

The background of the lower half of the image is a teal gradient with a repeating pattern of white line-art icons. These icons represent various household and office appliances and electronics, including light bulbs, fans, refrigerators, televisions, radios, and power tools, each with a small '+' symbol indicating connectivity.

EVERYTHING WILL BE CONNECTED

*The embedded world
in few clicks*

SOON ON **KICKSTARTER**

WHAT IS VIPER

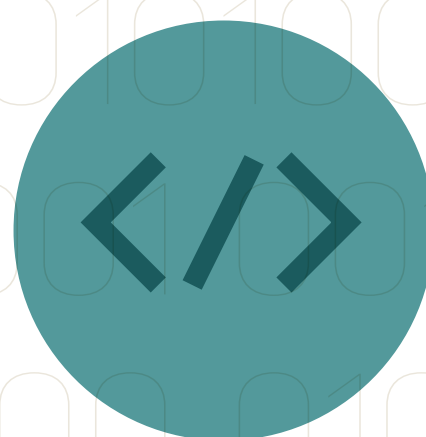


A SOLUTION FOR CREATIVES

Designers and IoT professionals who need to focus their efforts on the design aspects of their projects and ideas without caring about board features, low level programming, device wiring, etc.

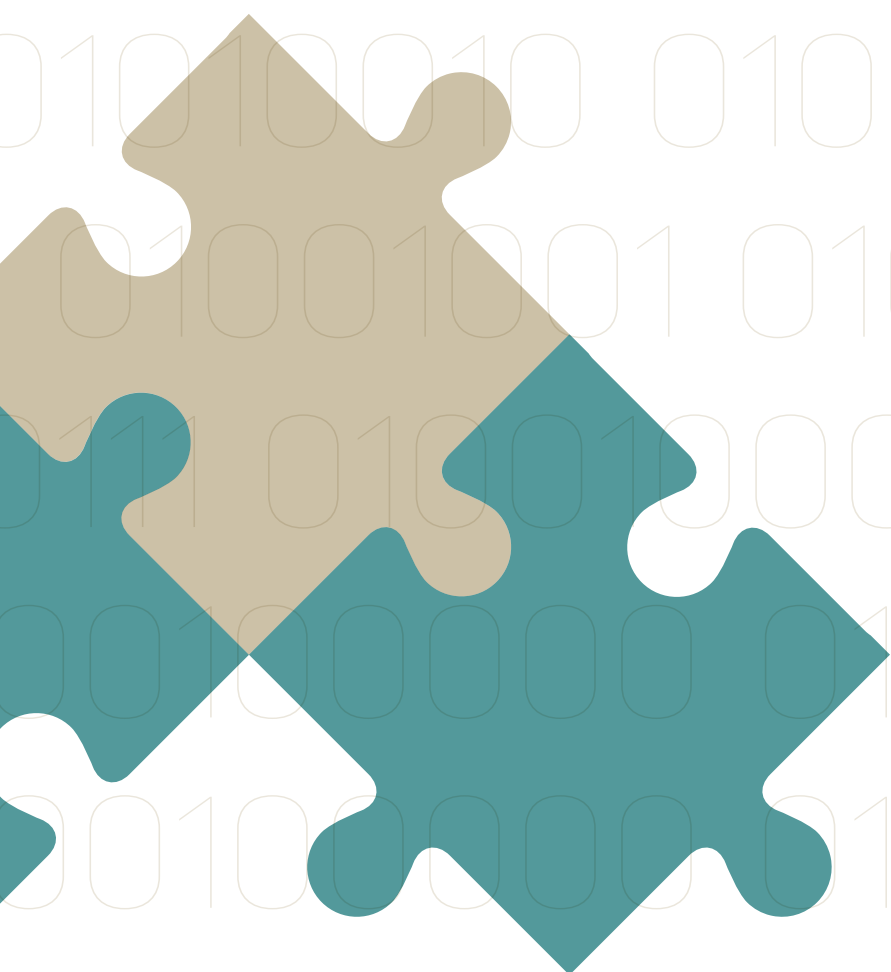
PYTHON FOR EMBEDDED

An easy to use, professional and performant development suite for the high level design of interactive objects, artistic installations, and internet/cloud connected devices.



MULTI-BOARD COMPATIBLE

VIPER runs on Arduino, Sparkcore, UD00 and other DIY or professional boards. We want to leave you free to use the hardware you prefer.



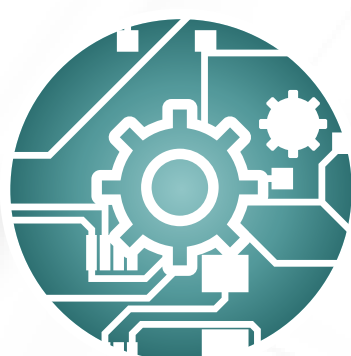
SOON ON **KICKSTARTER**

WHAT IS VIPER



VIPER IDE

A browser based developing environment. It allows you to develop your object behaviour coding in Python with your Mac, Windows or Linux computer



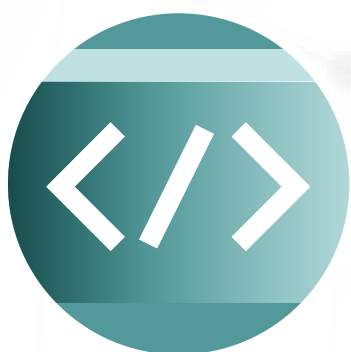
VIPER Virtual Machine

A multi-board compatible embedded operating system that runs on all the most used DIY and professionals boards



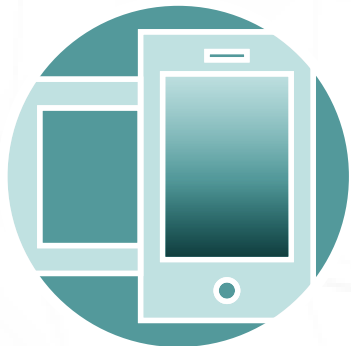
TOI Shield

A plug and play multi-sensors board that empower your smart objects. It can be plugged on both Arduino and Spark Core boards without any adapter



VIPER Library

A pre-cooked set of Python functions that makes your life easier. You don't have to care about developing an algorithm for making sensor average or detecting a double touch



VIPER App

The mobile interface for your smart objects, just download it from the store. Your mobile will become your object display and remote controller



VIPER Smart Network

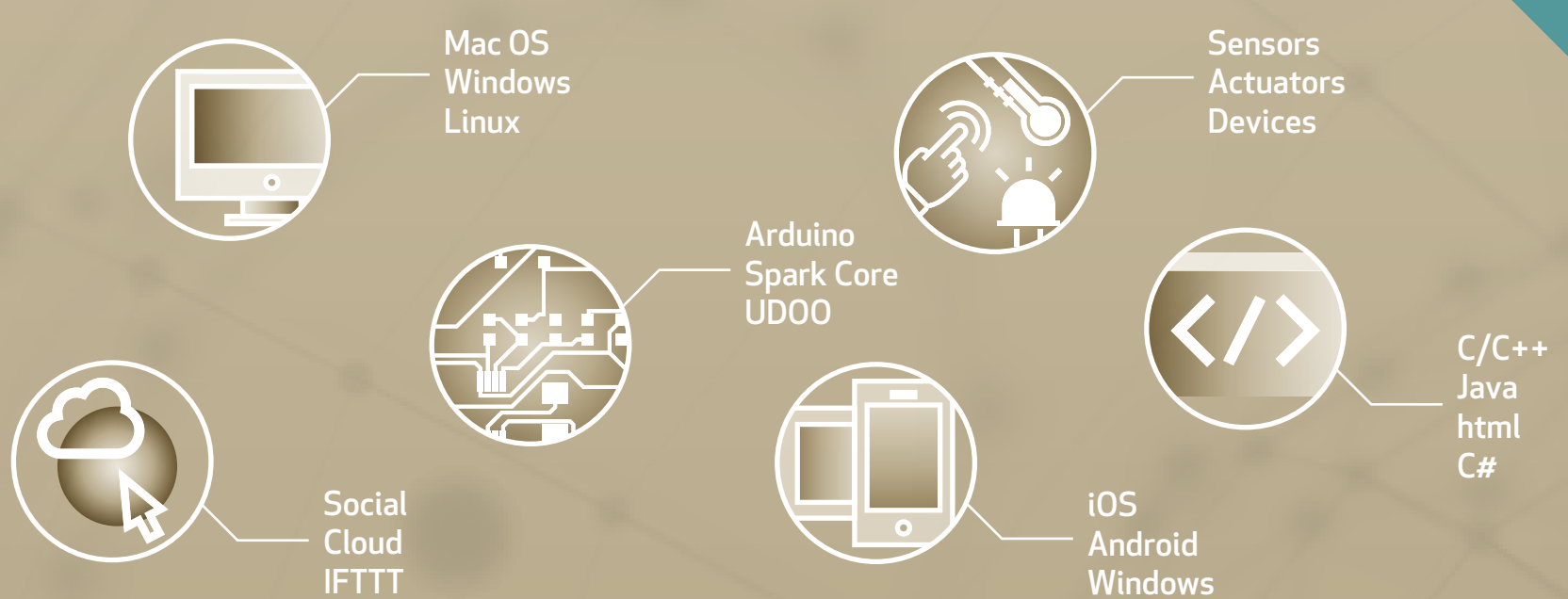
It makes your project ready for the cloud! Carriots and Paraimpu are already included or you can easily add the service you prefer

SOON ON **KICKSTARTER**

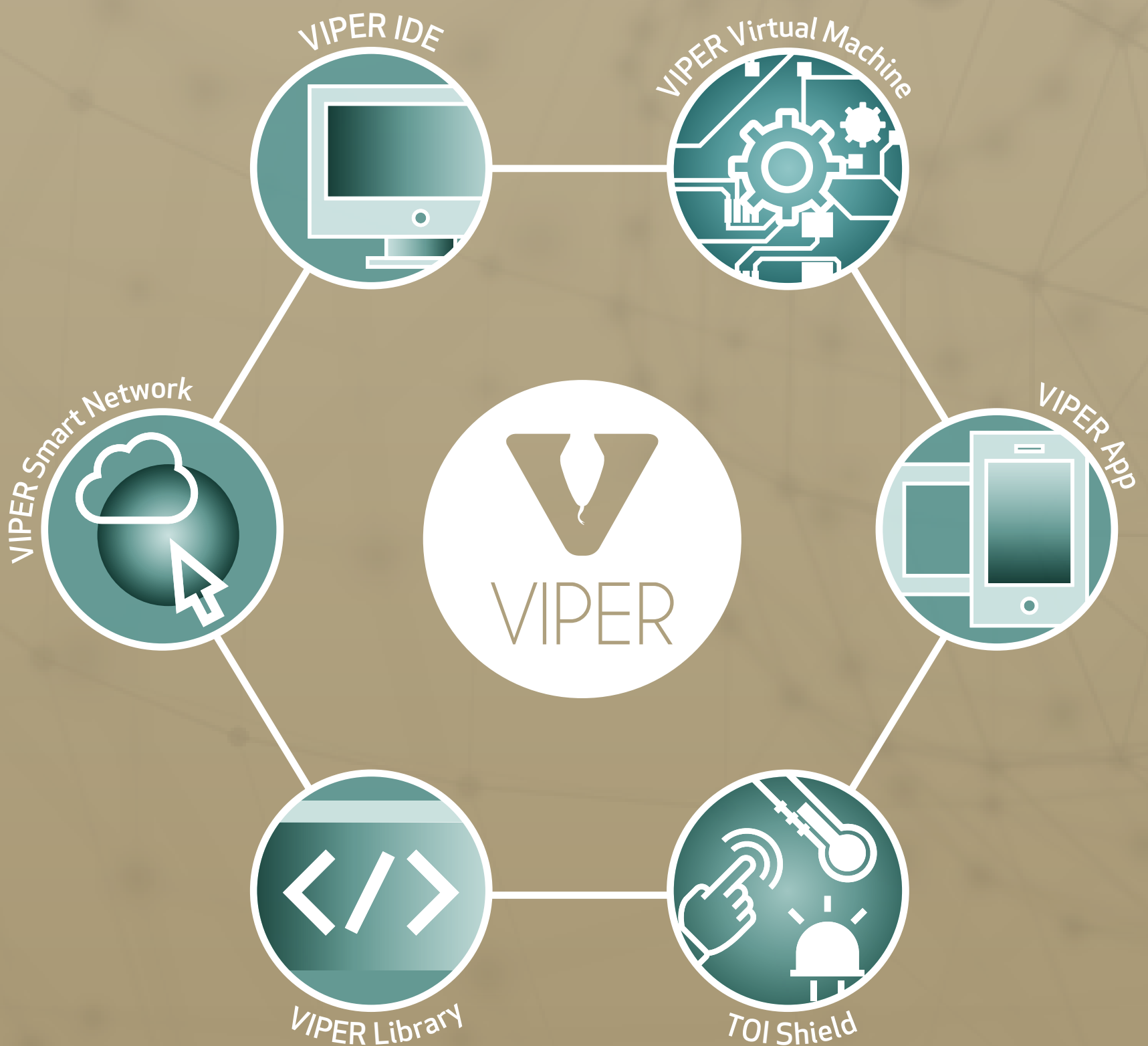
A CHANGE OF PARADIGM

"VIPER isn't just a library for Arduino or similar, it is a change of paradigm!"

The recent revolution of Internet of Things (IoT) brought designers to create interactive objects that are able to communicate with the web, the cloud and with the social networks.



With VIPER all these features will be available in just few lines of code.



Let's imagine the power of developing embedded device codes with the same architectures and design approaches you use for your Android, iOS or PC applications! VIPER aims to be for the embedded world what Android has been for the mobile world!

SOON ON KICKSTARTER

HOW DO I USE VIPER?

1 ASSEMBLY YOUR HARDWARE

If you have a TOI Shield just plug it on your Arduino or SparkCore

2 INSTALL VIPER

Just download the package and launch it.
No matter which OS you use, VIPER runs!

3 LAUNCH VIPER

The VIPER IDE will start on your browser,
just create a new project

4 CONFIGURE YOUR BOARD

- Select wich board you are using (Arduino, UDOO, SparkCore)
- Select the hardware you are using (TOI Shield or other shields)
- Set advanced features from the dedicated menu

5 VIPERIZE YOUR BOARD

From here on you need to flash VIPER
only if you change the board

6 WRITE YOUR PYTHON CODE OR LOAD AN EXAMPLE AND CLICK UPLOAD!

VIPER will compile it and upload on your board
through WiFi or USB connection

*Do you want to change your board? Just go to step 5!
VIPER scripts are platform independent!*

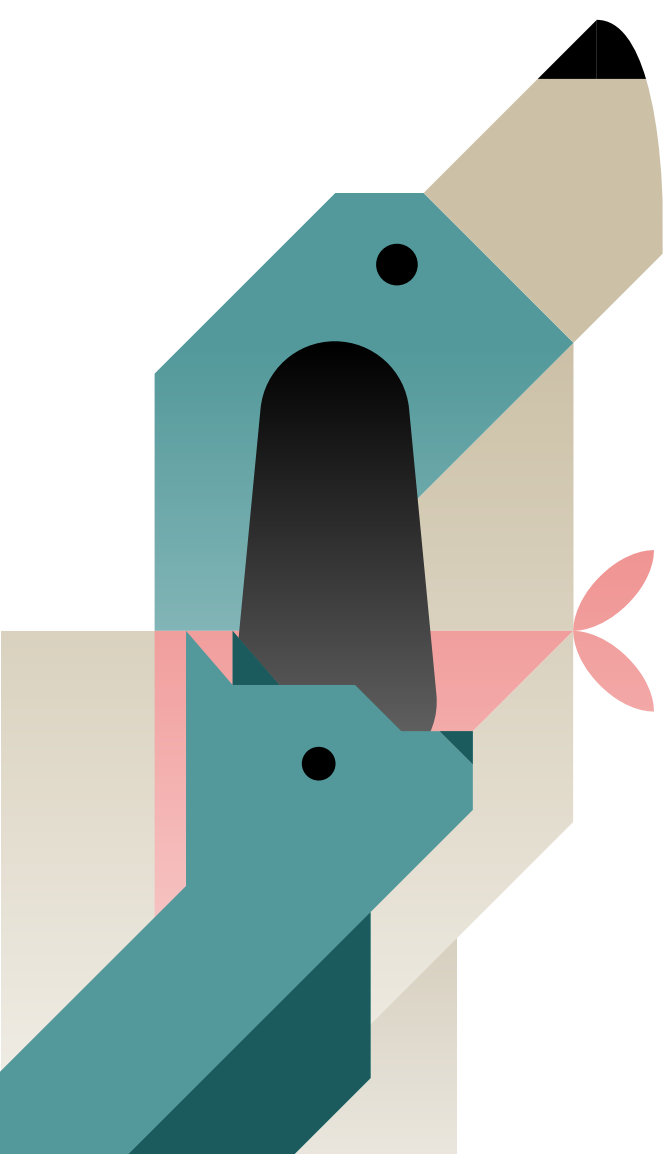
SOON ON **KICKSTARTER**

USE CASES

VIPER

SmartPets

Humanize your pet through a smart device that monitors its feelings and tweets to you.



Hey @jack84, water is finished...
come back home, i am thirsty!

TOOLS REQUIRED

SparkCore

TOI Shield

TOI Shield
VIPER library

VIPER App

Twitter

Microphone
Light sensor
Temperature sensor
Capacitive Touch Sensor
IR emitter
Buzzer

Free account

SOON ON **KICKSTARTER**

USE CASES

VIPER

Social Safe Home

Create a home social network that notifies you and your family who is at home.
If intrusions are detected you'll receive a mobile notification while your neighbours a Facebook alert.
In the meantime your house devices will turn into alarms: lights blinking, TV and Hi-Fi shouting at high volumes.



TOOLS REQUIRED

Arduino DUE

WiFi Shield

TOI Shield

TOI Shield
VIPER library

VIPER App

Facebook

Microphone
Light sensor
Capacitive Touch Sensor
IR emitter
Buzzer

Free account

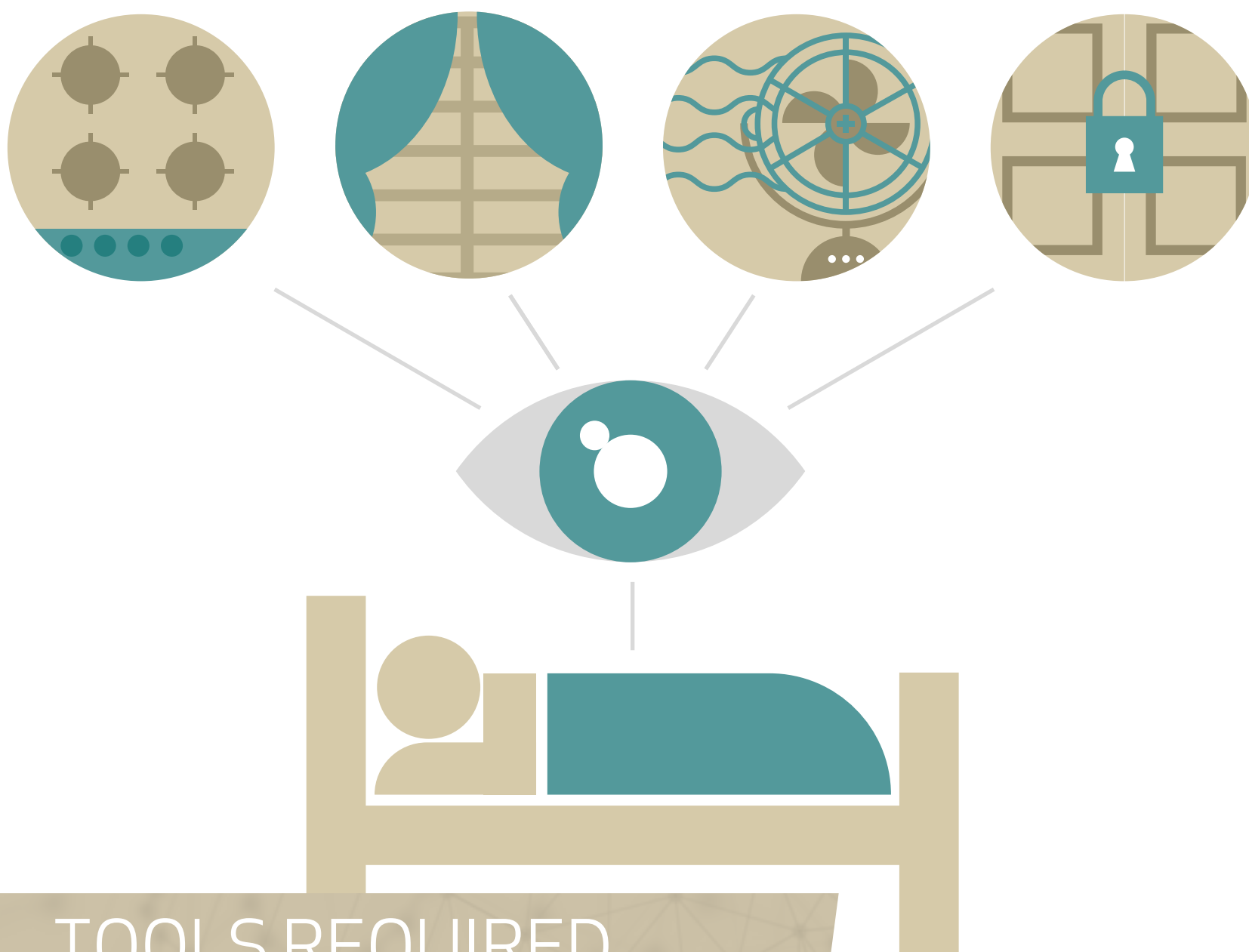
SOON ON **KICKSTARTER**

USE CASES

VIPER

House Safety System

*Never wonder again about GAS leakage,
windows closing and other house devices state.
Have you closed the valve before going bed?
Have you closed the windows?
No problem, check all of them with your smartphone!*



TOOLS REQUIRED

SparkCore

TOI Shield

TOI Shield
VIPER library

VIPER App

Capacitive Touch Sensor
Aux channel for GAS sensor
Buzzer
LEDs

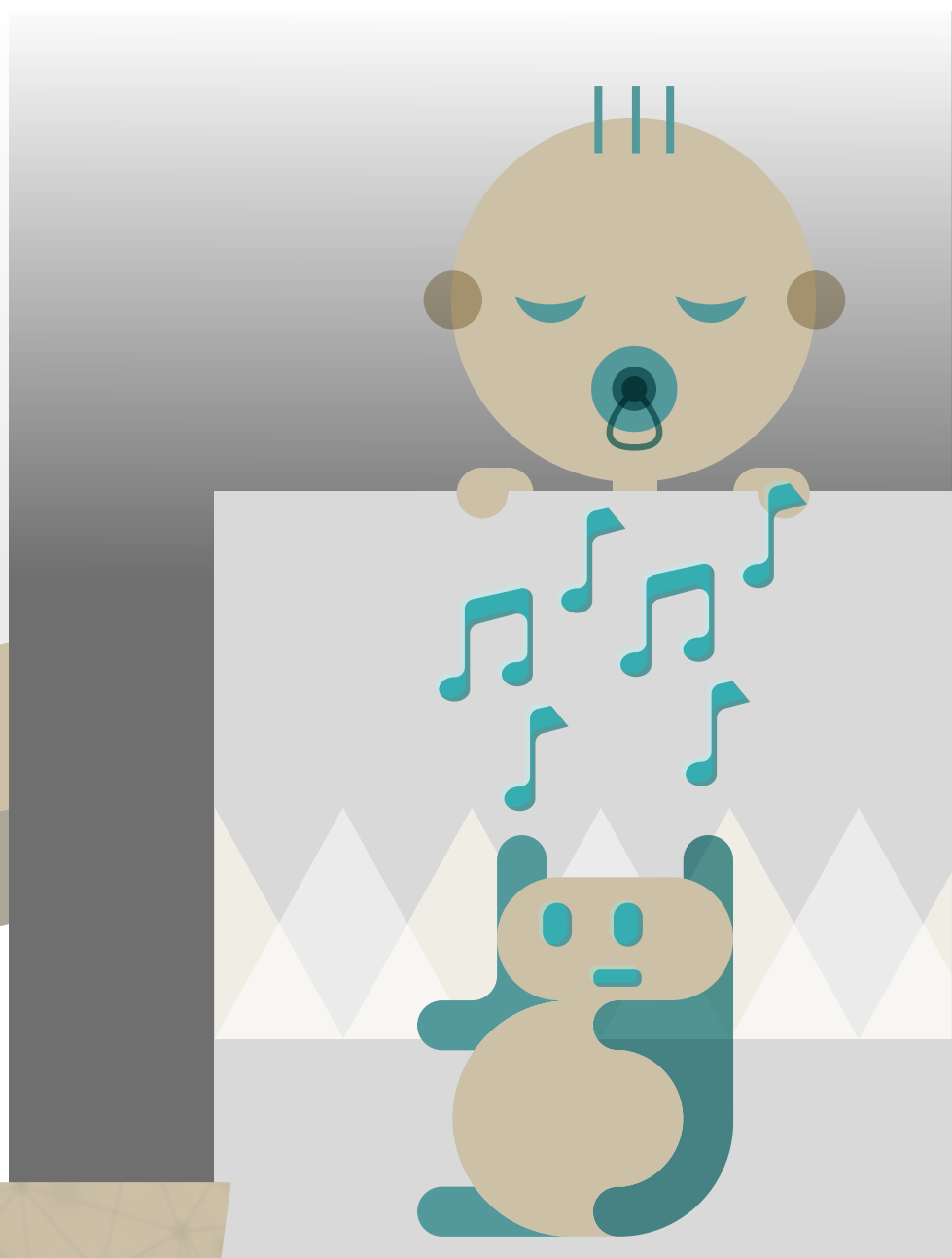
SOON ON **KICKSTARTER**

USE CASES

VIPER

Smart Baby Monitor

Look after your newborn with a baby cry and breath activity monitor embedded in a peluche that vibrates and play melodies.
With your smartphone you can check the alerts and select the lullaby your child prefers.



TOOLS REQUIRED

SparkCore

TOI Shield

TOI Shield
VIPER library

VIPER App

Microphone
Temperature sensor
Capacitive Touch Sensor
Aux channel for accelerometer
PWM channel for vibrator
Buzzer
LEDs

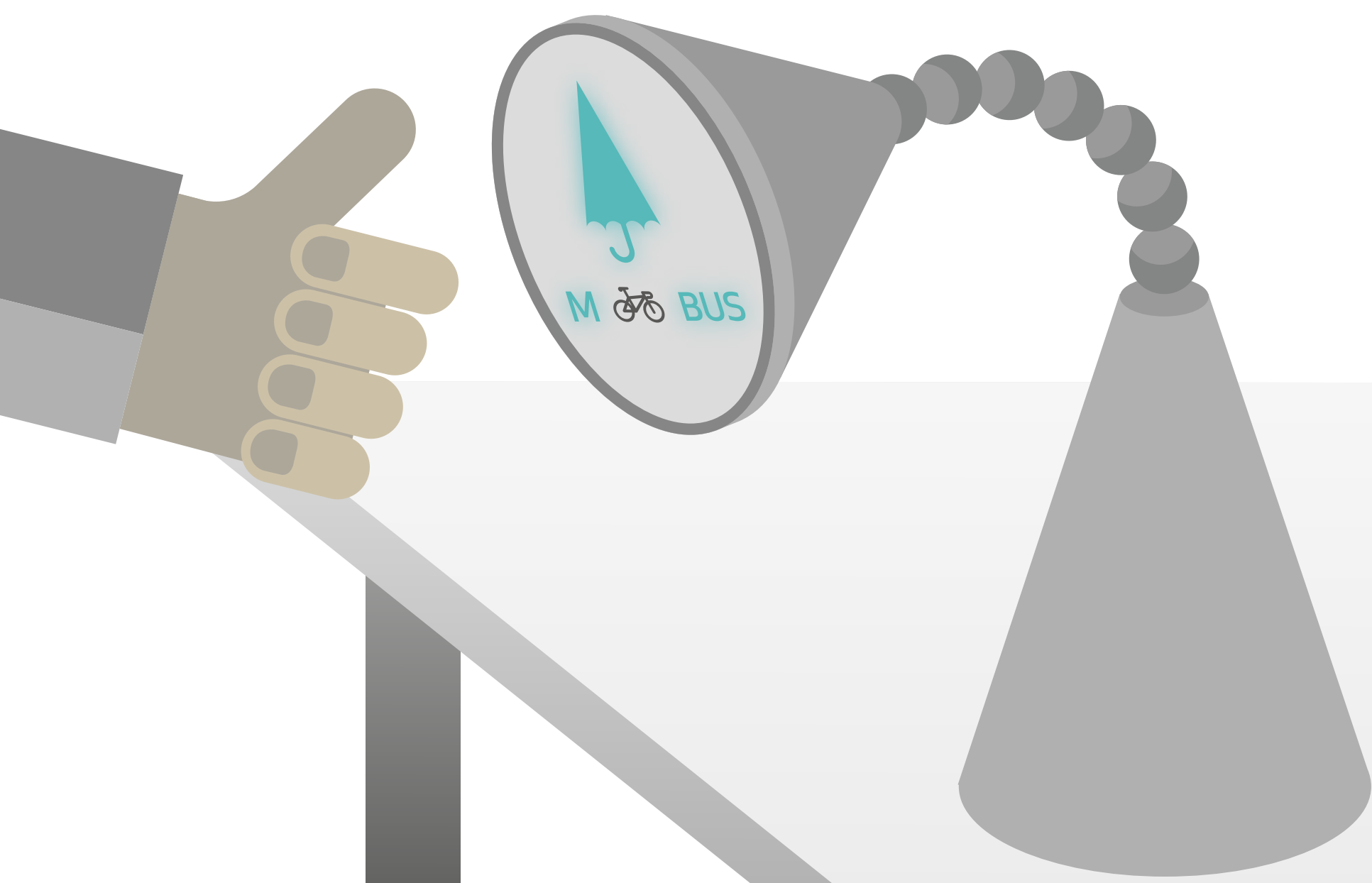
SOON ON **KICKSTARTER**

USE CASES

VIPER

Daily life metronome

Never start your day in a bad way! Get reminded to take your umbrella in a cloudy day, to get your bike during a metro strike or to take your grocery list when the fridge is empty.



TOOLS REQUIRED

SparkCore

TOI Shield

TOI Shield
VIPER library

VIPER App

Weather.com

Light Sensor
Capacitive Touch Sensor
Buzzer
LEDs

And other cloud services

SOON ON **KICKSTARTER**

Illustrated by  idna