

PRD 1: Mobile application for real-time parking search

1. Product description: Develop a mobile application for Android devices that allows users to search and find available parking spaces in real time in the city of Quito. The application will provide an efficient solution to the shortage of safe parking spaces, improving urban mobility and reducing the improper occupation of public spaces.
2. Functional requirements:
 - User registration: Users will be able to register in the application using their email or through a social network account.
 - Search for parking: Users will be able to search for parking near their current location or by entering a specific address. The application will use map services to display available parking spaces on an interactive map.
 - Parking information: Users will be able to obtain detailed information on each parking lot, including capacity, rates, hours of operation, additional services, and implemented security measures.
 - Parking reservation: Users will be able to reserve a parking space in a specific parking lot and make the corresponding payment through the application.
 - Ratings and reviews: Users will be able to rate and leave reviews on the parking lots they have used, which will help other users make informed decisions.
 - Notifications: Users will receive real-time notifications about the availability of nearby parking lots, special offers, and reservation reminders.
3. Non-functional requirements:
 - Platforms: The application will be compatible with mobile devices that use the iOS and Android operating systems.
 - Intuitive user interface: The application will have an easy-to-use and user-friendly interface, with intuitive navigation and clear layouts.
 - Maps integration: The application will use reliable map services to show the location of parking lots and help users find them easily.
 - Security: Robust security measures will be implemented to protect users' personal information and payments, using encryption and authentication techniques.
 - Performance and scalability: The application must be fast and scalable to handle a high volume of users and concurrent transactions.