NarrateMyWay - Main Application

Participants: BluetoothBeacon, ExpansionPackBeacon, user, NarrateMyWay, GUI, LocalStorage, ExternalStorage

Initialisation

user → NarrateMyWay: Open application

Note: Begin loop to scan for beacons.

NarrateMyWay → GUI: Render "Scanning" screen

NarrateMyWay → user: Audio: "Scanning for beacons near you"

Expansion Pack Beacon Detected

ExpansionPackBeacon → NarrateMyWay: "Expansion Pack" beacon detected within 10m

NarrateMyWay → GUI: Render "New Location Discovered" screen

Note: Process new location detection (see 'Detecting a New Location')

NarrateMyWay → GUI: Render "Scanning" screen

NarrateMyWay → user: Audio: "Scanning for beacons near you"

Location Beacon Detected

BluetoothBeacon → user: Beacon detected within 10m

BluetoothBeacon → user: Code: "nmw:1-0-1" & UUID: 98765

user → NarrateMyWay: Determine information for the given code & UUID

Note: Terminate loop

(Optional) UUID information available

NarrateMyWay → LocalStorage: Check if UUID is available in local storage

LocalStorage → NarrateMyWay: Provide enriched information

NarrateMyWay → ExternalStorage: Fetch encoding information

Note: Determine meaning of code including:
- Type of location (POI or Warning etc.)
- Name and icon for location
- Required audio output (in chosen language)

NarrateMyWay → GUI: Render "Main" screen using this information

NarrateMyWay → user: Audio: Play required audio snippet

Allow user to engage with app and repeat audio etc

Beacon Out Of Range

BluetoothBeacon → user: Beacon no longer detected

Note: Begin loop to scan for beacons.

user → NarrateMyWay: (In background) Notify that beacon no longer detected

NarrateMyWay → GUI: Render "Scanning" screen

NarrateMyWay → user: Audio: "Scanning for beacons near you"