**Test Report**

**Project Information**

**Project Name: Economy Lot Parking Rate Calculation**

**Version: 1.0**

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**Test Summary**

This test report presents the results of functional tests conducted on the Economy Lot Parking rate calculation feature. The tests validate the rate calculations for various parking durations in the Economy Lot to ensure accurate cost outputs for time intervals ranging from 30 minutes to 10 days.

**Test Objectives**

* Verify that the Economy Lot Parking rate calculation functions correctly across a range of time intervals.
* Confirm that the system processes user input for dates and times accurately.
* Ensure correct pricing is displayed according to the predefined parking rate structure.

**Test Environment:**

**Operating System: Windows 11**

**Browser: Google Chrome v97**

**Database: PostgreSQL 12**

**Testing Tool: Manual Testing**

**Test Layer: End-to-End (E2E)**

**Test Cases Executed:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Case ID | Description | Expected Result | Actual Result | Status |
| PMS-17 | Calculate rate for 30 minutes | |  | | --- | | System displays cost: $2.00 | | |  | | --- | | System displays cost: $2.00 | | |  | | --- | | Passed | |
| PMS-18 | Calculate rate for 1 hour | System displays cost: $2.00 | System displays cost: $2.00 | Passed |
| PMS-19 | Calculate rate for 24 hours (1 day) | System displays cost: $9.00 | System displays cost: $9.00 | Passed |
| PMS-20 | Calculate rate for 168 hours (7 days) | System displays cost: $54.00 | System displays cost: $54.00 | Passed |
| PMS-21 | Calculate rate for 240 hours (10 days) | System displays Error message | System displays Error message | Passed |

**Defect Summary:**

* No defects identified. The system performed as expected, with actual results matching the expected results for each test case, including the correct error message for durations exceeding the maximum allowable limit.

**Risk Analysis:**

**Known Risks:** None identified at this stage, as the system correctly handled all scenarios outlined in the requirements.

**Potential Risks:** Future considerations may include adding further validation for very short or very long durations beyond the current range to ensure robustness.

**Conclusion:**

The Economy Lot Parking rate calculation feature has been successfully validated across multiple time intervals, meeting all expected outcomes for both pricing and error scenarios. The system is functioning as expected and is stable.