

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

B

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 st	2 nd	3 rd	4 th	
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 use cases for data packages management, publication, and their usage pricing system is presented.

UC1: Set a Platform

Primary Actor: Site admin

Main Success Scenario (or Basic Flow):

1. Set the site configuration (including title, owner)
2. The system records the site configuration
3. Invite users to visit the site
4. The system sent invitations
5. Define a price plan
 - 5.1. Name the price plan
 - 5.2. Determine the price plan scheme
 - 5.3. The system records the price plan
6. Set site usage metrics (including users, API usage, downloads)
7. The system records the metrics settings
8. Set the billing system

UC2: Join the Platform as a Publisher

Primary Actor: Publisher

Main Success Scenario (or Basic Flow):

1. Register to the site and open an account
2. The system stores a publisher account
3. Select price plans
4. The system assigns the appropriate price plans to the Publisher account
5. Manage users (add, remove)
6. The system send invitation to selected users
7. Set site usage metrics for the Publisher
8. The system records the metrics for the Publisher

UC3: Handle data packages

Primary Actor: Publisher

Main Success Scenario (or Basic Flow):

1. Search for data packages
2. The system retrieves data packages
3. Select a data package
4. The system present the data package
5. Import a data packages
6. The system load and save the data package and assign it to the Publisher
7. The system validate the data package
8. Tag the data set
9. Select the users that will have permissions
10. Set the required permission for the data set
11. The system stores the appropriate permissions

Alternatives:

1. Select a data package to be unpublished/deleted
2. The system marks the data package to be unpublished/ delete the data package

UC4: Use a dataset

Primary Actor: Consumer

Main Success Scenario (or Basic Flow):

1. Search for data packages
2. The system retrieve related data packages

3. Explore data package meta data
4. The system presents the related information
5. View the actual data package
6. Download the data package
7. The system download the data package

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 user stories for estimation of time and resources in software development using a game.

Epic 1: Setting a Game

1. As a moderator, I want to create a new game by entering a name and an optional description, so that I can start inviting estimators.
2. As a moderator, I want to invite estimators, so that we can start the game.
3. As a moderator, I want to invite up to 15 estimators, so that we can play with large but not immense number of estimators.
4. As a moderator, I want to select whether to have the estimators estimate with {0, 1/2, 1, 2, 3, 5, 8, etc.} or {0, 1, 2, 4, 8, 16, 32, etc.} policies.

Epic 2: Playing a Game

1. As a moderator, I want to start a round by entering an item, so that we can estimate it.
2. As a moderator, I want to see all items we try to estimate this round, so I can examine them.
3. As a moderator, I want to select an item to be estimated or re-estimated, so that the estimators see that item and can estimate it.
4. As a moderator, I want to add an item to the list of items to be estimated, so that so that we can be flexible and accommodate situations where we think of additional properties.
5. As a moderator, I want to edit an item in the list of items to be estimated, so that I can make it better reflect the estimators' understanding of the item.
6. As a moderator, I want to delete an item from the list of items to be estimated, so that we can remove irrelevant items.
7. As a moderator, I want to show all estimates immediately, so that I can decide if and when to show the estimates.
8. As a moderator, I want to accept the average of all estimates, so that we can move on to the next item when we agree.
9. As a moderator, I want to have the "estimate" field filled in automatically if all estimators show the same card, so that I can accept it more quickly.
10. As a moderator, I want to enter the agreed-upon estimate, so that we can move on to the next item when we agree.
11. As an estimator, I want to see the item we are estimating, so that I know what I am giving an estimate for.
12. As an estimator, I want to see all items we will try to estimate this round, so that I have a feel for the sizes of the various items.
13. As an estimator, I want to immediately see that an estimate has been given by a specific estimator, so that I know who has already given an estimate and who we are still waiting for.
14. As an estimator, I want to be shown all estimates at the same time after all estimators have given their estimate, so that I can be sure estimates are independent and not influenced by other estimates given in the same draw.
15. As an estimator, I want to be able to change my estimate up until the last estimator places the estimation and all are shown, so that I can change my mind based on information I hear.
16. As an estimator, I want to see who gave what estimates during the current round, so that I know this when we are discussing the estimates.
17. As an estimator, I want to be able start a two-minute countdown timer that all participants can see, so that I can limit the time spent discussing the estimates.

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

Use cases 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
User stories 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
Use cases help in identifying classes	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
User stories helps in identifying classes	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
Use cases help in identifying relationships	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
User stories help in identifying relationships	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
Use cases 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
User stories 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
Use cases provide a system overview	To a very large extent	To a large extent	To a medium extent	To a limited extent	Not at all
User stories 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 use case 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 user story 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