MySQL – Error handling

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MySQL Error Handling

- Handle error
  - continue
  - Or exit the current code block's execution, and issuing a meaningful error message.
- Handlers
  - Handle from general conditions such as warnings or exceptions
  - specific conditions e.g., specific error codes.

Declaring a handler

- DECLARE action HANDLER FOR condition_value statement;
- The *action* accepts one of the following values:
  - CONTINUE : the execution of the enclosing code block (BEGIN … END) continues.
  - EXIT : the execution of the enclosing code block, where the handler is declared, terminates.
- The *condition_value* :
  - A MySQL error code.
  - A standard SQLSTATE value. Or it can be an SQLWARNING , NOTFOUND or SQLEXCEPTION condition, which is shorthand for the class of SQLSTATE values. The NOTFOUND condition is used for a cursor or SELECT INTO variable_list statement.
  - A named condition associated with either a MySQL error code or SQLSTATE value.
- The *statement* could be a simple statement or a compound statement enclosing by the BEGIN and END keywords.

MySQL handler precedence

In case you have multiple handlers that handle the same error, MySQL will call the most specific handler to handle the error first based on the following rules:

- An error always maps to a MySQL error code because in MySQL it is the most specific.

- An SQLSTATE may map to many MySQL error codes, therefore, it is less specific.

- An SQLEXCPETION or an SQLWARNING is the shorthand for a class of SQLSTATES values so it is the most generic.

- Based on the handler precedence rules, MySQL error code handler, SQLSTATE handler and SQLEXCEPTION takes the first, second and third precedence.

Named error condition

- DECLARE condition_name CONDITION FOR condition_value;

- The condition_value can be a MySQL error code such as 1146 or a SQLSTATE value.

- The condition_value is represented by the condition_name .

- After the declaration, you can refer to condition_name instead of condition_value

MySQL error handling examples

ErrorHandling.txt

References

- https://www.mysqltutorial.org/