**SOFTWARE PROPOSAL**

**GROUP 3**

**TITLE OF PROJECT:PRE PARKING SYSTEM**

**BACKGROUND**

**Parking space is one of the most important things to keep in mind when building an establishment that attracts people could be a mall ,restaurant or hotel any places where people come to patronize a service parking is very key ,because people will come with vehicles and there is always this frustration that come with not being able to find a space, it can affects the rate at which customers come to patronize your establishment .An uncoordinated parking area can discourage potential customers from patronizing.**

**Now this is where my team comes in we have come up with a solution to ease this parking process by creating a pre parking system that allows customers to book their spaces beforehand creating a well organised area and peace of mind to the customers.**

**OBJECTIVES**

**-To create a pre parking system that help potential customers book a space before coming.**

**-To reduce rowdiness and uncoordinated parking area.**

**-To reduce parking search time and improve traffic flow.**

**-To ensure efficient use of parking spots.**

**-To minimixe unneccessary driving and enhace security and safety.**

**PROJECT DESCRIPTION AND SCOPE**

**PROPOSED SOLUTION FEATURES**

**-Live Updates: Provide drivers with live updates on available spaces through a mobile app or website.**

**-Real-time availability – Shows open parking spaces in a specific area.**

**-Reservation system – Allows users to book a spot before arrival.**

**-Payment integration – Supports cashless transactions via mobile apps.**

**-Navigation assistance – Provides directions to the reserved spot.**

**-Confirmation and Notifications: Once a spot is reserved, send confirmation and reminders to users via email or app notifications.**

**SCOPE**

**Included scope**

**-Integration of parking space data into a user interface (mobile app or website).**

**-Integration with online payment gateways to handle secure payments (credit/debit cards, digital wallets, etc.).**

**-Notification system to send real-time updates about parking availability, reservation status, or changes.**

**-Use of real-time location-based services (like Google Maps) for direction assistance.**

**-Support for payment and reservation confirmation before arrival.**

**Excluded scope**

**-The system will not manage or monitor on-street parking, which involves street-based meters or parking authorities.**

**-The system will not integrate or include external parking lots or garages that are not part of the specific parking network being managed.**

**- The pre-parking system only manages parking availability and does not control the broader traffic flow within the city or region.**

**-The system will not support or integrate with parking locations or garages that are not part of the approved parking network**

**ASSUMPTIONS AND CONSTRAINTS**

**Assumptions**

**-Users will have access to the platfoem with supported browsers and internet connectivity.**

**-Administrators will actively monitor and manage the sytem.**

**-The Establishment already has designated parking space.**

**-The system will process real-time parking data effectively to ensure that information such as availability, space reservation, and payments are updated instantly.**

**Constraints**

**-Budget limits for development ,testing and deployment.**

**-Fixed delivery timeline of 5 weeks for complete system.**

**There may be challenges in ensuring that real-time data (e.g., parking space availability) is synchronized across all users and systems to avoid conflicts and miscommunication.**

**DELIVERABLES AND MILESTONES**

**DELIVERABLES**

**-Requirement specification document.**

**-System Design (Architecture and UI/UX Design)**

**-Final Tested and deployed platform**

**-User documentation**

**-Deployment and Maintenace platform**

**MILESTONES**

**Week 1-2**

**-Define goals ,gather requirments and documentations,**

**Week 3**

**-Breakdown project and assign members to each part.**

**Week 4-6**

**-Design,coding and implementation.**

**Week 7**

**-Testing and Final project review.**

**Week 8**

**-Deployment**

**PROJECT BUDGET SUMMARY**

**The estimated budget for the development and deployment of the Pre-Parking System includes the following components:**

**| Item | Estimated Cost (NGN) |**

**| Software Development | ₦3,000,000 |**

**| Website and Hosting | ₦500,000 |**

**| Database Management | ₦1,000,000 |**

**| Security and Compliance | ₦700,000 |**

**| Marketing and Promotion | ₦800,000 |**

**| Maintenance & Support | ₦1,000,000 |**

**| Miscellaneous | ₦500,000 |**

**| Total Estimated Budget | ₦7,500,000 |**

**PRICING INFORMATION**

**The pricing model for customers using the Pre-Parking System includes:**

**- Basic Booking Fee: ₦2000 per booking**

**- Premium Subscription: ₦15000 per month for unlimited bookings**

**- Corporate Packages: Custom pricing based on volume and integration needs**

**TEAM PROFILE**

1. **Project Manager- Oversees development and implementation.**
2. **Secretary – Responsible for all documentation.**
3. **Lead Software Engineer- Responsible for system architecture.**
4. **Front-End Developer - Develops the website interface.**
5. **Back-End Developer - Manages database and server-side functions.**
6. **UX/UI Designer - Ensures an intuitive customer experience.**
7. **QA Engineer - Conducts system testing and debugging.**

**DEFINITIONS AND ABBREVIATIONS**

**- Pre-Parking System (PPS): A platform allowing users to book parking spots in advance.**

**- UI/UX: User Interface/User Experience.**

**- API: Application Programming Interface.**

**- SaaS: Software as a Service.**

**REFERENCES**

**- Industry reports on smart parking solutions**

**- Case studies of existing pre-parking systems**

**- Compliance regulations for digital payment and data protection**

**KEY STAKEHOLDERS**

**- Mall Management - Ensures parking spots are available.**

**- Customers - End-users who book parking spaces.**

**- Software Development Team - Builds and maintains the system.**

**- Security & Compliance Experts - Ensure regulatory adherence.**

**- Marketing Team - Handles promotions and customer outreach.**

**TERMS AND CONDITIONS**

**1. Customers must provide accurate information during booking.**

**2. Pre-booked parking slots are held for a maximum of 15 minutes after the reserved time.**

**3. Cancellation requests must be submitted at least 2 hours before the scheduled parking time.**

**4. The company is not liable for vehicle damages or losses.**

**5. Refunds are subject to terms based on the cancellation policy.**

**6. The system must comply with all local parking and data privacy regulations.**

**7. Service may be suspended for users violating terms.**

**End of Proposal**