# TomThumb

a user-friendly assistive technology for AR navigation

#### Goal:

 The aim is to help Tom, a person with cognitive impairment, to memorize and follow a route independently.

#### Caregiver-side:

- Create routes by placing crumbs;
- Follow Tom's progress.

#### • Tom-side:

- Complete a route by collecting crumbs dropped by the caregiver;
- Follow routes already traveled.







## Create a route

The caregiver creates the route by placing the crumbs. Each crumbs has an associated audio, which can be recorded by the caregiver itself.



### AR-Navigation & Monitoring





Tom walks the route in AR and collects all the crumbs. He will be guided during the entire execution by visual (directional arrows, route percentage, pop-ups) and auditory support.

The caregiver monitors Tom's progress in real-time.

# Tom's safety

- Visual-auditory support:
  - Deviation from the route: Tom wil be invited to call his caregiver in case of deviations;
  - Unexpected event: at any time, Tom can play personalised audios or call his caregiver;
  - 3. 'Call caregiver' shortcut.

