**Project Design Phase**

**Solution Architecture**

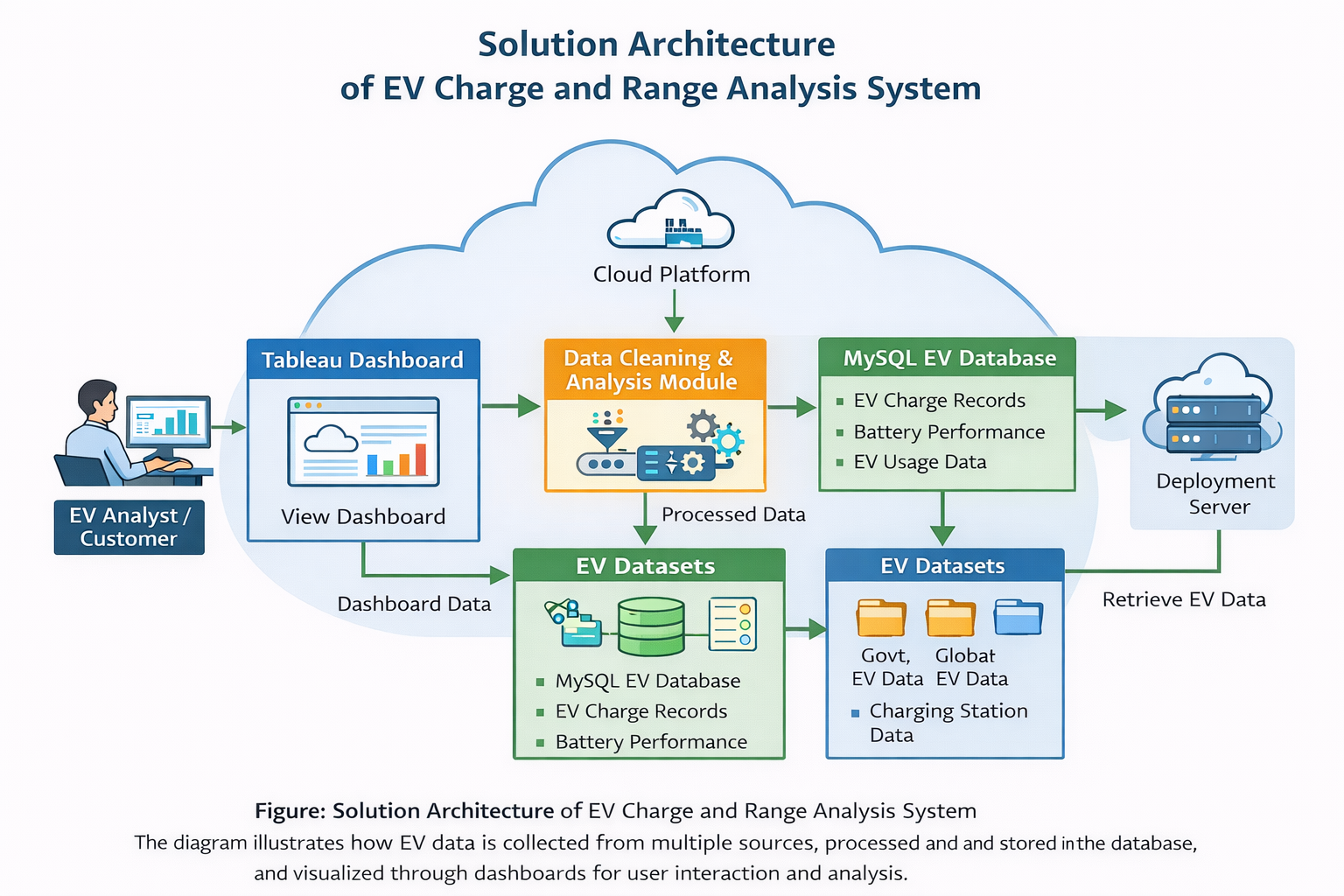
|  |  |
| --- | --- |
| Date | 11 February 2026 |
| Team ID | LTVIP2026TMIDS41011 |
| Project Name | Visualization Tool for Electric Vehicle Charge and Range Analysis |
| Maximum Marks | 4 Marks |

**Solution Architecture:**

Solution architecture defines how technology components work together to solve business problems. It provides a clear structure of the system, including its features, behavior, and interactions.

The proposed system, **Visualization Tool for Electric Vehicle Charge and Range Analysis**, follows a layered architecture:

* **User Interface Layer:** Allows users to interact with dashboards and view EV analytics.
* **Application Layer:** Processes user requests, performs calculations, and manages system logic.
* **Data Processing Layer:** Cleans, analyzes, and transforms EV data.
* **Database Layer:** Stores user information and EV performance data.
* **External Services:** Integrates APIs such as weather or mapping services.
* **Infrastructure Layer:** Handles system deployment, scalability, and cloud storage.

****