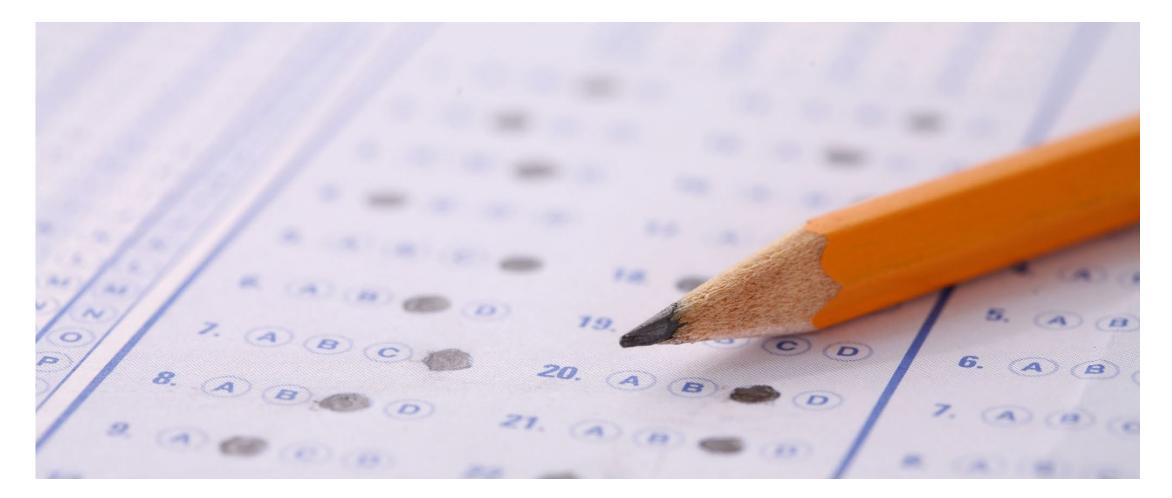# Practical assignment content

Learning outcome

- Understand the working principle of a Water quality IoT sensor
  - pH
  - Conductivity
  - Oxidation reduction potential
  - Turbidity

- Different ways of extracting data from online sensor

- Learn how to send data to a cloud

Necessary infrastructures

Hardware

- PC/ Laptop

- Access to WiFi

Software

- MS Word or Latex

Task 1 - Describe the features of WQ sensor

- Choose a water-quality sensor from the list describe

    - What is the measuring principle?

    - What are the different sensor types and how are they used in water sector?

    - state-of-the-art in the sensor you choose

Task 2 - Extracting data

- Describe the following

  - Which parameters are measured by the sensor you chose for the assignment

  - How do you extract data from these sensors?

  - Advantages and disadvantages of different data extraction method

Task 3 – Implementing data filter

- Describe and discuss

  - Different methods to send data to a cloud

  - Benefits of sending data to the cloud

Deliverables

- A 2000-3000 word report on

    - Features and working principles of one of the WQ sensor

    - Extracting data from the WQ sensor

    - Sending data to the WQ sensor

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