**PROJECT NAME: Parking Automation System**

**GROUP MEMBERS:**

**Ayhan Taşdemir**

**Nazmi Ege Güven**

**Yasin Polat**

**Esin Eda Tan**

**Selin Sinem Ergül**

**Hande Betül Esgin**

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| LIKELIHOOD RANK | RISK  DESCRIPTION |
| 1 | **Data Loss or Incorrect Records:**  System failures or software errors may result in the loss of critical parking and user data. |
| 2 | **Power Outage Risk** :  Power outages in the parking area may disrupt the system and cause data loss. |
| 3 | **Maintenance and Support Delays**:  Delayed response from maintenance teams during system failures may negatively affect user satisfaction. |
| 4 | **Mobile App Performance Issues**:  The mobile application may crash or slow down under heavy usage, impacting the user experience. |
| 5 | **Automatic Payment System Errors:**  Errors in the payment system or bank-related issues may prevent users from completing parking fee transactions. |
| 6 | **Parking Entrance-Exit Traffic Congestion**:  After system implementation, vehicle congestion may occur at parking lot entrances and exits, especially during peak hours. |
| 7 | **User Resistance**:  Users accustomed to traditional methods may struggle to adapt to the new system or refuse to use it. |
| 8 | **Weather Conditions Affecting Sensors**:  Heavy rain and strong winds, common in İzmir, may disrupt sensor detection and camera visibility. Since snowfall is rare, this risk is ranked lower. |
| 9 | **Incorrect Parking Problems**:  Users parking incorrectly (e.g., occupying two spaces) may reduce parking space efficiency. |
| 10 | **Camera and Image Processing Issues**:  Nighttime visibility issues or humidity-induced fogging may reduce camera performance and cause errors in license plate recognition. |

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| IMPACT  RANK | RISK  DESCRIPTION |
| 1 | **Data Loss or Incorrect Records:**  System failures or software errors may result in the loss of critical parking and user data. |
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| LIKELIHOOD RANK | IMPACT RANK | COMBINED RANK | RISK  DESCRIPTION |
| 1 | **1** | **2** | **Data Loss or Incorrect Records:**  System failures or software errors may result in the loss of critical parking and user data. |
| 2 | **3** | **5** | **Power Outage Risk** :  Power outages in the parking area may disrupt the system and cause data loss. |
| 3 | **2** | **5** | **Maintenance and Support Delays**:  Delayed response from maintenance teams during system failures may negatively affect user satisfaction. |
| 4 | **5** | **9** | **Mobile App Performance Issues**:  The mobile application may crash or slow down under heavy usage, impacting the user experience. |
| 5 | **4** | **9** | **Automatic Payment System Errors:**  Errors in the payment system or bank-related issues may prevent users from completing parking fee transactions. |
| 6 | **6** | **12** | **Parking Entrance-Exit Traffic Congestion**:  After system implementation, vehicle congestion may occur at parking lot entrances and exits, especially during peak hours. |
| 7 | **7** | **14** | **User Resistance**:  Users accustomed to traditional methods may struggle to adapt to the new system or refuse to use it. |
| 8 | **9** | **17** | **Weather Conditions Affecting Sensors**:  Heavy rain and strong winds, common in İzmir, may disrupt sensor detection and camera visibility. Since snowfall is rare, this risk is ranked lower. |
| 9 | **8** | **17** | **Incorrect Parking Problems**:  Users parking incorrectly (e.g., occupying two spaces) may reduce parking space efficiency. |
| 10 | **10** | **20** | **Camera and Image Processing Issues**:  Nighttime visibility issues or humidity-induced fogging may reduce camera performance and cause errors in license plate recognition. |