

PRD 4: Design of APIs and of the first frames

PRODUCT DESCRIPTION:

SpeedSpot is a mobile application designed to facilitate the search for parking areas in real time, optimizing the process and helping users find the best option in the shortest possible time. The application has a distributed database that stores updated information on the availability of parking spaces in different urban areas.

FUNCTIONAL REQUIREMENTS

- User registration: Users will be able to create an account in the application, providing their personal information and search preferences.
- Search for parking areas: Users will be able to search for available parking areas in real time, using filters such as location, type of parking (street, private parking, blue zone, etc.) and availability.
- Visualization of results: The application will show the search results in the form of a list or map, providing detailed information about each parking area, including rates, hours, ratings and comments from other users.
- Reservation and payment of parking spaces: Users will be able to reserve and pay for parking spaces through the application, guaranteeing their availability upon arrival at the location.
- Rating and reviews: Users will be able to rate and leave comments on the parking areas they have used, sharing their experience with other users.

NON-FUNCTIONAL REQUIREMENTS:

- Performance: The application must be fast and efficient, providing search results in real time and minimizing load times.
- Usability: The user interface must be intuitive and easy to use, with an attractive design that provides a smooth and pleasant experience for users.
- Security: Security measures must be implemented to protect users' personal information, as well as to guarantee secure transactions in case of online payment.
- Availability: The application must be available 24 hours a day, 7 days a week, to allow users to search for parking spaces at any time.
- Scalability: The distributed database must be able to handle a large volume of information and concurrent users, without compromising system performance.
- Integration of external APIs: The application must be integrated with external APIs of map and geolocation services to provide accurate and updated results.