### **Team Member 1: Data Analysis and Cleaning**

* **Task:** Analyze the two spreadsheets (Concert Data and Music Performed Data) to identify inconsistencies, missing values, and data quality issues.
* **Responsibilities:**
  + Clean and preprocess the data to ensure accuracy and consistency.
  + Identify and resolve any data anomalies or errors.
  + Standardize data formats and units of measurement.
  + Extract relevant information from the Works.con PDF file and integrate it into the dataset.

### **Team Member 2: ERD Design and DDL Script**

* **Task:** Design the Entity-Relationship Diagram (ERD) to model the database structure.
* **Responsibilities:**
  + Identify entities and attributes based on the data analysis.
  + Define relationships between entities (e.g., one-to-one, one-to-many, many-to-many).
  + Create the Data Definition Language (DDL) script to implement the database schema in SQL.
  + Ensure the database design is optimized for efficient data storage and retrieval.

### **Team Member 3: Data Integration and Database Population**

* **Task:** Integrate the cleaned data into the database.
* **Responsibilities:**
  + Import the data into the database using appropriate tools and techniques.
  + Validate the data integrity and consistency.
  + Optimize the database for performance, indexing relevant columns.
  + Create views or stored procedures to simplify data access and analysis.

**Collaborative Tasks:**

* **Regular Meetings:** Schedule regular meetings to discuss progress, address issues, and make decisions.
* **Review and Feedback:** Provide constructive feedback on each other's work to improve the overall quality of the database.
* **Testing and Validation:** Test the database to ensure it functions correctly and meets the project requirements.

**Additional Considerations:**

* **Data Security:** Implement appropriate security measures to protect sensitive data.
* **Data Privacy:** Adhere to data privacy regulations and ethical guidelines.
* **Scalability:** Design the database to accommodate future growth and changes.
* **User Interface:** Consider the user interface for accessing and analyzing the data (e.g., SQL queries, reporting tools).

By dividing the tasks in this way, the team can efficiently collaborate and produce a robust and user-friendly database that supports the Stockton Symphony's data-driven decision-making.

**Team Member 1:**

* Identify core entities: Concert, Performance, Work.

**Team Member 2:**

* Define primary keys for each entity: ConcertID, PerformanceID, WorkID.

**Team Member 3:**

* Determine cardinalities and constraints for relationships between entities: One-to-many between Concert and Performance, Many-to-one between Performance and Work.

**Team Member 4:**

* Create the ERD diagram using a suitable diagramming tool.
* Visually represent entities, relationships, cardinalities, and constraints.
* Ensure the diagram is clear, concise, and easy to understand.
* Refine the diagram based on feedback from team members.