Requirements:

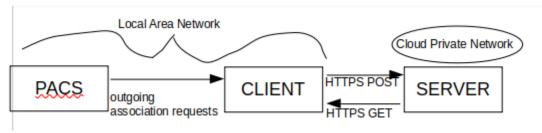
- Obtain patient data from PACS system. Patient data is; SeriesInstanceUID, PatientID, PatientName, StudyInstanceUID, InstancesInSeries.
- Client-Server Model. Client receives the above data and sends it to the server.

Considerations:

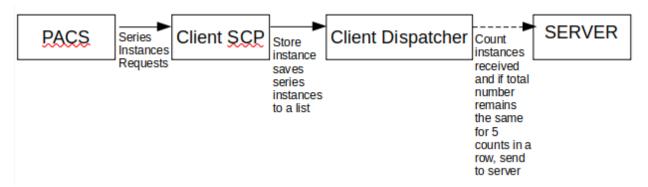
Provision of Client AEs (Application Entities) in the same location as a PACS leads to the following considerations;

- Using the same network to send datasets to the client means near zero latency.
 Latency would come in during communication with the Floy server. Therefore, async/await function calls are needed within the client to communicate with the server.
- Regular pings to the client from the server to catch failures such as those due to firewall changes. A 24 hour ping schedule suffices.
- Restart sequences in case of unforeseen downtimes should be put in place. A simple option is crontab's reboot schedule.
- <u>Fig 1</u> workflow indicates that processed images would be returned to the PACS. Given that the assignment specifies dealing with 5 pieces of the dataset and images are not among those, implementation of this feature has been left out.

System Outline:



component diagram of system interactions



sequence diagram of origin of post request to server

Questions/Clarifications:

- Some more detail on the communication between the Client and PACS. Specifically, are series going to be sent concurrently from PACS to the client.