DECS
Asynchronous Server-Client Design

Guided By : Prof. Varsha Apte

Proposed By : Yogesh Mandlik (23M0780)

Rohit Singh Yadav (23M0773)

Client side

1. Send source code file
2. Receive a Unique ID given by the server
3. Check status of send file
4. If “Done” status received, receive response otherwise keep checking status after every polling interval

Server Side

1. Receive the code File from the client.
2. Compute and assign unique Request IDs.

   I. Generate a Unique Request ID using Timestamp.

   OR

   II. Use of a counter(long long int) which gives a unused ID to the request.

3. Send the request ID to client.
4. Save the result files into the result directory.

5. Using HashMaps implemented the functionality for multiple states of request.

    I. Map to store <requestID , ResultFile > for processed request.(Request processed)

    II. Map to store <requestID , threadID > for storing the request which is getting process. (Request in process)

    III. Map to store <requestID , RequestNumber > for the request mapped with the Number. (Used to find whether request is in queue and send status accordingly)

6. Based on the request Share the result or status.