

CS242 Project: StackOverflow Search Engine

Winter 2025

Team 06



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GUI Overview

Stack Overflow Search

Error 1130 in mysql



Lucene ☐ BERT

AI-Generated Answer

To resolve Error 1130 in MySQL, ensure that your MySQL server is running and listening on the correct port (usually 3306). If you're connecting locally, use 'localhost' or '127.0.0.1' as the host. If you're connecting remotely, ensure that your server's firewall allows incoming connections on the MySQL port. Additionally, check if there are any network issues or if the MySQL server is bound to a specific IP address.

Error 1130 in mysql

when i am trying to log on mysql using my ip address i am getting error 1130 qht can i do for this ...

mysql-error-1130 mysql

[View Discussion](#)

phpMyAdmin - #1130 - Host 'SERVER' is not allowed to connect to this MySQL server

I run WAMPServer on a Windows server 2012 r2, I want to run a database on it using phpMyAdmin, everything is working but when I try ...

phpmyadmin mysql-error-1130 wampserver

[View Discussion](#)

#1130 - Host 'localhost' is not allowed to connect to this MySQL server

I issued a command of: DROP USER 'root'@'localhost'; GRANT ALL PRIVILEGES ON . TO 'root'@'%'; ...in PhpMyAdmin. Immediately after...

Stack Overflow Search

Error 1130 in mysql



Lucene ☒ BERT

Dark Mode

AI-Generated Answer

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Error 1130 in mysql

when i am trying to log on mysql using my ip address i am getting error 1130 qht can i do for this...

mysql mysql-error-1130 mysql mysql-error-1130

[View Discussion](#)

Showing Error Name (by function) in Angular

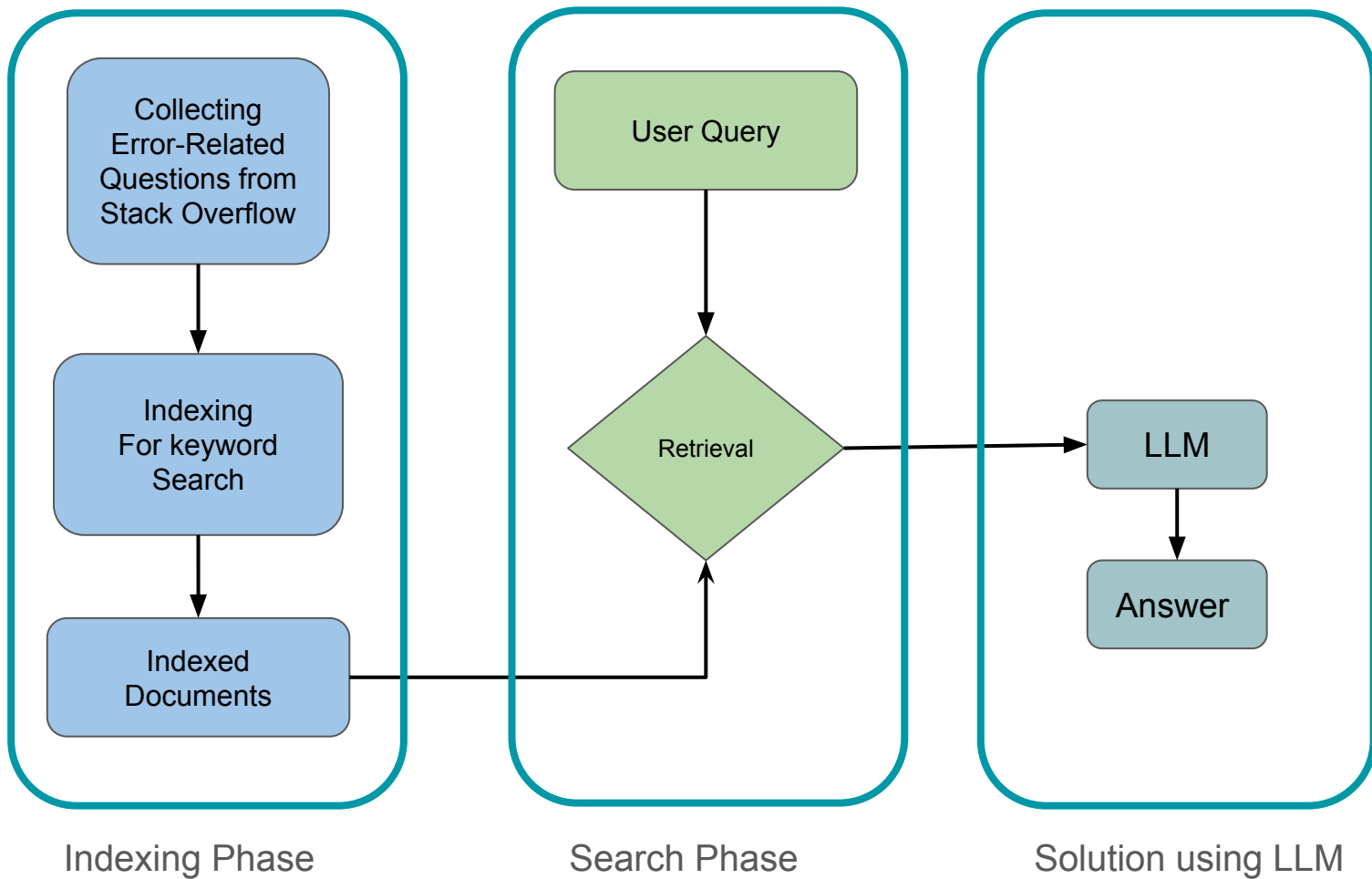
I am trying to take in a textarea, like so:

angular error-handling angular error-handling

[View Discussion](#)

OCaml: error in list function

Steps



Data Collection



Data Source:

- Scraped **StackOverflow** (224,046 error-related entries) using **Scrapy**
- **Tags:** error-handling", "compiler-errors", "runtime-error", "syntax-error", "linker-errors", "importerror"
- Collected **questions, tags, answers, and comments, and saved those as json.**

Challenges & Solutions:

- **Slow scraping** → Split workload across team
- **Pagination Handling**
- **Applied “Download Delay” to avoid blocking from server**
- **Handling duplicates** → Post Processing and filtering

Indexing Methods

- **Pylucene (Sparse Retrieval):**
 - **Inverted index** for **fast keyword-based retrieval**
 - **Scoring**
 - i. Vector Space Model (VSM)
 - ii. Probabilistic Models such as Okapi **BM25** and DFR
 - iii. Language models
 - **TextField:** title, body, tags, comments, answers.
 - **StoredField:** link, score, creation_date.
- **BERT - 🧠 Transformers (Dense Retrieval):**
 - Transforms text into **contextualized vector representations** for efficient **semantic matching**.
 - Tokenized and truncated Stack Overflow question titles and bodies to first 512 tokens.
 - Used the [CLS] token from BERT's last hidden state for embedding extraction.
- **FAISS (Efficient Similarity Search):**
 - Stores embeddings for **fast nearest neighbor retrieval**
 - **IndexFlatL2** - exact nearest neighbor with euclidean distance.

LLM Integration



Large Language Model (Qwen 2.5 3B Instruct)

- Takes an **error query** and **top-5 retrieved documents** as inputs
- Generates **response** as a solution to the query

How It Works:

1. **User Query:** Enters programming error
2. **Retrieval:** Lucene or BERT fetches top-k relevant documents
3. **Prompting:**
 - Construct a closed book QA style prompt using query and documents
 - Prompt sent to model via **Hugging Face API**
 - Model generates **an answer** to the query
4. **Result Displayed:** Shown in **GUI**

Challenges Solved:

- **Improved query handling** for ambiguous searches
- **Better response generation**

GUI Implementation



Features:

- **User-friendly web interface**
- Allows **Lucene or BERT-based search**
- Displays **ranked solutions with AI-generated summaries**
- **Backend:** Flask API connecting search & AI models

Hugging Face API Usage:

- Used **pre-trained LLM via API call**
- Requires **API key authentication**
- Sends **query & retrieved answers** for processing



Live Demo:

<http://169.235.31.51:8080/>

Final Results & Achievements



- Fully operational AI-powered error resolution system
- Successfully implemented Lucene, BERT & FAISS
- Optimized search retrieval with Hugging Face API (Additional Contribution)
- Interactive GUI for real-time query processing (Additional Contribution)

Future Scope:

- Enhance UI for better UX
- Expand dataset for multi-language support
- Optimize Hugging Face API requests for speed & cost

Demo