

Project Design Phase

Solution Architecture

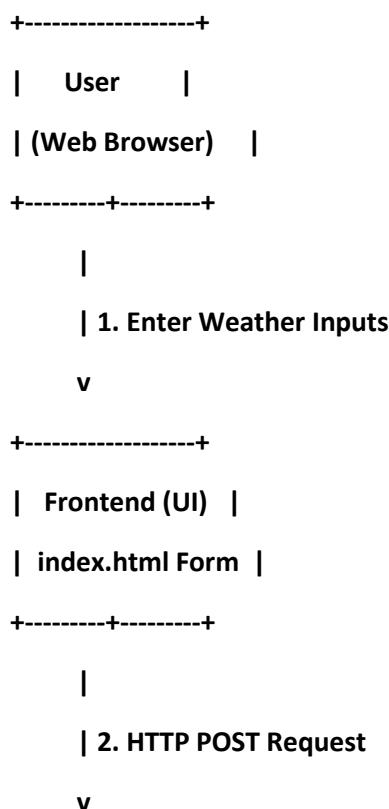
Date	16 February 2026
Team ID	LTVIP2026TMIDS57051
Project Name	Exploratory Analysis of Rainfall Data in India for Agriculture.
Maximum Marks	4 Marks

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, behavior, 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.

Solution Architecture Diagram:



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|  Flask Backend      |  
|  (app.py)          |  
| - Input Validation |  
| - Feature Engineering |  
| - Data Formatting (DataFrame)|  
+-----+-----+
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 | 3. Scale Input Data  
 v
```

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+-----+  
|  Scaler      |  
|  (scale.pkl) |  
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 |  
 | 4. Prediction  
 v
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+-----+  
|  ML Model      |  
|  (Rainfall.pkl) |  
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 | 5. Prediction Result  
 v
```

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+-----+  
|  Result Rendering      |  
|  chance.html / nochance.html|  
+-----+-----+
```

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 | 6. Display Result  
 v
```

```
+-----+
```

| User |

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