

Angelina Paredes, Melanie Bell, Horace Tsang  
CptS 451  
Project Milestone 2 business metrics

### **Overpriced Business**

Overpriced businesses are businesses that having higher prices than the average price of the businesses in the same category. Data such as name of category, name of the business, price range, and review contents (text) would be used to identify overprice. We first would calculate the average price range for each category of business and select businesses that are higher than the average price range. Then, we would check for the keywords like “expensive”, “overpriced”, “overcharge” for the reviews of those businesses. The businesses match both conditions would be considered as overpriced businesses and sorted from highest to lowest price.

```
SELECT B.name, B.pricerange, B.numcheckin
FROM Business as B, Review as R
      (SELECT C.names, AVG(B.pricerange) as avgpr
       FROM Category as C, Business as B
       GROUP BY C.names) as avgCPR
WHERE B.pricerange > avgCPR.avgpr AND R.text LIKE 'expensive' or R.text LIKE
'overpriced' or R.text LIKE 'overcharge'
ORDER BY B.pricerange;
```

### **Popular Business**

Popular businesses are businesses that seems to be attractive to customers with higher rating than other businesses in the same category. Data such as name of category, name of business, stars of business, and number of reviews would be used to indicate popular. We first select businesses that are having 4 or 5 stars. Then, we would calculate the average number of reviews for the business category. For businesses that are 4 or 5 stars with number of reviews that are higher than average, they would be considered as popular businesses and sort from highest number of

reviews to lowest.

```
SELECT B.name, B.star, B.numofreview
FROM Business as B
      (SELECT C.name, AVG(B.numofreview) as avgnr
       FROM Category as C, Business as B
       GROUP BY C.name) as avgCNR
WHERE B.numofreview > avgCNR.avgnr AND B.star >= 4
ORDER BY B.numberofreview;
```

### **Successful Business**

Successful businesses are businesses that have been open for a long time with plenty amount of reviews and number of check in. Data such as name of category, name of business, number of reviews and number of check in would be used for the measurement of success. We would first calculate the average number of review and check in for each business category. For those businesses have above average in both number of review and check in would be considered as successful businesses.

```
SELECT B.name, B.numCheckin, B.numofreview
FROM Business as B
      (SELECT C.name, AVG(B.numofreview) as avgnr
       FROM Category as C, Business as B
       (SELECT C.name, AVG(B.numCheckin) as avgci
        FROM Category as C, Business as B
        GROUP BY C.name) as avgCCI
       GROUP BY C.name) as avgCNR
WHERE B.numofreview > avgCNR.avgnr AND B.numCheckin > avgCCI.avgci;
```