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| **Test Case No.** | **Test Scenario** | **Test Steps** | **Expected Outcome** |
| 1 | Valid Input Data | 1. Input valid data for all fields (e.g., FL\_DATE, TAIL\_NUM, CRS\_DEP\_TIME). | Form should submit successfully and display prediction result. |
| 2. Submit the form. |
| 2 | Invalid Flight Date | 1. Input an invalid or future date for FL\_DATE. | The form should reject submission and show an error message like "Invalid date." |
| 2. Submit the form. |
| 3 | Missing Required Fields | 1. Leave some required fields (e.g., OP\_UNIQUE\_CARRIER) blank. | Error messages should indicate missing fields, and no prediction is made. |
| 2. Submit the form. |
| 4 | Predicting for Canceled Flight | 1. Set CANCELLED to 1. | The system should display a message like "Flight is canceled," and no prediction is made. |
| 2. Fill other fields with valid data. |
| 3. Submit the form. |
| 5 | Invalid Airport ID | 1. Input invalid data for ORIGIN\_AIRPORT\_ID or DEST\_AIRPORT\_ID. | Error message should display "Invalid Airport ID." |
| 2. Submit the form. |
| 6 | Valid Flight Number Format | 1. Input a valid numeric flight number in OP\_CARRIER\_FL\_NUM. | Form should submit successfully, and a prediction should be displayed. |
| 2. Submit the form. |
| 7 | Invalid Flight Number Format | 1. Input an invalid (e.g., alphanumeric) flight number in OP\_CARRIER\_FL\_NUM. | The form should reject submission and show an error message. |
| 2. Submit the form. |
| 8 | Future Flight Prediction | 1. Input a future flight date. | The prediction should run for the future flight, and a result should be displayed. |
| 2. Fill in valid data. |
| 3. Submit the form. |
| 9 | Correct Handling of Optional Fields | 1. Leave optional fields (e.g., DEP\_TIME) empty. | Form should submit successfully, and a prediction should be made based on available data. |
| 2. Submit the form. |
| 10 | Handling Large Inputs | 1. Input large values for fields like DISTANCE or TAXI\_OUT. | The form should accept the inputs, and a prediction should be made without errors. |
| 2. Submit the form. |