

# CSE563: Internals of Application Servers

*Spring Semester 2021*

## RPC and Intermediate Server

A problem statement was discussed in the class about how to connect to end points which do not have static IP. In this assignment we want you to implement the solution which was discussed in the class.

### Overview:

- Client Side: A client-side program which will call an RPC method along with an identifier and expects all the data collected after the last fetch.
- Intermediate Server: An RPC server will sit here which will respond to client requests and participates in reverse polling with sensor servers.
- Sensor Server: Collects data from sensors and participates in reverse polling with intermediate server.
- Sensor: Records and sends data to sensor server.

### Use Cases:

- Client program will call the RPC method using `senor_id` as parameter and should get all the data collected after most recent fetch.
- Server side of RPC method should be at intermediate server only which will handle client requests.
- Sensor servers and intermediate server should do reverse polling with no listener at sensor servers.
- Sensors should independently record data and send it to the sensor server.
- There should be one client, one intermediate server, one sensor server with two sensors (having different rate at which they record data).

**Submission format:** <roll no>\_lab3.zip

**Programming Language:** Python (mandatory)