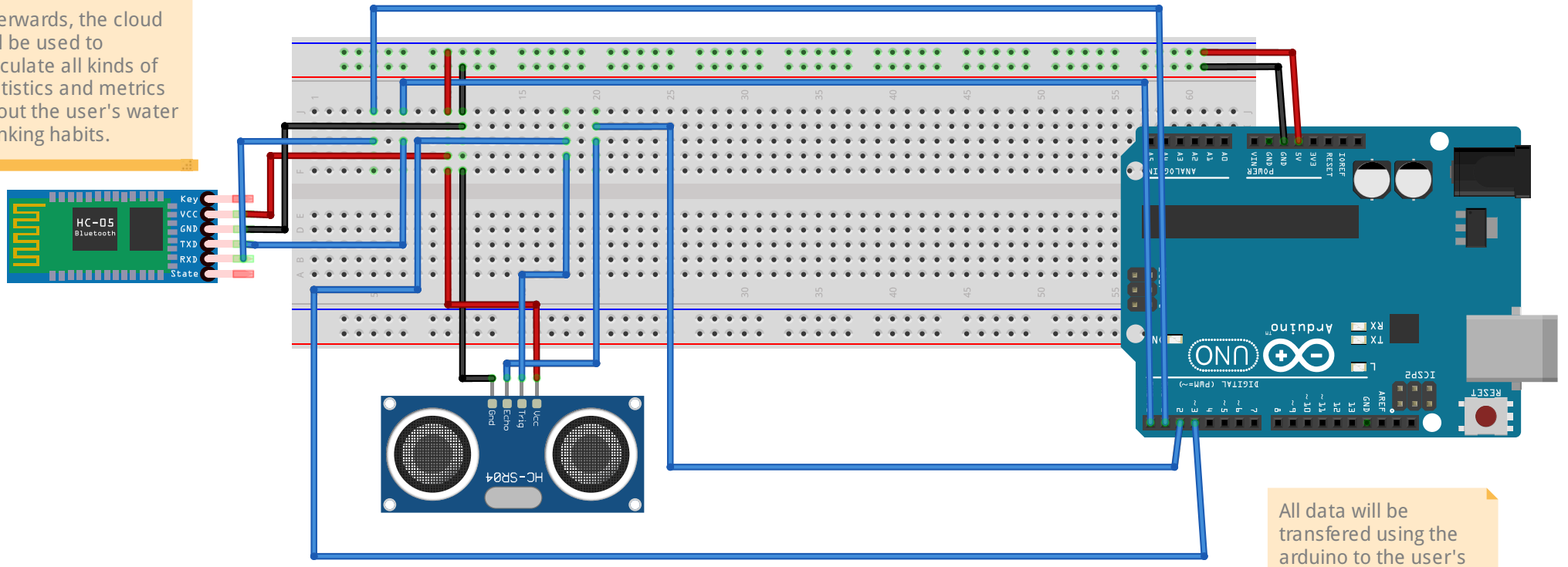
The bluetooth module will be used to communicate with the user's phone in order to tranfer data about the amount of water in the bottle.

The bluetooth module will be used to connect the arduino to the phone which will show the amount of data to the user and also sensd the data to the cloud.

Afterwards, the cloud will be used to calculate all kinds of statistics and metrics about the user's water drinking habits.



The ultrasonic sensor will be placed at the top of the bottle from the inside.

The amount of water in the bottle will be calculated using the maximum amount of water that the bottle can contain, and the amount of water per CM of distance from the top of the bottle(where the sensor will be placed).

So let's say the bottle is 10 CM tall and it can contain a liter of water. Each CM of water filled in the bottle is worth 100 ml of water.

So if the sensor is 1 cm away from the water it means there are 900 ml of water in the bottle.

All data will be transfered using the arduino to the user's phone and through it to the cloud which will show many statistics and metrics about the user's water drinking habits.

The Arduino will be connected to the ultrasonic sensor to get the distance of the senesor from the water and calculate the distance from the sensor to the water.

The Arduino will then use the bluetooth module to connect to the user's phone and show data on it.