

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

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| Date | 15 October 2022 |
| Team ID | PNT2022TMID44312 |
| Project Name | Developing a Flight Delay Prediction Model using Machine Learning |
| Maximum Marks | 4 Marks |

Functional Requirements:

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|--------|--|--|
| FR-1 | User registration & login | Registration & login of passengers via Google with email id and password |
| FR-2 | Detailed arrival and departure time of flights | With the flight no and name, the passenger can see the details (time, boarding station, etc) of his/her in the dashboard. |
| FR-3 | Intimate the accurate flight timings to passengers | With the help of various machine learning algorithms, when given the right input features (actual arrival time & departure time, scheduled time, etc) we can predict the delay in time of the flight which will also be shown in the dashboard and updated time-to-time. |
| FR-4 | Airline helpdesk provide alternatives | The contact details of different airlines will be provided, The passenger will also be able to look for any alternative flight in case the flights get cancelled. |
| FR-5 | Passenger feedback | The feedback will be got from the users or how the application was to use, with their feedback and suggestions, we can improve the application further. |

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|--|
| NFR-1 | Usability | The application will have an easy-to-use GUI. Users will find it simple to comprehend and utilize all the capabilities of the application. |
| NFR-2 | Security | The technique known as database replication will be utilised for the application security to ensure the safety of all crucial data |
| NFR-3 | Reliability | The application will be consistent in all scenarios and work without fail in any environment |
| NFR-4 | Performance | The applications response time is direct & faster which is determined by the efficiency of the implemented machine algorithm. |

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| NFR-5 | Availability | The application will be accessible to users 24 hours a day, 7 days a week without interruption. They can access it from any part of the world with proper internet. |
| NFR-6 | Scalability | The application will be able to handle a rise in the no. of users & generate higher versions. |