Marco Cheng

PA4 write up

* [70pts] End-to-End experience – results page with URLs from crawler, NBA player stats (when relevant), query suggestion shows up correctly &quickly, dashboard, caching, monetization
* [20pts] Code written in C# – C# best practices!
* [10pts] Works on Azure & AWS, proper use of all infrastructure modules  
  (web roles, worker roles, table storage, queue storage, etc)

This assignment mostly base on the PA3. First, I fixed the URL object to set partition key as the URL, row key as the keyword, and also store title and date. I spilt the title by space, and store it to the table. For example, in my crawler class if the title of the page is “apple watch”, then I made two different table entries, one is “URLA, apple”, and “URLA, watch”. After I fix the table object, then I change the search function in my ASMX. The search method takes user input as a string, then a list of results. I spilt the user input by space in a list<string>, then for each word I will check is the word already in my cache dictionary, if is not contain then I do a table query to get all the entries that the partition key is equal to the user input. If the cache dictionary contains the word, then I retrieve the list<URLdata> and add it to the data list. After I done the table query for each word, I use LINQ to group all the URL that have same URL as a list, and sort the number is the list, then sort by date. Then I use a loop to print the result out, and only limit it to 20 URL. Also, I moved the build trie and download file methods to the ASMX file, and add code to save the last title in trie and total number in trie to the stat table, that I can look up later in html. For the NBA stats, I remove all the html tag from the PA1, and I change the $\_POST to $\_GET, and the database and the PHP are also host in AWS. I call the PHP file in my allFucnction.js, it will return JSONP to me, and I use .html to append the JSONP in my html site. I use revues hit as the monetization part, but I really hit the pop up ads….