**Project Design Phase**

**Solution Architecture**

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| Date | 15 February 2025 |
| Team ID | LTVIP2026TMIDS85825 |
| Project Name | Prosperity Prognosticator – Machine Learning for Startup Success Prediction |
| Maximum Marks | 4 Marks |

**Solution Architecture:**

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

* Find the best tech solution to solve existing business problems.
* Describe the structure, characteristics, behaviour, and other aspects of the software to project stakeholders.
* Define features, development phases, and solution requirements.
* Provide specifications according to which the solution is defined, managed, and delivered.

**A diagram of a software development process

AI-generated content may be incorrect.**

## ****Architecture Flow Explanation****

1. Users (policy makers, entrepreneurs, investors) access the system through a **web or mobile interface**.
2. The **presentation layer** allows users to log in, enter startup details, and view prediction results.
3. The **application layer** handles authentication, data preprocessing, feature selection, and communication with ML models.
4. The **machine learning layer** processes the input data using trained models to predict startup success probability.
5. The **data layer** stores startup data, trained models, and prediction results for future analysis.
6. The system generates **reports and insights** to support data-driven decision-making.

## ****Key Architectural Features****

* Modular and layered architecture
* Separation of UI, logic, ML, and data
* Supports scalability and maintainability
* Enables easy model upgrades
* Cloud-ready deployment