**Display of Users’ Diet evaluation**

*Overview of the Implementation*

We will design a website for users (***Appendix 7***). If a user wants to check their daily dietary habit, he will input the user Id on the website. Once server receives request from user’s website, server will connect to dynamodb by API, and attain user’s data from dynamodb. When a user’s data is ready on the dynamodb, server will push to the website to exhibit readable information such as the gauge chart chart and point chart for user. The first gauge chart shows users’ dietary score in the most recent week and  The second gauge chart shows users’ dietary score in the most recent month. Users will easily observe their dietary score change in a certain time interval.  On the point chart, it exhibits User’s health level records by meal in different time. it is very useful for user to check the  dietary score in the different time. if a user wants to know the dietary score in specific time, he/she is able to click and drag in the plot area to zoom in. the health level records by meal in that specific period will show on the web page.  Users are able to download the PDF version monthly and annual evaluation report for late deep analysis.

*Implementation Details*

In our plan, when user type the URL on the browser’s address. Server will a use “GET” request to relocated user to our “index.html” which is web page we designed. User will input his/her login ID on this web page and hit the confirm button. After this user ID will be send to server on EC2. Server will send “POST” request with user’s ID to Dynamodb by API. The user’s ID will be match out and get the user’s data when Dynamodb receives the information from server. User’s data will reform by highcharts JS to exhibits gauge chart and point chart for user.

*Performance Testing*

we have been through several times performance test. on the first time attempt, when we uploaded  the same name of pictures to our S3 bucket, there was only one record of picture on the, since the second picture replaced the first picture on the Dynamodb. for fixing this problem, we did some changes on the server. when server attained the same name of picture, we added the sequence number for each same name pictures. Therefore, every picture has their own name. we changed the main key on the lambda from upload time to picture name, every problem have been fixed. Even we uploaded two same name pictures at time, there were two records on the Dynamodb and all pictures would be weighted out and calculated for user.