**Summary of the programs and accounts**

**Organization**

* The output of this project includes:
  + 1. A GIS Dashboard to visualize the leak point flow rate and flow pressure data
  + 2. A Web app for manual updating the attribute(s)
  + 3. An User Interface (UI) for retrieving historical data (past 1 hours and past 24 hours)
  + 4. A web app integrating items 1 to 3 and reserving the potential for any other development
* The following graph summarized the organization of deliveries:

As a part of the code

embedded

Scripts in ArcGIS Pro

emb

Scripts in ArcGIS Pro

ded

Python based web application to integrate the three function

**Backend program**

1. Dashboard

* Update\_Table.py
* Get\_HWM\_data.py
* Location: Desktop of uti lab PC

1. Attribute Editor

* Update\_Table.py
* Get\_HWM\_data.py
* Location: Desktop of uti lab PC

1. Historical Data Retrieval System

* Name: Streamlit\_platform\_for\_TY.py (portion)
* Location: Desktop of uti lab PC / Deployed on streamlit cloud

1. Python based web application to integrate the three function

* Name: Streamlit\_platform\_for\_TY.py
* Location: Desktop of uti lab PC / Deployed on streamlit cloud

HWM Data Gate V2.58

As a data source of

Updates

API Requests

Web Map

Attribute Editor

Scripts running in ArcGIS Pro

Dashboard

embedded

embedded

API Requests

Function

Present data (data frame and graph) on the app

Python scripts

Output

Python based web application to integrate the three function

**Access information**

1. Dashboard

* Name: Trial: Tsing Ying Q Leak Water Parameter Monitoring System (Data Viewer)
* Location : <https://www.arcgis.com/apps/dashboards/9d4c608d6f6a47aba56cdf1704248090>
* Login Information:
  + User Name: chun-on.yik\_LSGI\_PolyU
  + Pw: YLMASSs20110165P@ssw0rd

1. Attribute Editor

* Name: TY GV Remark Editor
* Location: <https://lsgi-polyu.maps.arcgis.com/apps/webappviewer/index.html?id=a5e83eebf5b546cd98de4ba633f27ef2>
* Login Information:
  + User Name: chun-on.yik\_LSGI\_PolyU
  + Pw: YLMASSs20110165P@ssw0rd

1. Historical Data Retrieval System

* Name: Streamlit\_platform\_for\_TY.py (portion)
* Location: Desktop of uti lab PC / Deployed on streamlit cloud
* Login Information: N/A

1. Python based web application to integrate the three function

* Name: Streamlit\_platform\_for\_TY.py
* Location: Desktop of uti lab PC / Deployed on streamlit cloud
* Login Information:
  + For Local Host version: N/A
  + For online version:
    - Streamlit Cloud:
      * Location: <https://share.streamlit.io/>
      * Deployed App: <https://share.streamlit.io/utlablsgi/leak-points-data-management-system-/main/Main.py>
      * User name: utlab.lsgi@gmail.com
      * Pw: wallacelai
    - GitHub Account (for storing the code for streamlit deploy):
      * Location : <https://github.com/utlablsgi/Leak-Points-Data-management-System->
      * User name: utlablsgi
      * User email: utlab.lsgi@gmail.com
      * Pw: wallacelaiP@ssw0rd

1. Web map as a data source of the dashboard and attribute editor

* Name: Trial
* Location : <https://lsgi-polyu.maps.arcgis.com/home/item.html?id=0d42ea3a58d8476db22817cb243505e9>
* Login Information:
  + User Name: chun-on.yik\_LSGI\_PolyU
  + Pw: YLMASSs20110165P@ssw0rd

1. HWM Data Gate V2.58

* Login Information: (User)
  + User Name: lsgi
  + Pw: P@ssw0rd
* Login Information: (Power User)
  + User Name: ansonyik
  + Pw: Yik@2021