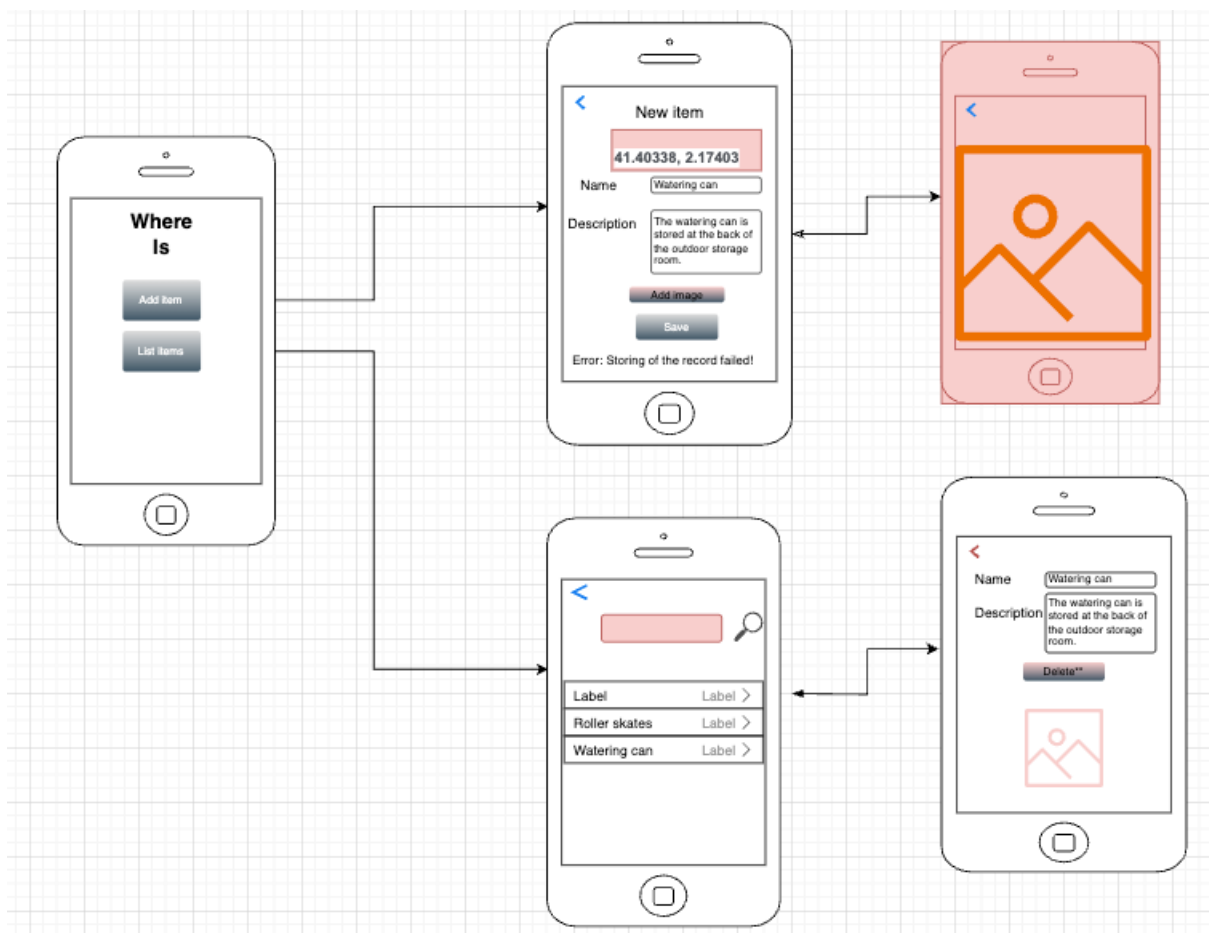


Functional Software Requirements for "Where Is" Application

Requirements with ** are required for grade 5

Requirements with *** (optional to implement)

This document contains requirements for the project work. UI sketch describes a minimum implementation of the navigation and screens required (white screens). You can choose to implement a platform specific navigation solution in a way that is supported by the device chosen (iOS or Android). (using navigation bars, drawers etc) and choose a platform specific screen layout instead of the generic one described below.



1. Entry screen with a “Add new” button and “List items” button

- **R1.1:** Add new button will lead to Record Creation Screen using stack navigation.
- **R1.2:** List items -button will lead to Flat List of WhereIs -items.

2. Record Creation

- **R2.1:** The application shall provide a form where the user can:

- Enter the **name** of the "thing" like “sleeping bag, swimming floats, christmas tree carpet” etc, which you do not need often and don’t remember where you last put it”
- Provide a **description** of the "thing and its location." for example: “*The red christmas tree carpet is put on the top shelf of the left closet in the walk-in closet.*”
- Use camera to take a picture of the “where is” item in the location, (so that the location can be identified from the photo.) (**see requirement 6**)**
- Store GPS location of the item.***
- **R2.2:** The application shall validate the inputs to ensure that the "thing" name and the description are mandatory, while other fields are optional.**
- **R2.3:** The application shall allow users to save the record with all provided details.
- **R2.4:** If storing of the data fails, error message is shown.

3. Flat list screen

- **R3.1:** The application shall allow the user to view all saved records in a list format.
- **R3.2:** The list shall display:
 - Name of each "thing."
 - Thumbnail of the photo (if available).***
- **R3.3.** Stack Navigation from list item to view one item details (see. 3.6)
- **R3.5. Navigation back to entry screen**

3.6 View one item -screen

- **R3.6.1** Show name, description, GPS-location*** and photo** of the item
- **R3.6.2** Navigate back to Flat List of Items

4. Storage of Records

- **R4.1:** The application shall store the records persistently in a (remote or local) database or local JSON-file or local storage or over the REST integration to the backend system.
 - **R4.1.1** If REST or remote database are chosen a proper authentication and encryption are implemented/ensured to secure data.
- **R4.2:** Each record shall include the following:

- Name of the item
- Description of the "thing" and the location
- Photo of the item (if provided).**
- **R5.3:** The application shall ensure data integrity during the save process.

6. Search Functionality embedded to Flat List of items***

- **R6.1:** The application shall provide a search bar where users can input a name to search for a item.
- **R6.2:** The search functionality shall support:
 - Exact match for the name.
 - Partial match (optional, but recommended for usability).
- **R6.3:** The application shall display search results in a list, showing:
 - Name of the "thing."
 - Thumbnail of the photo (if available).***
- **R6.4:** Users should be able to click on a search result to view full details of the record.

7. Record Updates and Deletion***

- **R5.1:** The application shall allow users to update an existing record's:**
 - Name.
 - Description.
 - Photos (of the "thing" or storage place).
- **R7.2:** The application shall allow users to delete a record from the list.

8. Photo Management***

- **R8.1:** The application shall support taking pictures (e.g., JPEG, PNG).**
- **R8.2:** The application shall optimize photo storage to reduce storage space while maintaining sufficient quality for identification.***
- **R8.3:** Photos shall be previewed before saving the record.***

9. Usability Features**

- **R9.1:** The application shall provide clear error messages for invalid inputs (e.g., missing "thing" name).
- **R9.2:** The application shall have an intuitive user interface for easy navigation between record creation, listing, and search.
- **R9.3:** The application shall provide a confirmation prompt before deleting a record.***

10. Security***

- **R10.1:** The application shall encrypt stored data.***
- **R10.2:** The application shall require user confirmation before making changes to stored records.***