

## 1. Task 1.

### Example 1:

#### No Brief description

1. In all steps we don't see actor names (e.g. User, System).
2. There is not defined which data User should enter (e.g. login, password, email and requirements for this data)
3. There is no exceptional case (e.g. data is invalid)
4. It's better to say "System validates that..." instead of "checks if"

### Example 2:

#### Brief description

1. It is not specified which data User should enter
2. There is no validation for data
3. There is no exceptional case (e.g. data didn't pass the validation process)
4. There is no step about what to do after user submission (e.g. "System validates the account data are complete and correct and then register new user with submitted data")

### Example 3:

#### Brief description

1. "User wants to Register" but there are no steps that he opened some registration form or something like that.
2. Data validation is not specified (e.g. password should have at least 8 symbols, email should be unique, etc.)
3. There is no definition of exceptional case (e.g. Data didn't pass the validation step)
4. There is no step about what to do after user submission (e.g. "System validates the account data are complete and correct and then register new user with submitted data")

### Example 4:

#### Brief description

1. There is no specification what kind of data user should input.
2. There is no definition what to do after user entered the data.
3. There is no data validation
4. There is no exceptional case

## Task 2:

Use case: User registration.

Actors: Guest, Reader

1. Guest wants to register.
2. Guest selects "Sign in" option.
3. System shows "Sign in" form with "Register new account" button to a guest.
4. Guests selects "Register new account" option.
5. System shows registration form to a guest with account data fields ("Name", "Password", "Email", "Fingerprint" fields. All are required, except of "Fingerprint" (it's optional)).
6. Guest inputs a data and then submits it by "Sign up" button.
7. System registers new user and automatically signs in a guest, which automatically becomes a Reader

**Exceptional Flow:** Guest's input data was not validated

System shows the user a message with which the Guest can understand what data he should change and returns user to a step #4.

Use case: Browser Catalog

Actors: User, Reader

1. Reader wants to browse catalog.
2. Reader selects "Browse catalog" option
3. Reader tries to find required book via search input
4. If book with input name exists – system shows it to a reader.
5. If book was found user can reserve it via "Reserve a book" button
6. If reader tries to reserve a book, system validates the requester privileges (requester should be reader), if so, system assigns book reserver to a concrete book and gives a book to a user

**Alternative Flow:** Book was not found

System shows special message to a reader that book was not found

**Alternative Flow:** Book is already reserved

System shows error message to a reader that book is already reserved by another user.

**Exceptional Flow:** User is not a Reader

System shows exceptional message, that user should sign in



### Task 3

#### Use case: View Dictionaries

##### **Basic flow:**

1. Run dictionaries use-case
2. User inputs name of the dictionary
3. System verifies that there is a dictionary with user's input name
4. System dispatches a dictionary to a user

##### **Alternative Flow:** Dictionary was not found

1. System verifies that the selected product is unavailable
2. System informs the user about the fact the dictionary is unavailable

Goto step 2 of basic flow

#### Use case: Learn Words

##### **Basic flow:**

1. Run View Dictionaries use case
2. User selects "Learn words" option
3. System runs words learning algorithm
4. System shows 10 unique words from the dictionary and their meaning.
5. System shows one of the shown words meaning and asks user to input a correlating word.
6. User inputs a word
7. System validates if the word was correct. Steps 5-7 are looped until all words will be shown
8. At the end, system shows count of correct answers and shows failed

Loop on step 4

##### **Alternative flow:** User wants to quit

1. System shows a message of total answers, correct attempts and failed and then closes the words learning algorithm