

Goal:

Improve parking availability and efficiency for USC students and faculty by providing real-time lot occupancy information.

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Technology / System Features

- Real-time parking lot occupancy tracking
- Mobile app showing available spaces
- Website dashboard for desktop access
- Color coded map

Data Collection & Sensors

- Cameras or sensors at lot entrances
- Partnership with campus police for lot data
- Student ID scanners for tracking entry and exit
- Use lot devices to count vehicles

User Experience (UX) / Interface

- Simple “Find My Spot” button
- Voice commands (hands-free driving)
- Option to “favorite” specific lots
- Filter by distance, permit type, or cost

Communication & Support

- Push notifications for lot closures or events
- Admin dashboard for staff to update lot status
- Feedback system for users to report errors
- Email alerts for parking permit updates

Implementation & Logistics

- First test in 2–3 student lots first
- Evaluate user feedback after 1 month
- Expand to faculty and visitor lots later
- Integrate payment system for visitor parking