**Criteria Importance (1-5)**

|  |
| --- |
| Simple and fast setup (5) |
| Cross-platform compatibility (4) |
| No network access (4) |
| Single-user access (5) |
| Easy backup to a USB stick (5) |
| Cost-effectiveness (5) |
| Compatibility with Python (5) |
| Potential for later replacement (3) |

**Scoring Calculation:**

For each criterion, the score is calculated by multiplying the importance rank with the rating for each database. The total score is obtained by summing up the scores for all criteria.

**Evaluation of Database:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Database | Simple Setup | Cross-platform | No Network Access | Single-user Access | Easy USB Backup | Cost-effective | Python Compatibility | Replaceable in Later Phases | Total Score |
| MSSQL | 2\*5=10 | 3\*4=12 | 2\*4=8 | 2\*5=10 | 1\*5=5 | 3\*5=15 | 4\*5=20 | 2\*3=6 | 86 |
| Oracle | 1\*5=5 | 3\*4=12 | 2\*4=8 | 2\*5=10 | 1\*5=5 | 2\*5=10 | 4\*5=20 | 2\*3=6 | 76 |
| SQLite | 5\*5=25 | 5\*4=20 | 5\*4=20 | 5\*5=25 | 5\*5=25 | 4\*5=20 | 5\*5=25 | 4\*3=12 | 172 |
| MySQL/MariaDB | 4\*5=20 | 4\*4=16 | 4\*4=16 | 4\*5=20 | 4\*5=20 | 4\*5=20 | 5\*5=25 | 3\*3=9 | 146 |
| PostgreSQL | 4\*5=20 | 4\*4=16 | 4\*4=16 | 4\*5=20 | 4\*5=20 | 4\*5=20 | 5\*5=25 | 4\*3=12 | 149 |
| Microsoft Access | 3\*5=15 | 2\*4=8 | 3\*4=12 | 3\*5=15 | 3\*5=15 | 3\*5=15 | 3\*5=15 | 2\*3=6 | 101 |
| LibreOffice Base | 3\*5=15 | 4\*4=16 | 3\*4=12 | 3\*5=15 | 3\*5=15 | 3\*5=15 | 4\*5=20 | 3\*3=9 | 117 |

**Conclusion:**

Based on the evaluation, SQLite has the highest total score (172), making it the most suitable database for the initial feasibility phase of the project. It excels in simplicity, cross-platform compatibility, no network access requirements, single-user access, easy USB backup, cost-effectiveness, and compatibility with Python. It meets the criteria extremely well, making it the recommended choice for the specified requirements.