INTERACTIVE AUGMENTED REALITY WITH PRINTED ELECTRONICS

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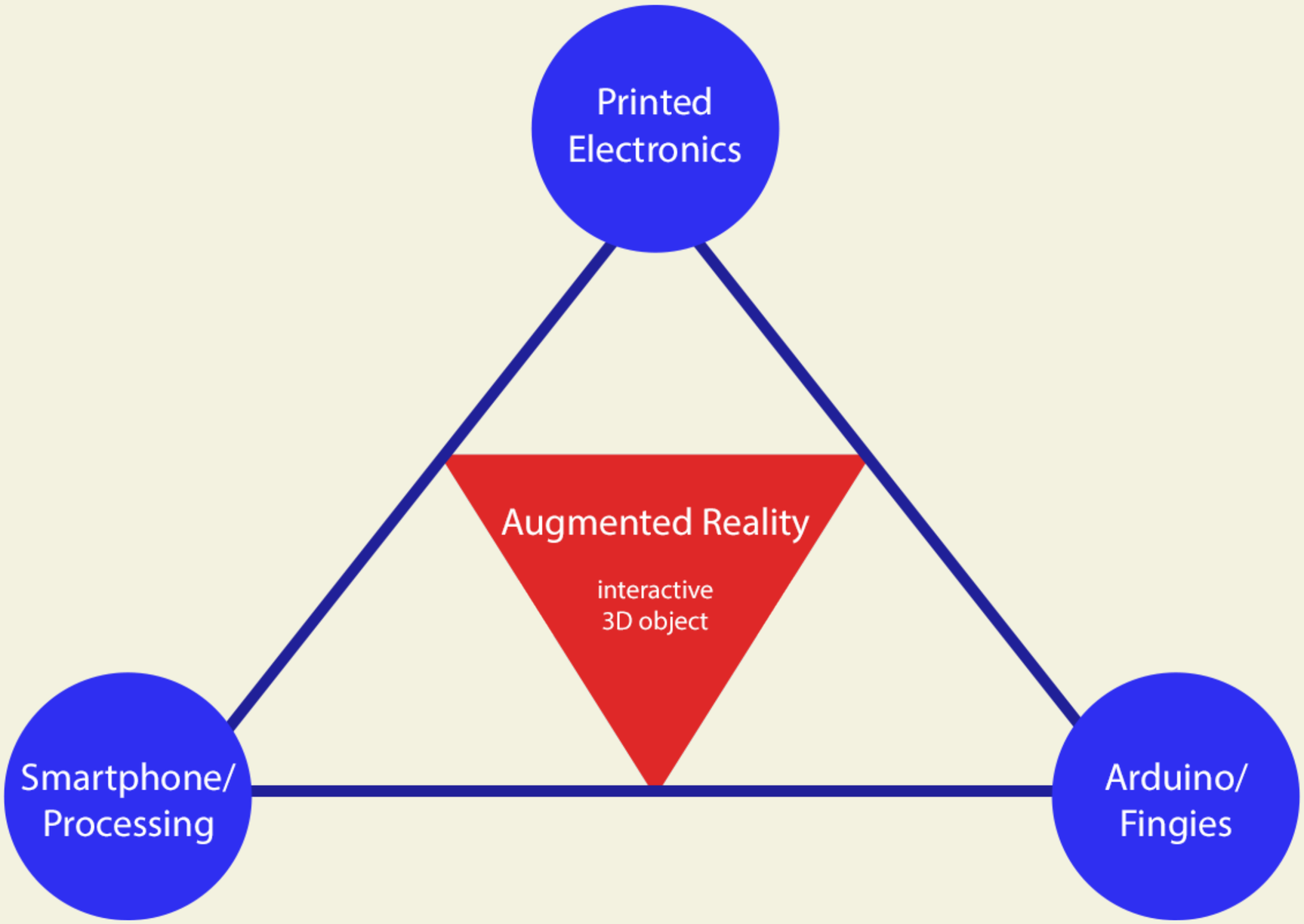
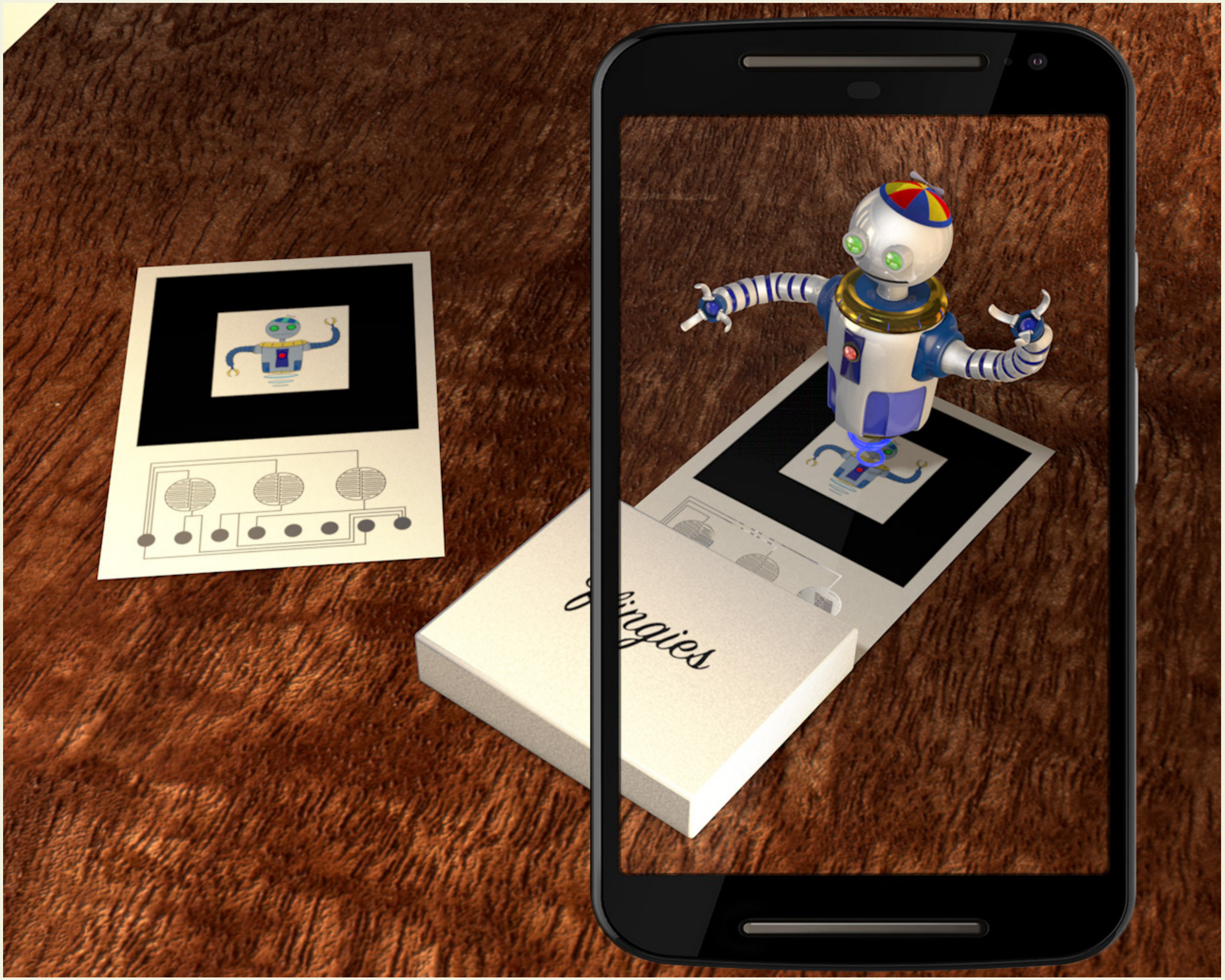
WHAT DOES THAT MEAN?

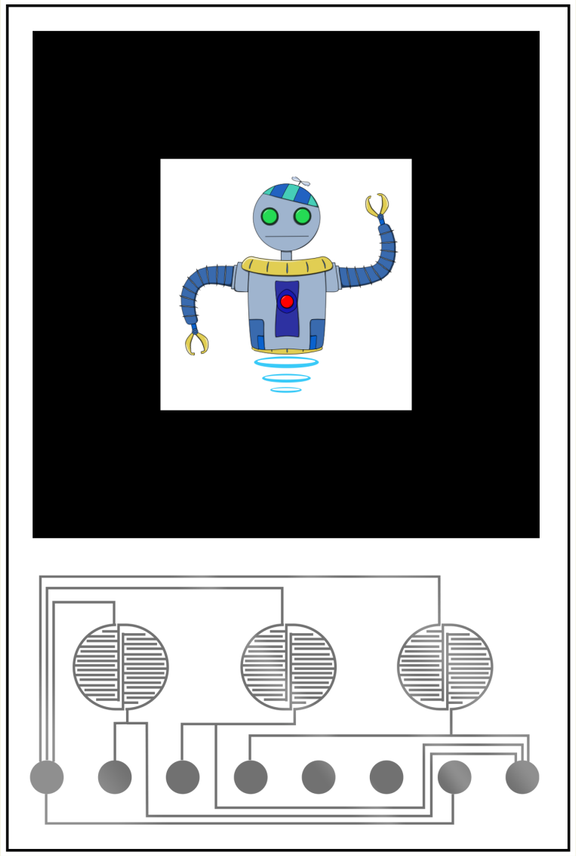
Augmented Reality:
Implementing digital objects into the real world with the help of software, a camera and a so-called ‘marker‘

Printed Electronics:
Fully functional electronical circuits, which can be printed on various materials with special silver ink


Printed
Electronics
Augmented Reality
interactive
3D object
Smartphone/
Processing
Arduino/
Fingies



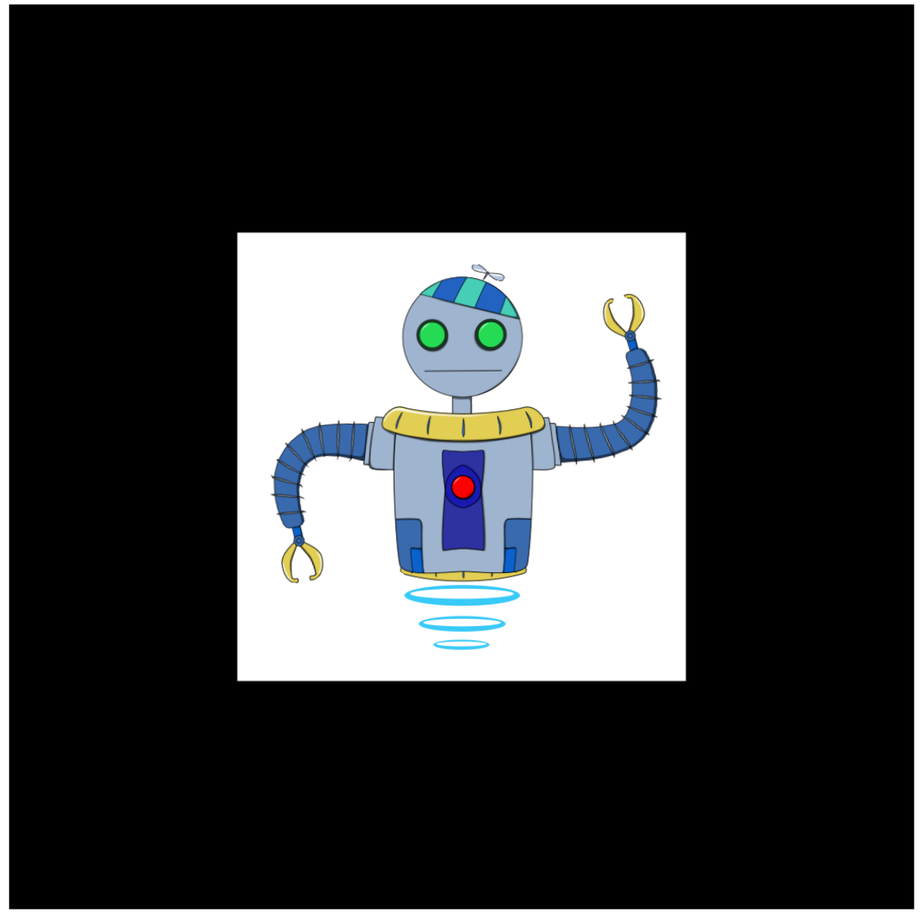
THE MARKER

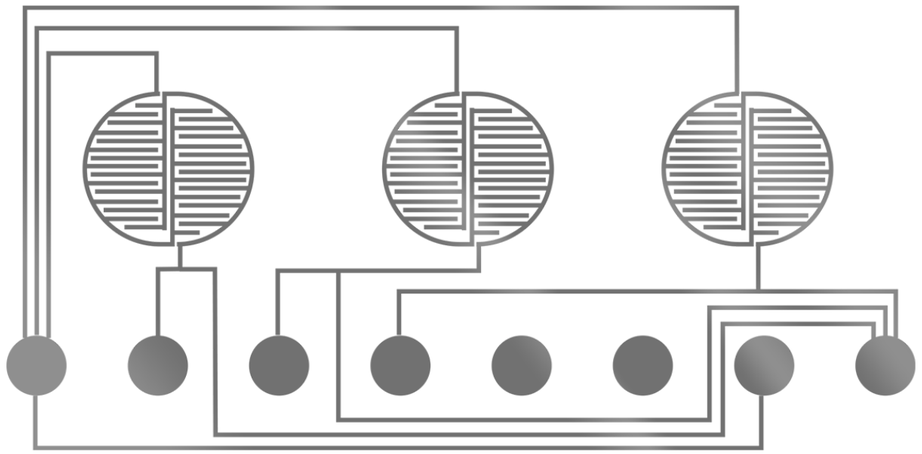


A conventional printed paper card with an overprinted silver ink circuit

Three humidity sensors, which will work as touch input to give commands to the AR object

Eight output-dots, which will connect to the fingies system via magnets. This provides plug and play





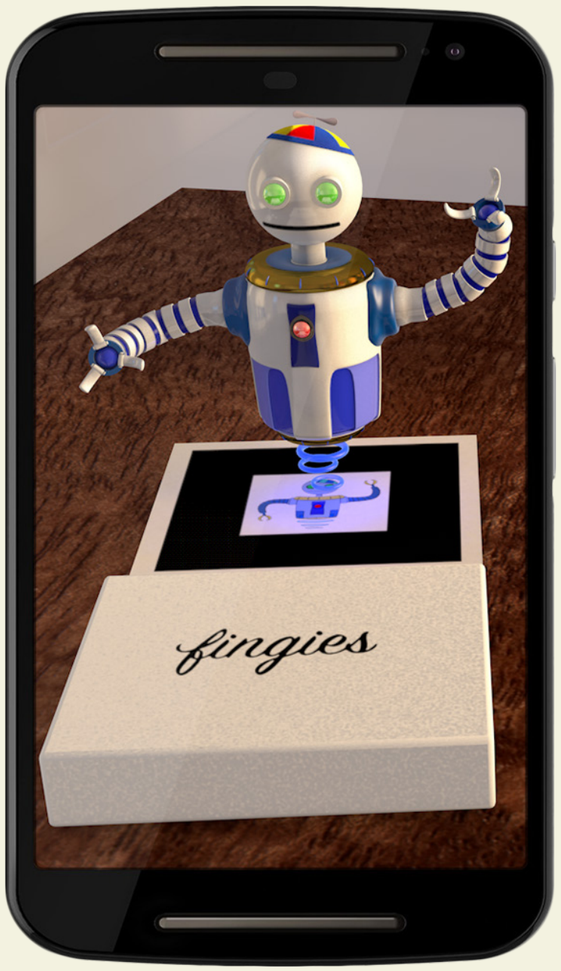
THE HARDWARE

fingies

The fingies system (which was developed at the Bauhaus University) will communicate between the marker and the software

An arduino board inside the fingies transfers the input data from the marker wireless to the application

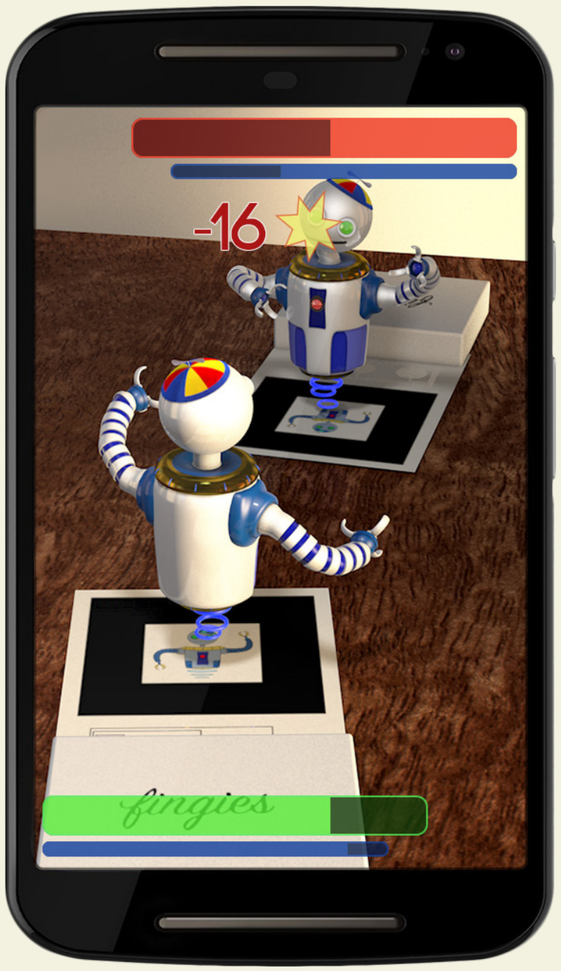
THE APPLICATION



The application recognizes the marker via the thick, black square and positions the 3D objects

By pressing one of the sensors on the marker you can now interact with the 3D object

THINKING BIGGER



Compete against other players

Different cards with different characters and abilities

Build a team and switch cards seamlessly

Next Generation Trading Card Game

THANK YOU
FOR WATCHING