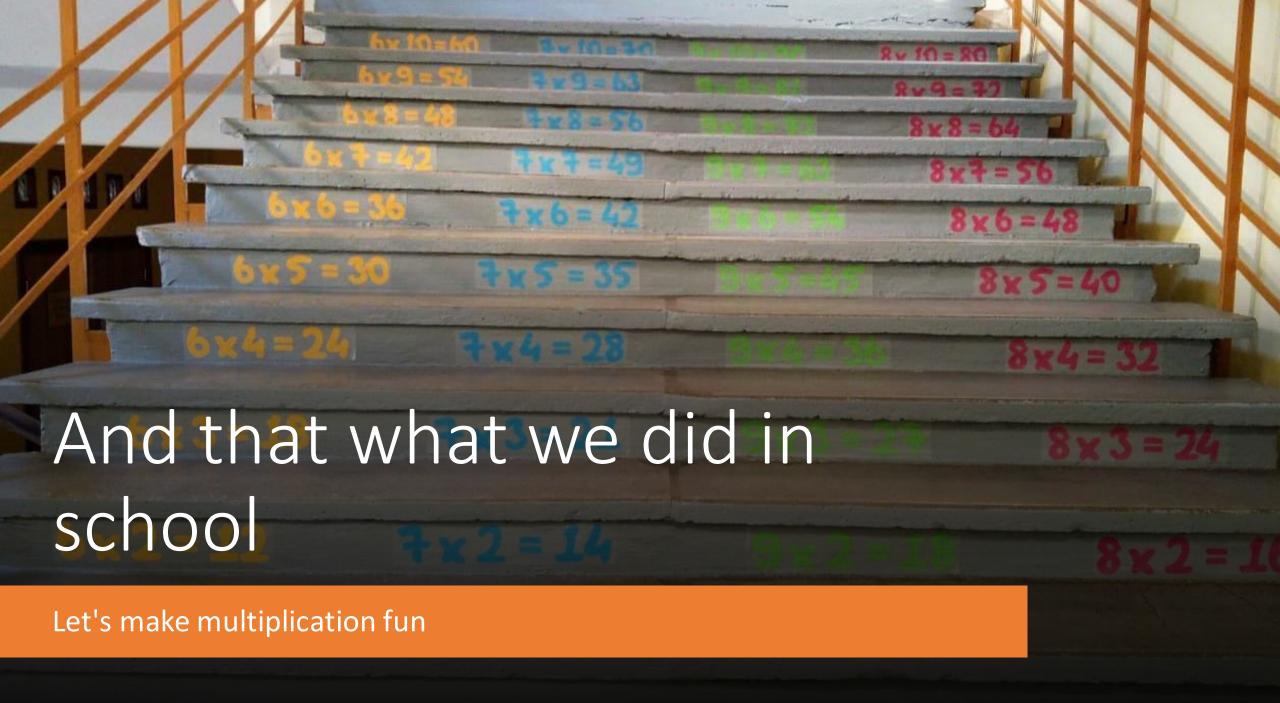
Kids do augment really daily

- Sofa get bed sheets and now it is a fort
- Table I will sit under it and eat, it is my house
- Cardboard box A house, a boat, a car
- A stick a sword, a gun, a spear, a rod



Because it is **fun** – reality sometimes is just too boring.



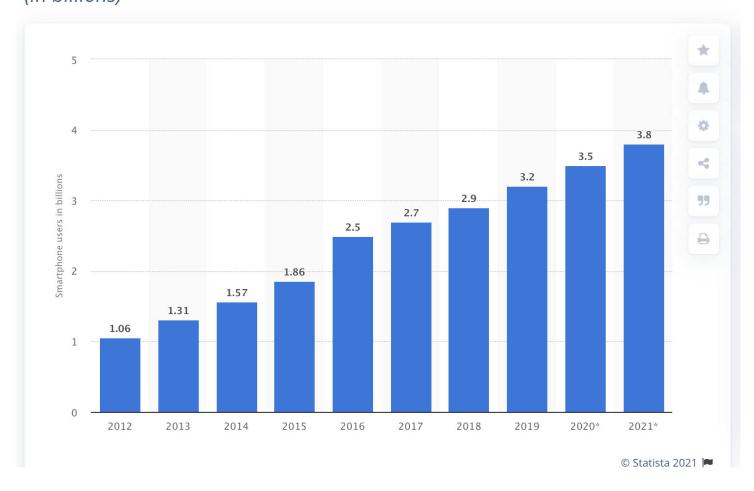


Here is why, we need to do more

Phones

- 2012 1.06 billions
- 2021 projection tripled

Number of smartphone users worldwide from 2016 to 2021 (in billions)







Bit of history

- It started in mid 2020, where I offered a help to teach software craftmanship in local school
- In beginning of 2021 small group of town folks released a small mobile application to boost local tourism
- It is **important** to highlight, none of the group had any experience to development
- It was perfect fit as smart village was brainstorming what to do with sudden influx of tourism

How

- Before covid restriction it was an onsite activity once per week
- After the covid restrictions, zoom remote calls once pre week
- Best approach, which I found does work, is mob programming

- Mob programming (informally mobbing) is a software development approach where the whole team works on the same thing, at the same time, in the same space, and at the same computer.
- -- https://en.wikipedia.org/wiki/Mob_programming



Result

•We did it!

To not lose the moment



We initiated one more initiative – AR at school

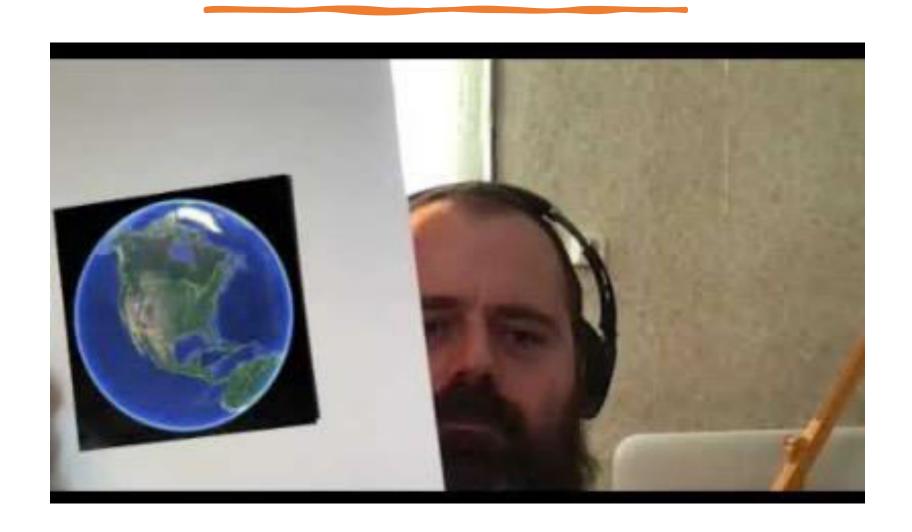


Involve people from previous group and kids from school

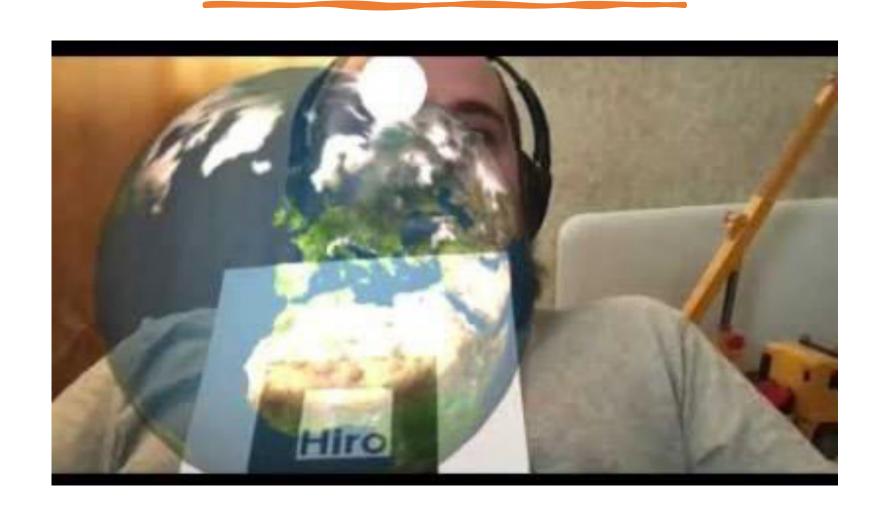


Create an application, which **augments** reality within the local **school**

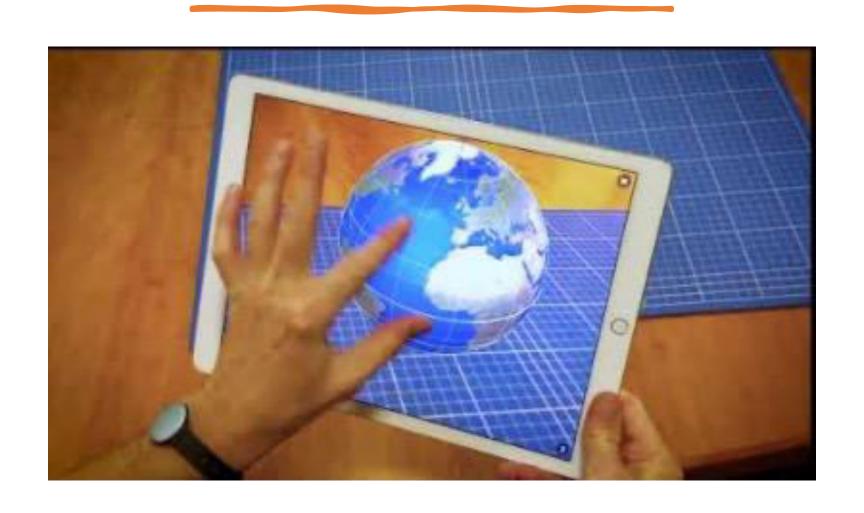
Is it even possible?



How about 3D



We are aiming for



Why we start with globe

- It teaches that earth is not flat
- It teaches it spins
- It teaches day and night cycle
- It teaches winter and summer cycle
- It opens more possibilities to teach
 - Create solar system with all planets and sun in the middle
 - Example how rockets are delivered in Earth orbit
 - Look in deatails, information about each country

Knowing is everything



Examples can be found here
and the source code for examples here



Our vision is to use web base AR. As all phones have a web browser

Where we are

- Group formed, with 12 participiants,
 - 5 kids from the local school
 - 2 teachers
 - 2 parents
 - 2 teenagers
- So far we had 2 sessions we learn basic concepts of programming
- Development language Javascript
- Frameworks we will use:
 - https://github.com/facebook/react UI interface
 - https://github.com/mrdoob/three.js/ 3D engine
 - <u>https://github.com/artoolkitx/jsartoolkit5</u> marker recognition
 - https://github.com/jeromeetienne/threex threejs extension connects 3D with AR
 - This will change, once we have hands on

Key to success

Do it together

bit.ly/3qETIXI



