

MYSQL DATA ANALYSIS COURSE

Mid Course Assignment Result Presentation

Presented by Pathompon Moonthianngam



MID COURSE ASSIGNMENT



Mid Course Assignment



The company's insurance policy is up for renewal and the insurance company's underwriters need some updated information from us before they will issue a new policy.



Dear Maven Movies Management,

In our review of your policy renewal application, we have realized that your business information has not been updated in a number of years.

In order to accurately assess the risk and approve your policy renewal, we will need you to provide all of the following information.

Sincerely,
Joe Scardycat, Lead Underwriter

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MID COURSE PROJECT QUESTIONS

- We will need a list of all staff members, including their first and last names, email addresses, and the store identification number where they work.
- We will need separate counts of inventory items held at each of your two stores.

We will need a count of active customers for each of your stores. Separately, please.

In order to assess the liability of a data breach, we will need you to provide a count of all customer email addresses stored in the database.

MID COURSE PROJECT QUESTIONS

- We are interested in how diverse your film offering is as a means of understanding how likely you are to keep customers engaged in the future. Please provide a count of unique film titles you have in inventory at each store and then provide a count of the unique categories of films you provide.
- We would like to understand the replacement cost of your films. Please provide the replacement cost for the film that is least expensive to replace, the most expensive to replace, and the average of all films you carry.
- We are interested in having you put payment monitoring systems and maximum payment processing restrictions in place in order to minimize the future risk of fraud by your staff. Please provide the average payment you process, as well as the maximum payment you have processed.
- We would like to better understand what your customer base looks like. Please provide a list of all customer identification values, with a count of rentals they have made all-time, with your highest volume customers at the top of the list.

Following the Underwriter's request, we found...

• Store 1 and 2 are staffed by Mike H. and Jon S., respectively.

| first_name | last_name | email | store_id |
|------------|-----------|------------------------------|----------|
| Mike | Hillyer | Mike.Hillyer@sakilastaff.com | 1 |
| Jon | Stephens | Jon.Stephens@sakilastaff.com | 2 |

 Store 2 has more inventory, specifically more films across 16 categories, than Store 1 but has fewer active customers.

| inventory_count | store_id |
|-----------------|----------|
| 2270 | 1 |
| 2311 | 2 |

| unique_film_count | store_id |
|-------------------|----------|
| 759 | 1 |
| 762 | 2 |

| unique_category | |
|-----------------|--|
| 16 | |

| active_customer | store_id |
|-----------------|----------|
| 318 | 1 |
| 266 | 2 |



+

In addition. . .

• The most expensive film replacement cost was \$29.99.

| lease_expensive_to_replace | most_expensive_to_replace | AVG_to_replace |
|----------------------------|---------------------------|----------------|
| 9.99 | 29.99 | 19.984000 |

 The average payment the stores processed was \$4.20.

| average_payment | max_payment |
|-----------------|-------------|
| 4.200667 | 11.99 |

The most that one customer had rented was 46 films.

| customer_id | number_of_rentals |
|-------------|-------------------|
| 148 | 46 |
| 526 | 45 |
| 144 | 42 |
| 236 | 42 |
| 75 | 41 |



See full csv file on Github