Sprint 1 Artifacts

1. **Requirement 3.1 – Display the total number of available and occupied parking spots for each lot**

   Description:
   Show real-time data for each parking lot's availability, indicating how many spots are open versus full.

   Implementation Details:
   Each lot in mockParking.js includes total and available fields.
   These are displayed beside each marker popup on the map (e.g., "64 / 80 spots available").

   Verification:
   On the Home Screen, click a marker on the map. A popup appears showing total and available spots.

2. **Requirement 4.1 – Mark parking lots available to yellow permit holders**

   Description:
   Visually represent lots reserved for Yellow Permit holders.

   Implementation Details:
   Yellow lots are tagged with "permit": "Yellow" in mockParking.js.

   Verification:
   Filter lots in mockParking.js. map labeled "Yellow Permit Lot."

3. **Requirement 4.2 – Mark parking lots available to red permit holders**

   Description:
   Red Permit lots must be easily identifiable on the map.

   Implementation Details:
   Markers show popup details of that lot's name and availability.

   Verification:
   On Home Screen, open the map → popup says "Red Permit Lot" labels.

4. **Requirement 4.3 – Mark parking lots available to Central District Parking Garage Holders**

   Description:
   Identify Central District Garage permit areas separately.

   Implementation Details:
   Markers show popup details of that lot's name and availability.

   Verification:
   Map shows markers around Central District; click a marker to see popup "Central District Garage Lot."

5. **Requirement 4.4 – Mark parking lots available to Union Garage Holders**

   Description:
   Display Union Garage lots distinctly.

   Implementation Details:
   Popup shows lot name and spots available.

   Verification:
   On map view, markers appear near Union Garage location with popup label.

6. **Requirement 14 – Map that displays where the parking lot is located**

   Description:
   Provide a geographic visualization of all parking lots on campus.

   Implementation Details:
   Implemented using react-native-maps for mobile and react-leaflet for web.
   Each lot from mockParking.js is rendered as a marker based on latitude and longitude.

   Verification:
   Run app → Home Screen shows interactive map centered on KU campus with colored markers for each lot.