Objective: Develop a Neo4j database system for analyzing hospital data extracted from a CSV file.

Description: This project aims to create a Neo4j database system to store and analyze hospital information extracted from a CSV file (`HospitalGeneralInformation.csv`). The dataset contains general information about hospitals such as their names, addresses, phone numbers, services provided, and performance ratings.

Features:

1. Data Loading: Load hospital data from the CSV file into the Neo4j database using Cypher queries.

2. Indexing: Create indexes on relevant properties to optimize query performance.

3. Constraints: Define constraints to ensure data integrity, such as unique identifiers for hospitals and states.

4. Additional Information: Enhance the dataset by adding additional information such as phone numbers, services, and performance ratings to the hospital nodes.

5. Geospatial Data: Add latitude and longitude properties to hospitals for geospatial analysis.

6. Queries: Develop Cypher queries to retrieve insights from the hospital data, such as the number of hospitals per city, zip code, or street, and identifying hospitals with specific attributes like emergency services.

7. Documentation: Provide clear documentation including a README file to guide users on how to use and understand the database system.

### README.md

#### Hospital Database System

This project aims to create a Neo4j database system for analyzing hospital data. The database stores general information about hospitals, including their names, addresses, services, and performance ratings. The provided Cypher queries facilitate data loading, indexing, constraint definition, additional information enhancement, geospatial data addition, and querying insights from the dataset.

Instructions:

1. Data Loading: Load hospital data from the CSV file (`HospitalGeneralInformation.csv`) into the Neo4j database using the provided Cypher queries.

2. Indexing: Index relevant properties to optimize query performance.

3. Constraints: Define constraints to ensure data integrity, such as unique identifiers for hospitals and states.

4. Additional Information: Enhance the dataset by adding phone numbers, services, and performance ratings to hospital nodes.

5. Geospatial Data: Add latitude and longitude properties to hospitals for geospatial analysis.

6. Queries: Utilize provided Cypher queries to retrieve insights from the hospital data, such as the number of hospitals per city, zip code, or street, and identifying hospitals with specific attributes like emergency services.

7. Documentation: Refer to this README file for guidance on using and understanding the database system.

Note: Ensure Neo4j is installed and running before executing the Cypher queries. Modify file paths in the queries to match your local file system.