Cloud Services

BLYNK: This is an IoT platform also for smartphones that is used to control Arduino, Raspberry Pi, and other hardware via the internet. Hardware monitoring can be done with different modules and widgets. With Blynk Cloud, it is possible to create an application for controlling with a graphical interface without even using codes. The provided documentation is easily understandable and community support also exists for further help. Really beginner friendly and easily understandable. However, the data receive can be delayed. Furthermore, the free version support just two pieces of hardware, and historical data storage is just for one week. In case of choosing a paid version, one solution could be the plan for 4,99 euros/month. This plan supports 10 hardware connections, however, the data storage problem would not be sold, while it stores the data for three months.

Documentation for Blynk: https://docs.blynk.cc/
https://blynk.io/

Yandex Cloud: Russian cloud which is really similar to Google disk and iCloud. It offers 5GB of data storage for free. It has an API concept described in the following link: https://cloud.yandex.com/en/docs/api-design-guide/. Data security is well-supported. There is a possibility to decide between pay-what-you-use and already prepare plans. In our case, the most appropriate one would be with storage of 1 TB, for 22,30 euros/year. The biggest problem with this cloud was, that to prepare an account (and for further payments) a Russian card is needed.

Documentation for Yandex: https://cloud.yandex.com/en/docs

Thinger.io: The free version plan contains 2 devices, and limited data points (1 data point in one minute). It contains fewer features and the free version is not supporting MQTT protocol. In the case of Education purposes, there is a possibility to discuss with the sales special offers (however they never replied to the mail). In case of a need for a private cloud, the price would be way more expensive- 45

eur/months. In case of community cloud, which is a shared community server, the price would be way less, 8 eur/months. Data transfer is done in real time, and visualized on a dashboard. It supports a Role-Based Access Control, where with the help of different permissions, different users different actions can make. Compatible with Arduino, and also available for Linux devices. The maximum number of data points is 1000 what it can receive.

Documentation for Thinger.io: https://docs.thinger.io/

https://thinger.io/

AskSensors: It is one of the easiest clouds on the market. The user can control the actuators remotely, connect sensors, and manage the devices in real-time. However, the free version contains just 30 MB of data storage and it doesn't give access to useful features such as dashboards, choice of graphs, sharing, and downloading data (just the latest datasets can be downloaded). Data retention is also just for three months.

Documentation can be found: https://doc.asksensors.com/

https://asksensors.com/index.html

Amazon Web Services: One of the oldest and most frequently used clouds on the market. It also offers a good infrastructure service, various storage options, and databases as well as emerging technologies like artificial intelligence, machine learning, etc. It contains a pay-as-you-go pricing method, that's the reason why the price calculation can be done really hard. While it has millions of active users, community support is big. There are different kinds of certifications, and what can be done to understand and master more of the functions of AWS. It also offers free tutorials available on its official website: https://aws.amazon.com/education/awseducate/.

It offers many services, that can be used for different purposes. Price calculation can be done on the following site: https://calculator.aws/#/.

Official documentation for AWS: https://docs.aws.amazon.com/