

Affinity Diagram

Current Problems & Frustrations

Students often forget or lose their Carolina Card.

Replacing cards costs money and delays access.

Physical cards wear out or get demagnetized.

Students must carry both their card and phone.

Library and dorm access requires physical tap-in.

Parking gate scanners only recognize physical cards.

Carrying multiple cards for different purposes is inconvenient.

User Needs & Expectations

Want to tap their phone instead of a card.

Desire an all-in-one campus access app.

Expect quick, contactless access (like Apple Pay).

Need compatibility with existing scanners and systems.

Want reliable performance even when offline or low battery.

Key App Features

NFC-based tap system for buildings, parking, and library.

Digital Carolina Card stored securely in the app.

QR code fallback for older scanners.

Integrated campus map for access points.

Option to store vehicle license plate for parking verification.

Security & Privacy

Encrypted communication with USC's servers.

Face ID / fingerprint authentication for access.

Auto-lockout when device is reported lost.

Secure Single Sign-On using USC credentials.

Offline authentication caching (for temporary network issues).

Benefits & Campus Impact

Streamlines access to all campus buildings and services.

Reduces lost-card incidents and replacement costs.

Improves campus security via digital tracking.

Increases convenience and student satisfaction.

Makes USC appear more modern and tech-forward.