Test Plan

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Sharer Test Cases

A. Sharer 001, Share with Single Friend (no driver), Severity 1
B.
1. Press "Share Location"
2. Mark "I don't need a driver"
3. Select one friend from contacts list
4. Submit
C. Receive a non-zero session ID from server with no error.

A. Sharer 002, Share with Multiple Friends (no driver) Severity 1
B.
a. Press "Share Location"
b. Mark "I don't need a driver"
c. Select multiple friends from contact list.
d. Submit
C. Receive a non-zero session ID from server with no error.

A. Sharer 003, Select 0 Friends to Share Error, Severity 2
B.
a. Press "Share Location"
b. Mark "I don't need a driver"
c. Select no users from contact list
d. Submit
C. Alert is displayed that at least one contact must be selected.

A. Sharer 004, Share with One Friend (Request Driver), Severity 1
B.
a. Press "Share Location"
b. Mark "I need a driver"
c. Select one friend from contact list
d. Submit
C. Receive a non-zero session ID from server with no error, and a message to confirm that a driver request was sent.

A. Sharer 005, Share with Multiple Friends (Request Driver), Severity 1
B.
a. Press "Share Location"
b. Mark "I need a driver"

      c. Select multiple friends from contact list

      d. Submit

C. Receive a non-zero session ID from server with no error, and a message to confirm that a driver request was sent.

A. Sharer 006, Share with Multiple Friends for Valid Time, Severity 1

B.

      a. Press "Share Location"

      b. Select "Pick me up in X hours." Select a valid time in the future.

      c. Select multiple users from contact list

      d. Submit

C. Receive a non-zero session ID from server with no error, receive a flag that user wants to be track for a period of time, and an integer submitted by sharer. [Something to confirm that a driver request was sent rather than a regular one]

A. Sharer 007, Share with Multiple Friends Invalid Time Input, Severity 2

B.

      a. Press "Share Location"

      b. Select "Pick me up in X hours." Select a time in the past.

      c. Select multiple users from contact list

      d. Submit

C. Alert is displayed saying "You must select a valid time"

A. Sharer 008, Request to Stop Sharing Location, Severity 2

B.

      a. Press "Stop Sharing my Location"

      b. Select "Confirm"

C. Server receives a mock incoming request from a Sharer to stop sharing their location.

A. Sharer 009, Share with Friends Until Within Proximity of Location, Severity 2

B.

      a. Press "Share Location"

      b. Select "I don't need a driver"

      c. Select "Share until I reach a location." Input a location from a map.

      d. Select user(s) from contact list.

      e. Submit

C. Receive a non-zero session ID from server with no error, receive a flag that user wants to be tracked until a location is reached, and a set of coordinates for the end location.

A. Sharer 010, Request Pick-up, Severity 1

B.

      a. Initiate sharing session with driver request

      b. Press "I need to be picked up"

C. Display alert: "Your friends have been notified", receive a non-zero session ID from server with no error.

A. Sharer 011, View One Sharer that Location has been Shared with, Severity 2
B.
    a. User A: Initiate sharing session with User B
    b. User A - Go to the sharer tab
C. User B is displayed as a receiver who is receiving location updates from User A.

A. Sharer 012, View Multiple Sharers that Location has been Shared with, Severity 2
B.
    a. User A: Initiate sharing session with User B, User C, and User D
    b. User A - Go to the sharer tab
C. User B, User C, and User D are displayed as receivers who are receiving location updates from User A.

A. Sharer 013, Location Sharing Ends when Home is Reached, Severity 2
B.
    a. Send a share request.
    b. Set the request to timeout when a destination is reached, and use a close by destination.
    c. Move the phone to that destination
    d. Request update from server
C. Receive update from server indicating sharing has ended, and update UI appropriately

A. Sharer 014, Location Sharing Ends when Sharing Times Out, Severity 2
B.
    a. Send a share request.
    b. Set the request to timeout after 5 seconds
    c. Wait for 5 seconds
    d. Request update from server
C. Receive update from server indicating sharing has ended, and update UI appropriately

Server Test Cases

A. Server 001, Handle Share Location Request to Single Receiver, Severity 1
B.
    a. Mock incoming request from User A to share location with User B
    b. Allow server to handle request
C. Response returned to User A including session ID, and notification payload is sent to Apple Push Notification Service for User B

A. Server 002, Handle Share Location Request to Multiple Receivers, Severity 1
B.

  a. Mock incoming request from User A to share location with User B, User C, and User D

  b. Allow server to handle request

C. Response returned to user A including session ID, and notification payloads are sent to Apple Push Notification Service for User B, User C, and User D.

A. Server 003, Handle Heartbeat Pings from Sharer, Severity 1

B.

  a. Mock share location request from User A

  b. Mock incoming heartbeat ping from User A

  c. Allow server to handle request

C. Most recent location is stored in session for User A

A. Server 004, Verify GPS coordinates when using geofence, Severity 2

B.

  a. Mock "Share until I reach a location" request.

C. Coordinates the server returns are the same as requested.

A. Server 005, Return Location of a Single Sharer, Severity 1

B.

  a. Create Sharer-Receiver session between User A and User B

  b. Mock current location update from User A

  c. Mock request from User B to fetch the current location of User A

  d. Allow server to handle request

C. Response to User B contains correct location of User A

A. Server 006, Return Location of Multiple Sharers, Severity 1

B.

  a. Create Sharer-Receiver session between User A and User C, and User B and User C

  b. Mock current location update from User A, and from User B

  c. Mock request from User C to fetch the current location of all sharers

  d. Allow server to handle request

C. Response to User C contains correct location of User A and User B

A. Server 007, Handle Request to Request a Pickup, Severity 2

B.

  a. Create Sharer-Receiver session between User A and User B

  b. Mock request from User A to request a pickup

  c. Allow server to handle request

C. Return success response to User A and notification payload is sent to Apple Push Notification Service for User B: "User A has requested to be picked up"

A. Server 008, Handle a Response to Accept a Pickup with Valid ETA, Severity 2

B.
   a. Create Sharer-Receiver session between User A and User B
   b. Mock request from User A to request a pickup
   c. Mock response from User B to accept a pickup request with a valid ETA
   d. Allow server to handle request
C. Return success response to user A and notification payload is sent to Apple Push Notification Service for User A: "User A is ready to be picked up"

A. Server 009, Handle a Response to Accept a Pickup with Invalid ETA, Severity 3
B.
   a. Create Sharer-Receiver session between User A and User B
   b. Mock request from User A to request a pickup
   c. Mock response from User B to accept a pickup request with an invalid ETA (time in the past, or negative hour count))
   d. Allow server to handle request
C. Return error response to User B: Invalid ETA

[Functionality to stop sharing location is provided for convenience but is not a core safety feature - therefore the severity level is decreased]

A. Server 010, Handle a Request to Stop Sharing Location (Initiate), Severity 3
B.
   a. Create Sharer-Receiver session between User A and User B
   b. Mock request from User A to stop sharing location
   c. Allow server to handle request
C. Return success response to User A and notification payload is sent to Apple Push Notification Service for User B: "User A wants to stop sharing his/her location. Is this okay?"

A. Server 011, Handle a Request to Stop Sharing Location (Accept), Severity 3
B.
   a. Create Sharer-Receiver session between User A and User B
   b. Mock request from User A to stop sharing location
   c. Mock request from User B to accept User A's request to stop sharing
   d. Allow server to handle request
C. Return success response to User B, and terminate the live session between User A and User B.

A. Server 012, Stop Sharing Location with Time Ending Condition, Severity 2
B.
   a. Create Sharer-Receiver session between User A and User B which expires in 5 seconds
   b. Sleep 5 seconds
   c. Mock heartbeat ping from User A, mock location request from User B

       d. Allow server to handle request
C. Terminate session, return session termination response to User A and to User B

A. Server 013, Stop Sharing Location with Home Ending Condition, Severity 2
B.
       a. Create Sharer-Receiver session between User A and User B with a given home location
       b. Mock heartbeat ping from User A whose location is within a 100-ft. radius of the specified home location
       c. Mock heartbeat ping from User A, mock location request from User B
       d. Allow server to handle request
C. Terminate session, return session termination response to User A and to User B

Receiver Test Cases

A. Receiver 001, Monitor a Single Sharer's Location, Severity 1
B.
       a. Mock incoming response from server indicating User A is sharing location
       b. In Receiver view, select User A
C. Current location of User A appears on map as specified in the server response

A. Receiver 002, Monitor the Location of Multiple Sharers, Severity 1
B.
       a. Mock incoming response from server with current location that User A, User B, and User C are sharing their location
       b. Open Receiver overview
C. Current locations of User A, User B, and User C appear on overview map

A. Receiver 003, Receive Pick-up Alert, Severity 1
B.
       a. Mock incoming response from server that User A is ready for pick-up
       b. User B - Open Receiver overview
C. User A's pick-up alert is shown on the Receiver overview tab for User B.

A. Receiver 004, Accept Pick-up Request, Include Valid ETA, Severity 1
B.
       a. Press "Accept pick-up request"
       b. Select a time in the future as ETA
       c. Submit
C. Receive a non-zero session ID from server with no error, receive a flag that receiver agreed to pick-up, and an integer ETA submitted by receiver.

A. Receiver 005, Accept Pick-up Request, Include Invalid ETA, Severity 1

B.
    a. Press "Accept pick-up request"
    b. Select a time in the past as ETA
    c. Submit

C. Alert is displayed saying "You must select a valid time"

A. Receiver 006, Decline Pick-up Request, Severity 2
B.
    a. Press "Decline pick-up request"
    b. Submit

C. Receive a non-zero session ID from server with no error, receive a flag that receiver declined to pick-up.

A. Receiver 007, Receive Alert that Other Receiver Accepted Pick-up, Severity 2
B.
    a. Mock incoming response from server that User C has accepted User A's pick-up request
    b. User B - Open receiver overview

C. User C's acceptance of User A's pick-up alert is shown on the receiver's tab for User B. User B can no longer accept User A's pick-up alert.

A. Receiver 008, Notification of Sharer's Safe Return, Severity 2
B.
    a. Mock incoming response from server that User A has returned to designated location.
    b. User B - Open receiver overview

C. User A's notification of safe return is shown on the receiver's tab for User B.

A. Receiver 009, Accept a Request to Stop Sharing Location, Severity 1
B.
    a. Mock incoming response from server that Sharer A has requested to stop sharing their location
    b. Receiver accepts

C. Server terminates tracking of Sharer A and will no longer request updates of location from sharer.

A. Receiver 010, Deny a Request to Stop Sharing Location from Sharer, Severity 1
B.
    a. Mock incoming response from server that Sharer A has requested to stop sharing their location
    b. Receiver denies

C. Server continues to track location of Sharer A.