Maurin Donat Thalmann, Raphael Heer / AIOT - HSLU Informatik Deparment, Switzerland / maurindonat.thalmann@stud.hslu.ch, raphael.heer@hslu.ch
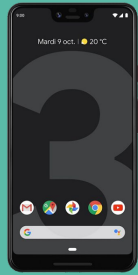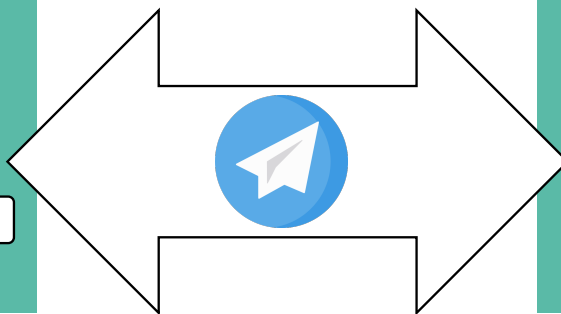
CasaGrama
The Telegram Smart Home Bot

A User wants
to control his
Smart Home
Devices
and opens
the Telegram
Bot CasaGrama

Send me the Weather Data!

Telegram Servers
communicate
between Client
and CasaGrama

CasaGrama
handles commands
and communicates
with
Microsoft Azure

Data Exchange
between Azure & CasaGrama

Stream Analytics
retrieves data
and sends it to
Cosmos DB

Cosmos DB stores
valuable weather data

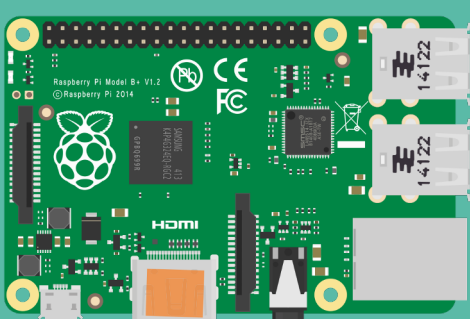Can be accessed
by CasaGrama
at any time, anywhere

IoT Hub holds
all IoT Devices and
can send Cloud to Device
Messages to
certain devices

Data Exchange between
IoT Devices & Azure

IoT Devices read sensors
and control peripherals
and are in connection with
the Azure IoT Hub

WHAT?
CasaGrama can be accessed everywhere with the Telegram Messenger application. One can control and access his smartphone everywhere he wants to. All data is processed and delivered over Microsoft Azure, the absolute cloud solution.

WHY?
CasaGrama is fast and you don't need any additional application if you already have the Telegram Messenger. You get the benefit of a Smart Home solution, you can even choose from a great range of devices where you want to control it from.

HOW?
Smart IoT Devices are connected to Azure, where they send their data to or can be controlled from. CasaGrama is running on any server or computer instance you want, you can easily access it over the Telegram Messenger.
The IoT Hub handles all your devices, the Cosmos DB stores all data that is received from the sensors.
Through Cloud-to-device messaging, controlling your IoT Device through another application has never been easier.