

SMART HOMES

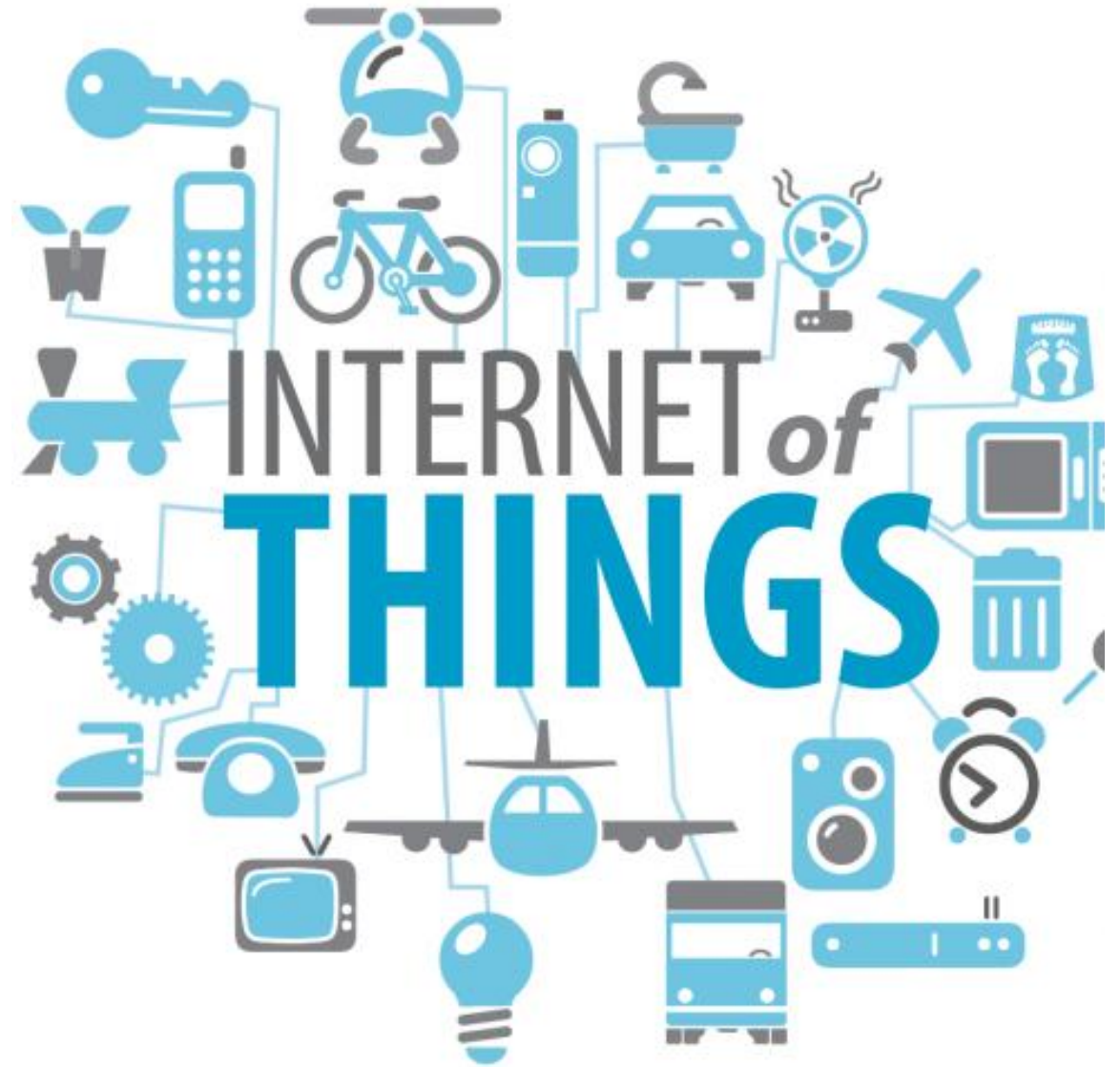
CSERNYICKO GYÖRGY

SMART HOMES AND THE „INTERNET OF THINGS”

- ❖ We use the internet: to share, to connect, to collaborate
- ❖ The Internet of Things, called IoT is the key to build the next generation of comfort in our homes.
- ❖ The IoT itself is a protocol.
- ❖ These acts provides the method to our devices to meet their user's needs, habits.

CONNECTED EVERYWHERE

Inventions that made the idea
of smart homes possible.



THE SAMSUNG WW9000

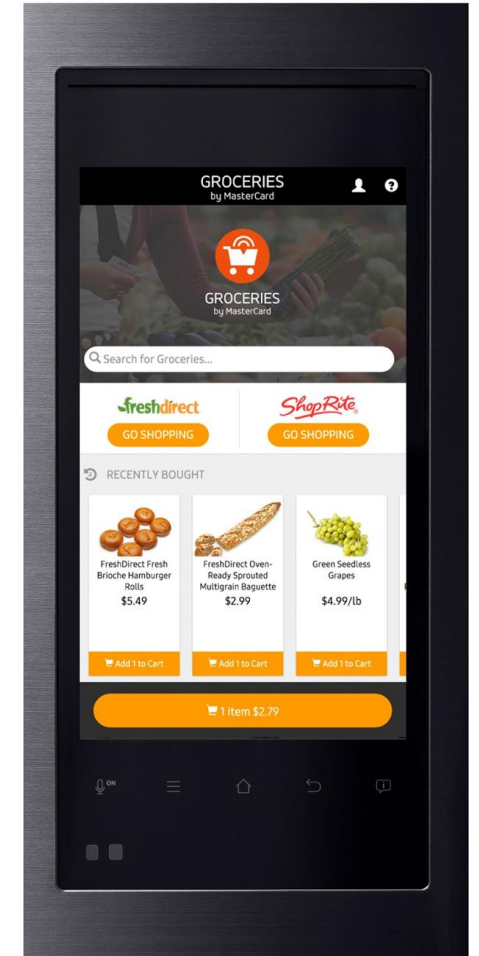
- 10kgs of laundry capacity
- Can connect with mobile phone.
- Sends data and access control from mobile device.
- Integrated detergent dispenser
- Smart sensing functions





SAMSUNG FAMILY HUB REFRIGERATOR

This refrigerator has
some very
interesting functions:



SAMSUNG FAMILY HUB REFRIGERATOR

- ❖ It has a WiFi enabled touchscreen.
- ❖ Three built-in cameras to take photos.
- ❖ Smartphone controllable.
- ❖ Online food ordering possibility.
- ❖ On the display, you can show photos, leave notes.
- ❖ TV and videos.

NEST THERMOSTAT



- ❖ Automatic home heating system
- ❖ Wi-Fi enabled
- ❖ **Motion sensor**
- ❖ **Self-learning**

GOJI DIGITAL SMART LOCK

- ❖ Keyless digital door lock
- ❖ It works with Wi-Fi and Bluetooth connection.
- ❖ Can send photos of visitors
- ❖ Clip-on electronic fobs



PHILIPS HUE

- ❖ Smartphone-controlled home lighting system
- ❖ Easy installation for any home
- ❖ Extendable with other smart devices
- ❖ Lots of possibilities to personalise





CROSSWATER SMART BATHROOM AND SHOWER

Smart bathroom
system

Easy to set the perfect
water temperature.

It can be controlled
from your smartphone.



XIAOMI SMART AIR PURIFIER

The Xiaomi Smart Air Purifier is an air purifier and dehumidifier.

Controllable from smartphone.

Provides air quality information.

Xiaomi has made a smart water purifier, too.





Mi Air Purifier

High-performance smart air purifier
10,000 liters of clean air per minute



XIAOMI MI SMART SOCKET PLUG

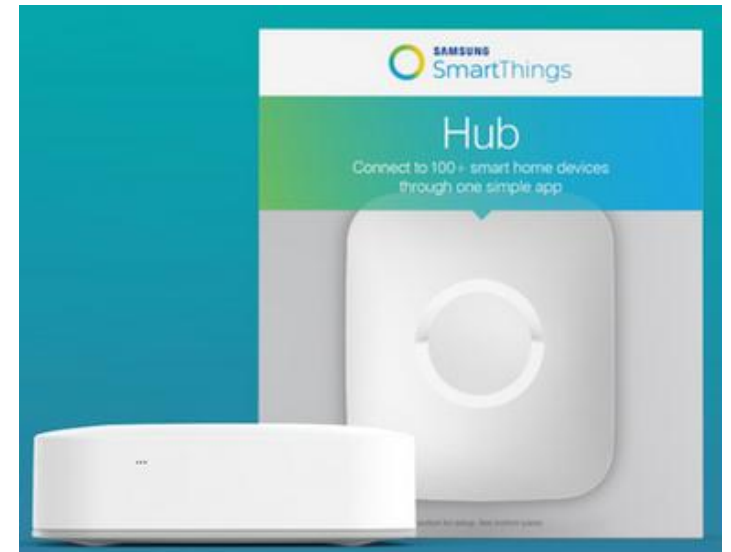
- ❖ Smart plug and adapter
- ❖ This is the cheapest way to turn your any usual household appliance into smart ones.
- ❖ The plug has 3 functions:
 1. Enable/disable through internet
 2. Built-in 5V/1A mobile device charger.
 3. It's compatible with all types of worldwide power outlets.



XIAOMI MI SMART SOCKET PLUG

OTHER SMART HOME APPLIANCES

- ❖ Connecting our smart home appliances together.
- ❖ You can control all your smart home devices from one app.
- ❖ Smarthome-compatible security systems can be attached.



SECURITY ISSUES

Imagine, if we have all of these devices, and a hacker enters your whole smart home system...

There are a lot of new generation malwares, trojans, etc. that attacks especially IoT devices...

Ransomwares are the most dangerous viruses: they are threatening, blackmailing people on their computers and devices, forcing send money to their creators, if not, they will upload your data to the public, will take your money, or lock your device, and make it unusable.

The Internet of ransomware things...

HUNGRY?
PAY UP AND
I'LL UNLOCK
MY DOOR!

ON STRIKE
UNTIL YOU
SEND MONEY
TO MY
HACKERS.

20 BUCKS
IN MY PAYPAL
ACCOUNT
OR I'LL ONLY
BREW
DECAF!

I'LL BE
BURNING THE
TOAST IF YOU
DON'T GET
ME SOME
DOUGH!

THE NEXT TIME
YOU LEAVE, IT'LL
COST YOU 100
BUCKS TO GET
BACK INTO THE
HOUSE, UNLESS
YOU GIVE ME
\$75 NOW!

30 BUCKS IN
BITCOIN, OR NEXT
TIME I SMELL
SMOKE, I MIGHT
JUST LET YOU
SLEEP.

MY ALARM
SYSTEM IS
GOING TO GO
OFF RANDOMLY
THROUGHOUT
THE NIGHT,
UNLESS YOU
"DONATE".

WIRE MY
HACKER \$100
OR I'LL REVERSE
MY MOTOR AND
BLOW DIRT ALL
OVER THIS
PLACE!

YOUR DIRTY
DISHES CAN
WAIT, I'M
BUSY MINING
BITCOINS.

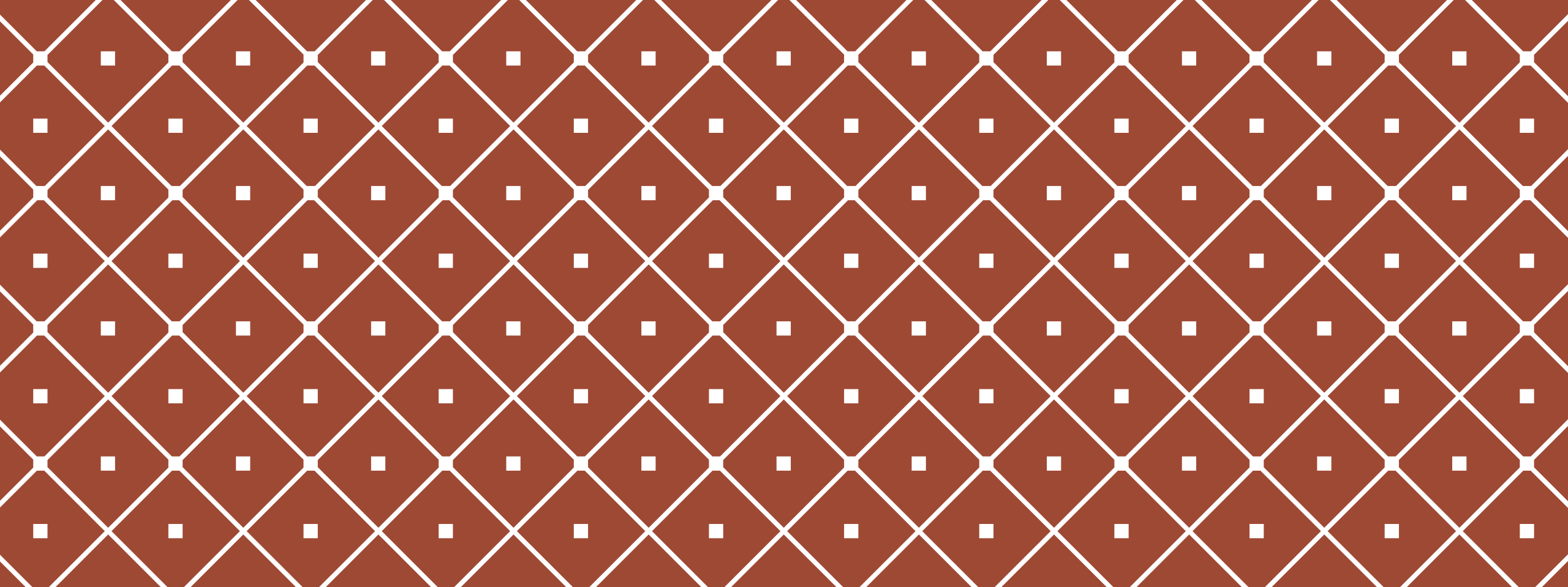
EXCUSE US
WHILE WE
PARTICIPATE
IN A DDOS
ATTACK.

I'M TURNING
OFF THE
HEAT UNTIL
YOU WARM UP
MY BANK
ACCOUNT!

IF YOU DON'T
SEND US CASH,
YOUR REPUTATION
WILL BE IN THE
TRASH.

I'LL START
YOUR CAR, BUT
ONLY TO TAKE
YOU TO YOUR
BANK TO MAKE
A TRANSFER.

SEND ME \$25 OR
I'LL TELL EVERYONE
ON YOUR SOCIAL
NETWORK THAT YOU
WERE STUPID ENOUGH
TO BUY AN INTERNET-
CONNECTED BROOM!



THANK YOU FOR YOUR ATTENTION!

CSENYICKO GYÖRGY