

VR / AR



Can(not) you!?

Tell what is VR/AR!?



Virtual Reality
Can take you anywhere.

Augmented Reality
Can bring anything to you.

Virtual Reality

Virtual Reality is an artificial, computer generated simulation or recreation of a real life environment or situation. It immerses the user primarily by stimulating their vision and hearing.

Augmented Reality

Augmented Reality is a technology that layers interactive, virtual enhancements atop an existing reality. It is developed into apps and used on mobile devices which blends digital components.

VR headsets



Google
Cardboard



Google
Daydream View



Lenovo
Mirage Solo



Can(not) you!?

Which amongst 3 headsets has higher specs, than others according to you?

Hint: Nomenclature

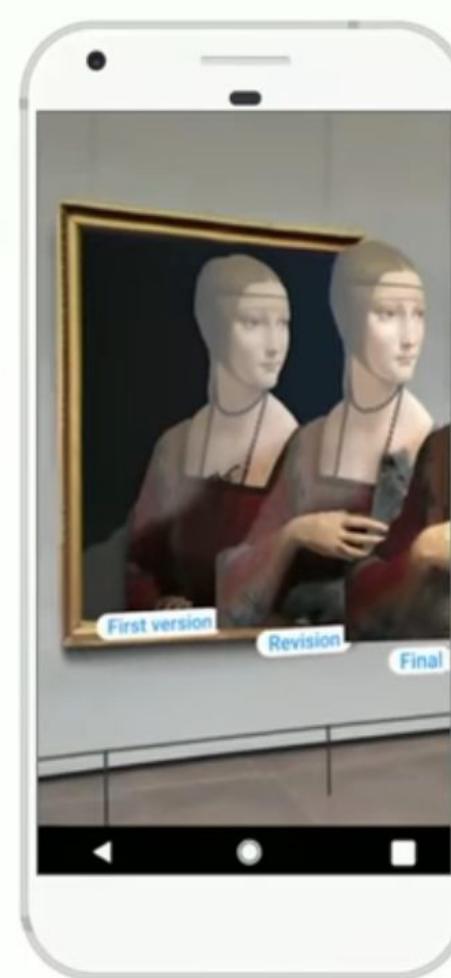


Showtime!

Simple VR design: <https://codepen.io/rashmi-nagpal/pen/PaQEbp>
<http://awwwards.unboring.net/>

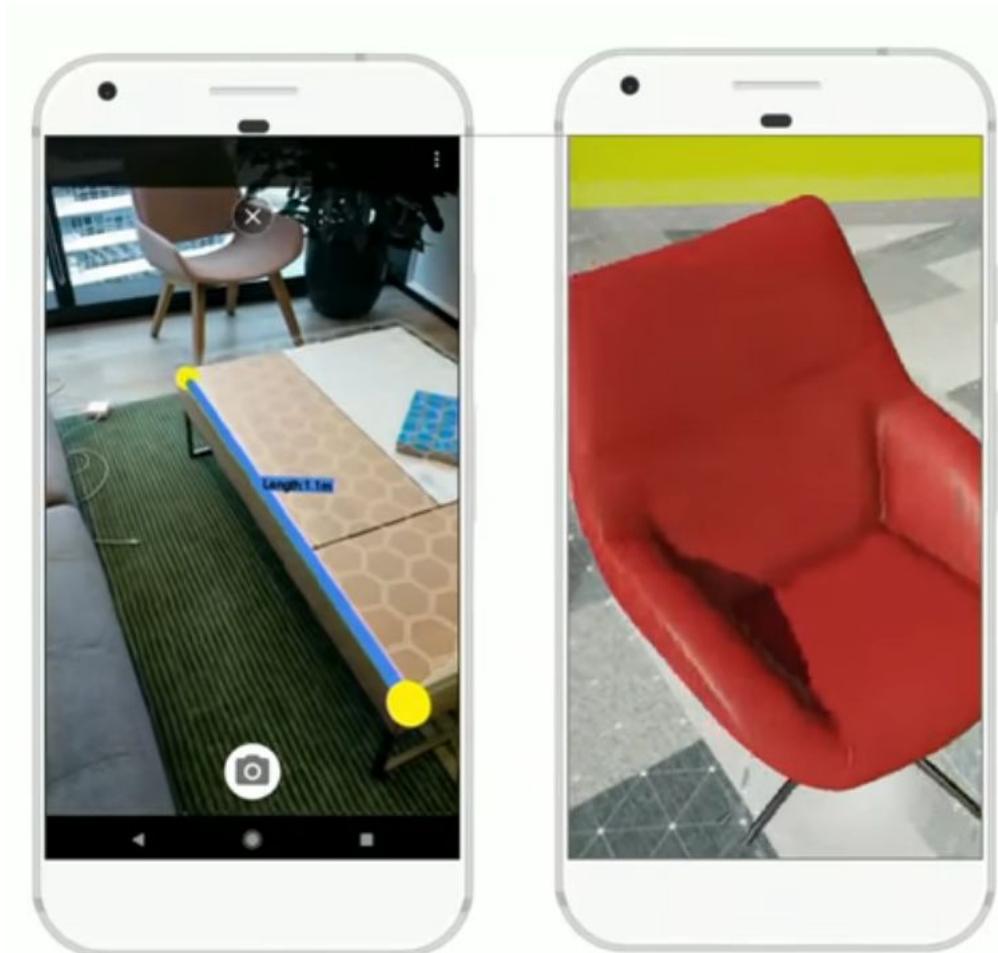
AR marks the next big shift in mobile computing

AR can bring digital information to you in the context of the real world, right where it's more accessible and useful.



AR can be useful

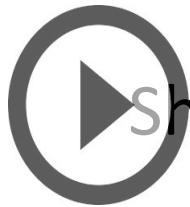
Build tools and shopping experiences that can understand the geometry of a room.



AR can be fun

Build games and creative experiences that interact with the real world.

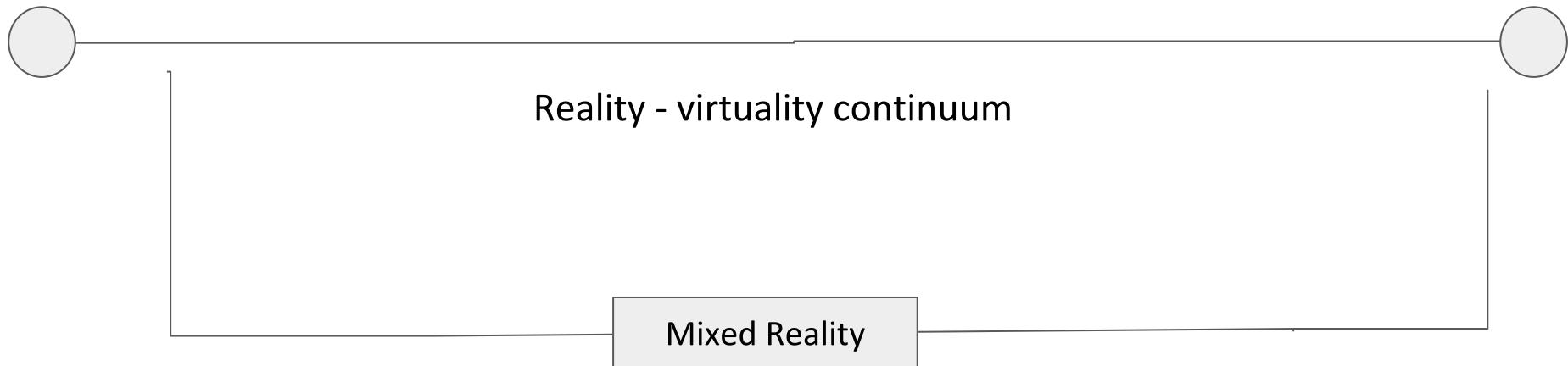




Showtime!

Simple AR design:

Real environment Augment Reality Augmented virtuality Virtual environment



State of the art

Motion Tracking

As mobile device moves through the world, AR technologies combines visual data from the device's camera and IMU to compute the position and orientation on the phone i.e we can render virtual object to match into physical environment.



Lighting Estimation

AR technologies can detect information about the lighting of its environment so you can render your virtual objects under the same conditions as the environment around them to have more immersive looks.



Environment Understanding

AR technologies understand the physical structure of the environment, detecting horizontal surfaces, like tables and desks, and makes these surfaces available to your app as planes.

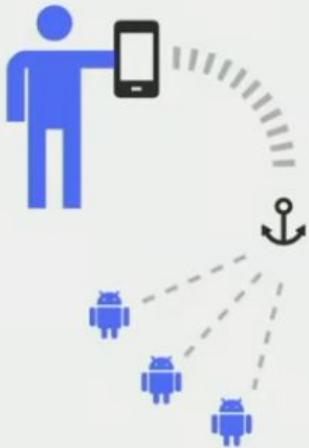




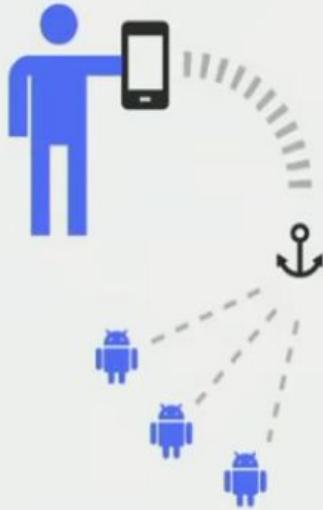
Can(not) you!?

Tell which amongst the following are AR based apps?

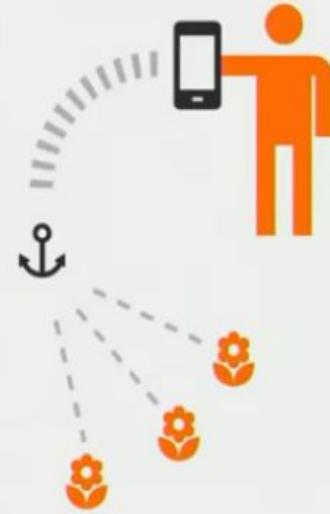
- Statik
- Pokemon Go
- The Lab
- Tilt Brush



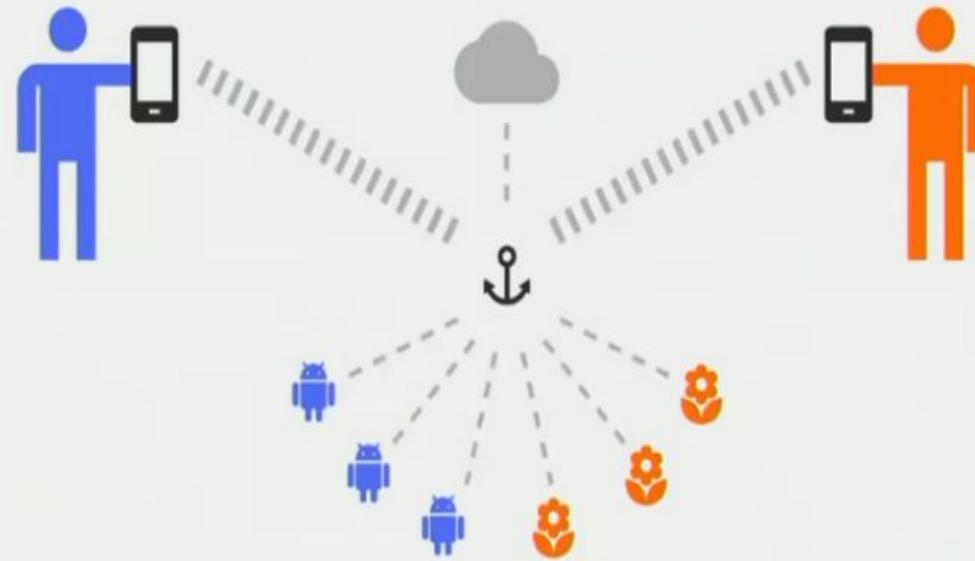
In AR, anchors connect content to the physical world.



In AR anchors connect content to the physical world.



Each device has its own augmented reality



With Cloud Anchors, now, you can share AR content.



PAIRED





Use cases

Education

Advertising

Products







ENTERPRISE USES OF AR



MAKING KILLER DIGITAL OUT OF HOME ADS



ENTERPRISE USES OF AR



Can(not) you!?

Has VR/AR technologies touched medical services!?



Showtime!

<https://www.youtube.com/watch?v=jvBH-sgPyak>



Can(not) you!?

Can we use these technologies for less fortunates ones!?

Hint: Visually impaired et al.



Think about the **CurbCuts**

Designed for Wheelchairs,
they're helpful for so many more

- Suitcases
- Bicycles
- Baby Strollers

Opportunities for action!



Mobility & Dexterity
Impairments



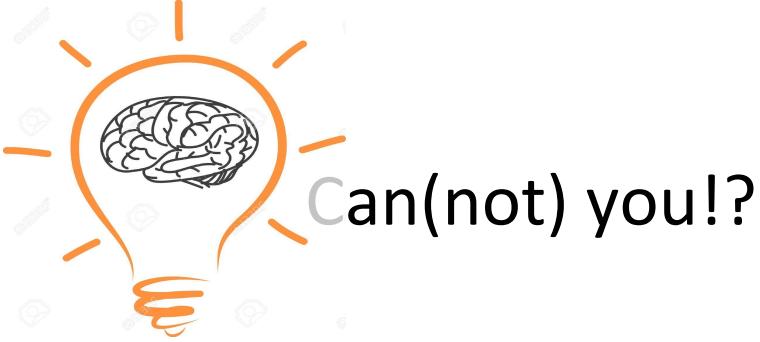
Vision
Impairments



Audio
Impairments



Cognitive
Impairments



Can(not) you!?

Tell use cases of VR/AR in banking applications!?

Don't design for yourself,

design for the broadest

possible market.

You'll be surprised who you'll be supporting.



Superpowers!

Augmented and Virtual Reality can give users Super powers!

These “powers” are helpful for everyone, but can be even more impactful for people with disabilities!



Showtime!

Backtrack to topics

A word cloud on a brown background containing various AR and VR terms. The words are in white and yellow, with some words like 'Reality' and 'Physical' appearing in white. Other words include 'Screen', 'Cardboard', 'VR Camera', 'Use Cases', 'Virtual Education', 'Web AR', 'World Motion', 'Products', 'Pokemon Go', 'Virtual World', 'Headset', 'Healthcare', 'ARCore', 'Advertising', 'AR Camera', 'Augmented Google', 'Aframe', 'Oculus', and 'Aframe' again.

Reality Physical Screen Cardboard VR Camera Use Cases Virtual Education Web AR World Motion Products Oculus Advertising AR Camera Augmented Google Aframe Aframe

Thanks, a bunch!

To heavy weight lifters:

- Amit G.
- Rishabh S.

All present!

Over n out!
RN