# Risk Analysis for Pre-Parking Software System

## 1. Risk Identification:

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| Risk Category | Description |
| Project Risks | Development team may struggle with integrating real-time parking availability data. Incomplete or unclear parking space data from authorities or owners. Team members may leave the project before completion. |
| Technical Risks | System may not update real-time parking availability accurately. Unauthorized access to user payment and location data. Server downtime or performance issues due to high traffic. |
| Business Risks | Users may find the system hard to use, leading to low adoption. Parking lot owners may not register their spaces on the platform. Inability to sustain operational costs for cloud hosting and API usage. |

## 2. Risk Identification and Mitigation

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| Risk | Likelihood | Category | Impact | RMMM (Risk Mitigation, Monitoring, and Management) |
| Inaccurate real-time parking data | High | Technical | High | Use IoT sensors and AI-based prediction models to improve accuracy. |
| Security breaches (user data theft) | High | Technical | High | Implement data encryption, secure authentication, and regular security audits. |
| Server performance issues | Medium | Technical | High | Use a scalable cloud infrastructure and load balancing techniques. |
| Low user adoption | High | Business | High | Conduct targeted marketing and offer incentives for early adopters. |
| Incomplete parking space data | High | Project | High | Partner with city authorities and private parking providers to obtain reliable data. |
| System complexity leading to usability issues | Medium | Business | High | Ensure a simple and intuitive user interface through usability testing. |