**Architecture diagram of the solution**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| |  | | --- | | **User Interface layer**  - Student Portal  - Counselor Portal  - Admin Dashboard |  |  | | --- | | **Insights Layer**  - Visualization(Graphs, Charts)  - Performance Reporting |  |  | | --- | | **Data Collection** |  |  | | --- | | **Analytics Layer**  Data Preprocessing  - Machine Learning Algorithms  - Rules-based Engine |  |  | | --- | | **Insight Generation Layer**  - Visualization Engine  - Reporting System |  |  | | --- | | **Recommendation Engine**  - Academic Support  - Well-being Strategies  - Personal Development |  |  | | --- | | **Feedback and Improvement Layer**  - Counselor Feedback  - Student Feedback | |