**Criteria:**

Ease of setup: 5

Speed: 4

Cross-platform compatibility: 5

Single-user access: 5

Ease of backup: 5

Cost-effectiveness: 5

Python compatibility: 5

**Comparison of Databases:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Features | MS-SQL | Oracle | SQLite | MySQL (or MariaDB) | PostgreSQL | Microsoft Access | LibreOffice Base |
| Ease of setup (5) | 2 | 2 | 5 | 4 | 4 | 5 | 4 |
| Speed (4) | 4 | 4 | 5 | 4 | 4 | 3 | 3 |
| Cross-platform compatibility (5) | 1 | 1 | 5 | 5 | 5 | 2 | 4 |
| Single-user access (5) | 3 | 3 | 5 | 4 | 4 | 5 | 5 |
| Ease of backup (5) | 2 | 2 | 5 | 4 | 4 | 4 | 4 |
| Cost-effectiveness (5) | 1 | 1 | 5 | 5 | 5 | 4 | 5 |
| Python compatibility (5) | 3 | 3 | 5 | 5 | 5 | 1 | 1 |

**Calculations:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Features | MS-SQL | Oracle | SQLite | MySQL (or MariaDB) | PostgreSQL | Microsoft Access | LibreOffice Base |
| Ease of setup (5) | 2\*5 =10 | 2\*5=10 | 5\*5=25 | 4\*5=20 | 4\*5=20 | 5\*5=25 | 4\*5=20 |
| Speed (4) | 4\*4=16 | 4\*4=16 | 5\*4=20 | 4\*4=16 | 4\*4=16 | 3\*4=12 | 3\*4=12 |
| Cross-platform compatibility (5) | 1\*5=5 | 1\*5=5 | 5\*5=25 | 5\*5=25 | 5\*5=25 | 2\*5=10 | 4\*5=20 |
| Single-user access (5) | 3\*5=15 | 3\*5=15 | 5\*5=25 | 4\*5=20 | 4\*5=20 | 5\*5=25 | 5\*5=25 |
| Ease of backup (5) | 2\*5=10 | 2\*5=10 | 5\*5=25 | 4\*5=20 | 4\*5=20 | 4\*5=20 | 4\*5=20 |
| Cost-effectiveness (5) | 1\*5=5 | 1\*5=5 | 5\*5=25 | 5\*5=25 | 5\*5=25 | 4\*5=20 | 5\*5=25 |
| Python compatibility (5) | 3\*5=15 | 3\*5=15 | 5\*5=25 | 5\*5=25 | 5\*5=25 | 1\*5=5 | 1\*5=5 |
| Total | 76 | 76 | **170** | 151 | 151 | 117 | 127 |

**Conclusion:**

SQLite is the best choice for this phase of the project based on the given criteria and evaluations. It scores the highest in all the features and the score is 170 which surpasses the other databases.