**1. Website Activity:**

**1. What are the peak times for website activity?**

SELECT

  EXTRACT (HOUR FROM created\_at) AS hour\_of\_day,

  COUNT(\*) AS activity\_count

FROM `bigquery-public-data.thelook\_ecommerce.events`

GROUP BY

  hour\_of\_day

ORDER BY activity\_count

|  |  |
| --- | --- |
| hour\_of\_day | activity\_count |
| 13 | 129028 |
| 11 | 128218 |
| 9 | 128208 |
| 7 | 128168 |
| 8 | 128126 |
| 10 | 127906 |
| 12 | 127492 |
| 3 | 127485 |
| 6 | 127464 |
| 1 | 127401 |
| 5 | 126917 |
| 2 | 126907 |
| 14 | 126802 |
| 4 | 126617 |
| 15 | 120365 |
| 16 | 103650 |
| 0 | 101898 |
| 17 | 86268 |
| 18 | 69058 |
| 23 | 57660 |
| 22 | 39845 |
| 19 | 25113 |
| 21 | 23558 |
| 20 | 6948 |

**2. Are there specific days or seasons with increased traffic?**

SELECT

  FORMAT\_DATE('%A', DATE(created\_at)) AS day\_name,

  COUNT(\*) AS traffic\_count

FROM `bigquery-public-data.thelook\_ecommerce.events`

GROUP BY

  day\_name

ORDER BY

  day\_name;

|  |  |
| --- | --- |
| day\_name | traffic\_count |
| Saturday | 354068 |
| Friday | 348485 |
| Sunday | 347170 |
| Thursday | 346472 |
| Monday | 343377 |
| Wednesday | 341610 |
| Tuesday | 339920 |

SELECT

  FORMAT\_DATE('%A', DATE(created\_at)) AS day\_name,

  EXTRACT(HOUR FROM created\_at) AS hour\_of\_day,

  COUNT(\*) AS traffic\_count

FROM `bigquery-public-data.thelook\_ecommerce.events`

GROUP BY

  day\_name, hour\_of\_day

ORDER BY

  day\_name, hour\_of\_day;

|  |  |  |
| --- | --- | --- |
| day\_name | hour\_of\_day | traffic\_count |
| Friday | 0 | 14191 |
| Friday | 1 | 17897 |
| Friday | 2 | 18151 |
| Friday | 3 | 18489 |
| Friday | 4 | 18441 |
| Friday | 5 | 18303 |
| Friday | 6 | 18065 |
| Friday | 7 | 18427 |
| Friday | 8 | 18221 |
| Friday | 9 | 18297 |
| Friday | 10 | 18342 |
| Friday | 11 | 18633 |
| Friday | 12 | 18044 |
| Friday | 13 | 18766 |
| Friday | 14 | 18941 |
| Friday | 15 | 17291 |
| Friday | 16 | 15142 |
| Friday | 17 | 12515 |
| Friday | 18 | 10172 |
| Friday | 19 | 3641 |
| Friday | 20 | 1010 |
| Friday | 21 | 3269 |
| Friday | 22 | 5723 |
| Friday | 23 | 8514 |
| Monday | 0 | 14427 |
| Monday | 1 | 17853 |
| Monday | 2 | 17802 |
| Monday | 3 | 17705 |
| Monday | 4 | 17635 |
| Monday | 5 | 17899 |
| Monday | 6 | 17767 |
| Monday | 7 | 17769 |
| Monday | 8 | 18506 |
| Monday | 9 | 18585 |
| Monday | 10 | 18365 |
| Monday | 11 | 18551 |
| Monday | 12 | 18419 |
| Monday | 13 | 18613 |
| Monday | 14 | 18326 |
| Monday | 15 | 17433 |
| Monday | 16 | 15116 |
| Monday | 17 | 11904 |
| Monday | 18 | 9419 |
| Monday | 19 | 3533 |
| Monday | 20 | 981 |
| Monday | 21 | 3275 |
| Monday | 22 | 5540 |
| Monday | 23 | 7954 |
| Saturday | 0 | 15068 |
| Saturday | 1 | 18887 |
| Saturday | 2 | 18674 |
| Saturday | 3 | 19083 |
| Saturday | 4 | 18893 |
| Saturday | 5 | 18866 |
| Saturday | 6 | 18954 |
| Saturday | 7 | 19031 |
| Saturday | 8 | 18899 |
| Saturday | 9 | 18793 |
| Saturday | 10 | 18463 |
| Saturday | 11 | 18209 |
| Saturday | 12 | 18608 |
| Saturday | 13 | 18475 |
| Saturday | 14 | 18581 |
| Saturday | 15 | 17624 |
| Saturday | 16 | 15034 |
| Saturday | 17 | 12400 |
| Saturday | 18 | 10093 |
| Saturday | 19 | 3777 |
| Saturday | 20 | 936 |
| Saturday | 21 | 3373 |
| Saturday | 22 | 5176 |
| Saturday | 23 | 8171 |
| Sunday | 0 | 14526 |
| Sunday | 1 | 18436 |
| Sunday | 2 | 18275 |
| Sunday | 3 | 17837 |
| Sunday | 4 | 18665 |
| Sunday | 5 | 18483 |
| Sunday | 6 | 18055 |
| Sunday | 7 | 18346 |
| Sunday | 8 | 18676 |
| Sunday | 9 | 18263 |
| Sunday | 10 | 18198 |
| Sunday | 11 | 17742 |
| Sunday | 12 | 17752 |
| Sunday | 13 | 18409 |
| Sunday | 14 | 17951 |
| Sunday | 15 | 17159 |
| Sunday | 16 | 14867 |
| Sunday | 17 | 12523 |
| Sunday | 18 | 9980 |
| Sunday | 19 | 3584 |
| Sunday | 20 | 1087 |
| Sunday | 21 | 3758 |
| Sunday | 22 | 6253 |
| Sunday | 23 | 8345 |
| Thursday | 0 | 14611 |
| Thursday | 1 | 18246 |
| Thursday | 2 | 18049 |
| Thursday | 3 | 18807 |
| Thursday | 4 | 17954 |
| Thursday | 5 | 17968 |
| Thursday | 6 | 18479 |
| Thursday | 7 | 18184 |
| Thursday | 8 | 17832 |
| Thursday | 9 | 18454 |
| Thursday | 10 | 18309 |
| Thursday | 11 | 18522 |
| Thursday | 12 | 18781 |
| Thursday | 13 | 18717 |
| Thursday | 14 | 17471 |
| Thursday | 15 | 16701 |
| Thursday | 16 | 14985 |
| Thursday | 17 | 12578 |
| Thursday | 18 | 9865 |
| Thursday | 19 | 3521 |
| Thursday | 20 | 1037 |
| Thursday | 21 | 3435 |
| Thursday | 22 | 5752 |
| Thursday | 23 | 8214 |
| Tuesday | 0 | 14058 |
| Tuesday | 1 | 17988 |
| Tuesday | 2 | 17636 |
| Tuesday | 3 | 17613 |
| Tuesday | 4 | 17197 |
| Tuesday | 5 | 17557 |
| Tuesday | 6 | 18107 |
| Tuesday | 7 | 18121 |
| Tuesday | 8 | 17992 |
| Tuesday | 9 | 17731 |
| Tuesday | 10 | 18340 |
| Tuesday | 11 | 17990 |
| Tuesday | 12 | 18008 |
| Tuesday | 13 | 18025 |
| Tuesday | 14 | 17710 |
| Tuesday | 15 | 17150 |
| Tuesday | 16 | 14631 |
| Tuesday | 17 | 12466 |
| Tuesday | 18 | 9696 |
| Tuesday | 19 | 3547 |
| Tuesday | 20 | 1023 |
| Tuesday | 21 | 3289 |
| Tuesday | 22 | 5684 |
| Tuesday | 23 | 8361 |
| Wednesday | 0 | 15017 |
| Wednesday | 1 | 18094 |
| Wednesday | 2 | 18320 |
| Wednesday | 3 | 17951 |
| Wednesday | 4 | 17832 |
| Wednesday | 5 | 17841 |
| Wednesday | 6 | 18037 |
| Wednesday | 7 | 18290 |
| Wednesday | 8 | 18000 |
| Wednesday | 9 | 18085 |
| Wednesday | 10 | 17889 |
| Wednesday | 11 | 18571 |
| Wednesday | 12 | 17880 |
| Wednesday | 13 | 18023 |
| Wednesday | 14 | 17822 |
| Wednesday | 15 | 17007 |
| Wednesday | 16 | 13875 |
| Wednesday | 17 | 11882 |
| Wednesday | 18 | 9833 |
| Wednesday | 19 | 3510 |
| Wednesday | 20 | 874 |
| Wednesday | 21 | 3159 |
| Wednesday | 22 | 5717 |
| Wednesday | 23 | 8101 |

SELECT

  EXTRACT(MONTH FROM created\_at) AS month,

  COUNT(\*) AS traffic\_count

FROM `bigquery-public-data.thelook\_ecommerce.events`

GROUP BY

  month

ORDER BY

  month;

|  |  |
| --- | --- |
| month | traffic\_count |
| 1 | 173857 |
| 2 | 159829 |
| 3 | 185225 |
| 4 | 181974 |
| 5 | 193331 |
| 6 | 193425 |
| 7 | 210109 |
| 8 | 220061 |
| 9 | 221035 |
| 10 | 246385 |
| 11 | 283992 |
| 12 | 151879 |

**3. Can we identify regions or countries with the highest website engagement? Events or users? How do user interactions differ across various geographical locations?**

SELECT

  city,

  COUNT(\*) AS total\_events

FROM `bigquery-public-data.thelook\_ecommerce.events`

GROUP BY

  city

ORDER BY

  total\_events DESC;

<https://docs.google.com/spreadsheets/d/1kMnLUHClPxYkGpSi15s-zjTdZkbwnCt9P7LTF2jxQrE/edit?usp=sharing> (Shanghai)

SELECT

  country,

  COUNT(\*) AS total\_events

FROM `bigquery-public-data.thelook\_ecommerce.users`

GROUP BY

  country

ORDER BY

  total\_events DESC;

|  |  |
| --- | --- |
| country | total\_events |
| China | 33991 |
| United States | 22428 |
| Brasil | 14626 |
| South Korea | 5283 |
| France | 4718 |
| United Kingdom | 4589 |
| Germany | 4157 |
| Spain | 3976 |
| Japan | 2472 |
| Australia | 2239 |
| Belgium | 1252 |
| Poland | 243 |
| Colombia | 16 |
| España | 5 |
| Austria | 4 |
| Deutschland | 1 |

SELECT

  city,

  COUNT(\*) AS total\_page\_views,

  COUNT(DISTINCT CASE WHEN event\_type = 'purchase' THEN user\_id END) AS total\_purchases

FROM `bigquery-public-data.thelook\_ecommerce.events`

GROUP BY

  city

ORDER BY

  total\_page\_views DESC;

<https://docs.google.com/spreadsheets/d/1ukEq0ApZzIKtEbY92P9lLQLEZvyZSjc3fyvgTyQaDYw/edit?usp=sharing>

**Popular browser:**

SELECT

  browser,

  COUNT(\*) AS total\_events

FROM `bigquery-public-data.thelook\_ecommerce.events`

GROUP BY

  browser

ORDER BY

  total\_events DESC;

|  |  |
| --- | --- |
| browser | total\_events |
| Chrome | 1208432 |
| Firefox | 485822 |
| Safari | 485117 |
| Other | 120996 |
| IE | 120735 |

**Popular Traffic source:**

SELECT

  traffic\_source,

  COUNT(\*) AS total\_events

FROM `bigquery-public-data.thelook\_ecommerce.events`

GROUP BY

  traffic\_source

ORDER BY

  total\_events DESC;

|  |  |
| --- | --- |
| traffic\_source | total\_events |
| Email | 1089377 |
| Adwords | 728909 |
| YouTube | 240996 |
| Facebook | 240991 |
| Organic | 120829 |

Which specific pages or features are the most popular among users? ☹

Are there common paths that users follow through the website? ☹

How does user engagement vary across different sections of the website? ☹

How do user behaviors vary during promotional events or campaigns? **No data on promotions**