

# User Cases vs. User Stories in deriving an initial conceptual class model

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ID: \_\_\_\_\_ Name: \_\_\_\_\_

## Consent Form

Dear Participant,

The experiment is conducted within the Department of Software and Information Systems Engineering at Ben-Gurion University of the Negev, and focuses on the development of a conceptual class model based on different requirements notations.

The experiment duration is two hours.

- Upon completion of the entire experiment and in an alignment to your performances you will get between 1 and two bonus point to the final grade in the Object-Oriented Analysis and Design course.
- At any rate, you are eligible to withdraw the experiment at any stage, yet, in such a case, you will not be entitled for the bonus points.
- The research is anonymous and no private details will be revealed.

1. I confirm that I read and understand the above and I agree to participate the experiment following the terms above.
2. It was made clear to me that my personal data will stay confidential.
3. It was made clear to me that I can withdraw the experiment at any stage.

Date \_\_\_\_\_ Name \_\_\_\_\_ Signature \_\_\_\_\_

**Attention:** In order to keep the experiment condition, you are kindly request to keep quit. In case you have questions please raise your hand.

## Instructions

The questionnaire consists of four parts:

1. The first part consists of general questions regarding the demographic background, academic background, knowledge, and achievements.
2. In the second and the third parts, you will be requested to develop a conceptual class model based on user stories and use cases.
3. The fourth part consists of questions regarding your perceptions of the different requirement notations.

First Part – General Details

Circle your answers.

Academic Year	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	
To what extent you are familiar with the Class Diagram	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
To what extent you are familiar with use cases	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
To what extent you are familiar with user stories	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
Have you participated in the use cases lecture?	Yes	No			
Have you participated in the user stories lecture?	Yes	No			
To what extent you were involved with the use cases homework?	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
To what extent you were involved with the user stories homework?	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
To what extent you were involved with the class diagram homework?	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all

## Second Part

In the following, a list of user stories for data packages management, publication, and their usage pricing system is presented.

### **EPIC 1: Getting Started**

1. As a Publisher, I want to sign up for an account, so that that I can publish my data packages under.
2. As an Admin, I want to invite someone to join the site, so that that they can start contributing or using data.

### **EPIC 2: Publishing Data Packages**

1. As a Publisher, I want to import my data package into my account, so that my data has a permanent online home to access.
2. As a Publisher, I want to publish a data package, so that I can share the data package publicly with everyone.
3. As a Publisher, I want to unpublish a data package, so that it is no longer visible to anyone.
4. As a Publisher, I want to permanently delete a data package, so that that it no longer takes up storage space.
5. As a Publisher, I want to validate the data I am about to publish, so that that I publish good data.
6. As a Publisher, I want to publish a data package, so that I can share it with a few people.
7. As a Publisher, I want to tag data package, so that that consumers can find and refer to it.

### **EPIC 3: Finding and Viewing Data Packages**

1. As a Publisher, I want to see real examples of published packages so that I can understand how useful and simple the data package is.
2. As a Consumer, I want to search data packages, so that that I can find the ones that fit my needs.
3. As a Consumer, I want to view a data package online, so that I can get a sense of whether this is the data package I want.
4. As a Consumer, I want to download the data package in one file, so that that I don't have to download descriptor and each resource by hand.
5. As a Consumer, I want to view the data package that I have downloaded before, so that that I can decide if I should update or not.
6. As a Consumer, I want to know that the data I am downloading is good and can be relied on, so that that I don't have to check it myself or run into annoying bugs later on.

### **EPIC 4: Administrating Site**

1. As a Publisher, I want to know if this site has a pricing plan and what the prices are, so I can choose the most fitted one.
2. As a Publisher, I want to sign up for a given pricing plan, so that that I am entitled to what it allows.
3. As an Admin, I want to set key configuration parameters for my site deployment.
4. As an Admin, I want to see key metrics about usage such as users, API usage, downloads, so that that I know how things are going.
5. As an Admin, I want to have a pricing plan and a billing system, so that that I can charge its users.

### **EPIC 5: Publishers**

1. As a Publisher, I want to invite users to my account.
2. As a Publisher, I want to invite someone using their email, so that that they are authorized to publish data packages under my Publisher.
3. As a Publisher, I want to remove someone from membership in my publisher, so that they no longer have ability to publish or modify my data packages.
4. As a Consumer, I want to see a publisher's profile, so that that I can discover their packages and get a sense of how active and good they are.

Your task is to develop an initial conceptual class model. Please be sure to name the relationships in the form of verbs.

### Part Three

In the following, a list of use cases for estimation of time and resources in software development using a game.

#### **UC1: Set a Game**

**Primary Actor:** Moderator

**Main Success Scenario (or Basic Flow):**

1. Create a new game by entering a name and an optional description
2. The system records the game parameters
3. Set the item estimation policy
4. The system stores the item estimation policy for the game
5. Invite up to 15 estimators to participate
6. The system sent invitations and add estimators to the game

#### **UC2: Play the Game**

**Primary Actor:** Moderator

**Other actors:** Estimators

**Main Success Scenario (or Basic Flow):**

1. Request to view the item list
2. The system retrieve all game items
3. Start a round
4. The system initiates a new round
5. Add/Edit/Delete Item to estimate in the specific round
6. The system stores the items
7. The system marks items to be estimated
8. Return to 3 when applicable
9. The system save the marked item and publish these to the estimators
10. The system gets the estimations
11. The system calculate the average estimation per item
12. Request to view item status
13. The system retrieve all item related data including estimations along with their estimators
14. Decide upon final estimation
15. The system stores the final estimation
16. Finish round
17. Back to any of the above operation when required
18. Finish game

#### **UC3: Estimate**

**Primary Actor:** Estimator

**Main Success Scenario (or Basic Flow):**

1. Request to View the item list
2. The system presents the relevant item list
3. Update estimations
4. The system updates and presents all items with their submitted estimations
5. Round ended
6. The system updates and presents all estimations and their related estimator
7. Submit/edit/change estimation
8. The system updates own estimation
9. Start countdown of two minutes before finalizing the round
10. The system starts the timer
11. The system ends the rounds after two minutes
12. Back to any of the above operation when required

Your task is to develop an initial conceptual class model. Please be sure to name the relationships in the form of verbs.

Part 4 – Post Questionnaire

Circle your extent of agreement with the following statements

<b>Use cases</b> fit for developing a conceptual model	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
<b>User stories</b> for developing a conceptual model	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
<b>Use cases</b> help in identifying classes	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
<b>User stories</b> helps in identifying classes	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
<b>Use cases</b> help in identifying relationships	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
<b>User stories</b> help in identifying relationships	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
<b>Use cases</b> facilitate the comprehension of the system structure	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
<b>User stories</b> facilitate the comprehension of the system structure	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
<b>Use cases</b> provide a system overview	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
<b>User stories</b> provide a system overview	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
A <b>use case</b> clearly presents a single requirement	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
A <b>user story</b> clearly presents a single requirement	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all

Which method do you prefer?      Use Cases      User Stories