CSE 360 Individual Homework 2 Karson Shin

1. A subset of the Student User Stories

Questions:

As a student, I can create a new question with valid text (not empty, minimum length 5) so it is stored correctly. (Positive Create)

As a student, if I attempt to create a question with empty or too short text, the system rejects it with a helpful error message. (Negative Create / Validation)

As a student, I can read an existing question (ID, author, content) so I can see its details. (Read)

As a student, I can update my question with new valid content to clarify or correct it. (Update)

As a student, if I try to update a non-existent question, the system shows an error message. (Negative Update)

As a student, I can delete my own question so it no longer appears in the system. (Delete)

As a student, if I try to delete a non-existent question, the system shows an error message. (Negative Delete)

As a student, I can list all questions to see what I or others have asked. (List All / Positive)

As a student, if no questions exist or a search returns nothing, the system shows an empty list gracefully. (List All / Negative)

As a student, I can search questions by author to filter results. (Search)

Answers:

As a student, I can create a new answer linked to an existing question with valid text (minimum length 2). (Positive Create)

As a student, if I attempt to create an answer with invalid text or for a non-existent question, the system rejects it with an error. (Negative Create / Validation)

As a student, I can read an answer (ID, question ID, author, content) to see responses. (Read)

As a student, I can update my answer with new valid content. (Update)

As a student, if I try to update a non-existent answer, the system shows an error message. (Negative Update)

As a student, I can delete my answer so it no longer appears. (Delete)

As a student, if I try to delete a non-existent answer, the system shows an error message. (Negative Delete)

As a student, I can list all answers to see all responses. (List All / Positive)

As a student, I can list all answers for a specific question. (Search by Question ID)

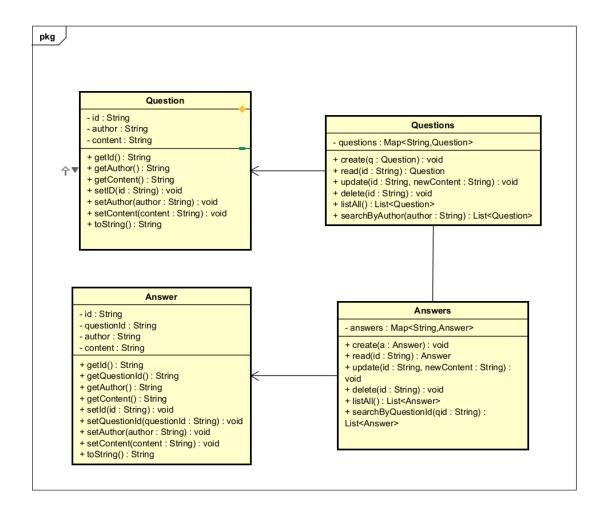
As a student, if a question has no answers, the system shows an empty list gracefully. (List / Negative)

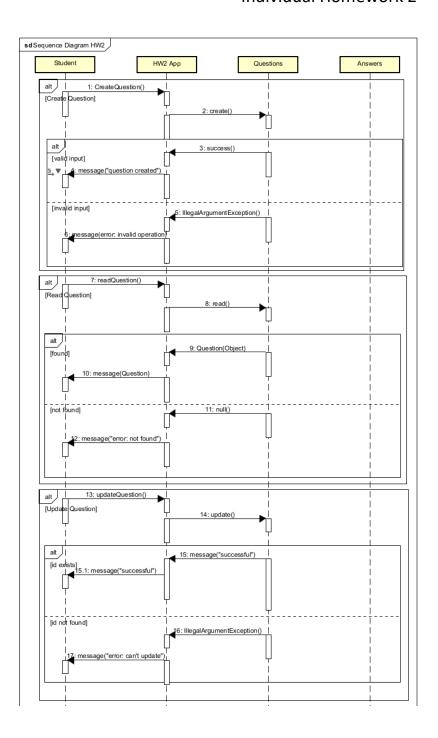
2. A list of Test Cases

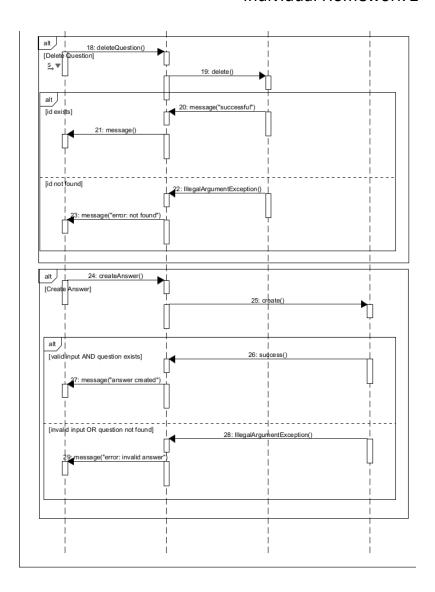
| ID | Туре | Action | Input | Expected Result | Outcome |
|------|-----------|------------|-------------------------|-----------------------------|----------|
| tc1 | Question | Create | Valid ID, Author, | Question object created | Positive |
| | | | Content | , | |
| tc2 | Question | Create | Empty ID | IllegalArgumentException | Negative |
| tc3 | Question | Create | Invalid Author | IllegalArgumentException | Negative |
| tc4 | Question | Create | Content < 5 chars | IllegalArgumentException | Negative |
| tc5 | Question | Read | Existing ID | Returns question object | Positive |
| tc6 | Question | Read | Non-existent ID | Returns null | Negative |
| tc7 | Question | Update | Valid ID, Valid Content | Content updated | Positive |
| tc8 | Question | Update | Non-existent ID | IllegalArgumentException | Negative |
| tc9 | Question | Delete | Existing ID | Removed from map | Positive |
| tc10 | Question | Delete | Non-existent ID | IllegalArgumentException | Negative |
| tc11 | Questions | List All | Map has questions | Returns list of all | Positive |
| | | | | questions | |
| tc12 | Questions | List All | Map empty | Returns empty list | Negative |
| tc13 | Questions | Search by | Author exists | Returns matching | Positive |
| | | Author | | questions | |
| tc14 | Questions | Search by | Author not found | Returns empty list | Negative |
| | | Author | | | |
| tc15 | Answer | Create | Valid ID, QuestionID, | Answer object created | Positive |
| | | | Author, Content | | |
| tc16 | Answer | Create | Empty ID | IllegalArgumentException | Negative |
| tc17 | Answer | Create | Content < 2 chars | IllegalArgumentException | Negative |
| tc18 | Answer | Create | Empty QuestionID | IllegalArgumentException | Negative |
| tc19 | Answer | Read | Existing ID | Returns answer object | Positive |
| tc20 | Answer | Read | Non-existent ID | Returns null | Negative |
| tc21 | Answer | Update | Valid ID, Valid Content | Content updated | Positive |
| tc22 | Answer | Update | Non-existent ID | IllegalArgumentException | Negative |
| tc23 | Answer | Delete | Existing ID | Removed from map | Positive |
| tc24 | Answer | Delete | Non-existent ID | IllegalArgumentException | Negative |
| tc25 | Answers | List All | Map has answers | Returns list of all answers | Positive |
| tc26 | Answers | List All | Map empty | Returns empty list | Negative |
| tc27 | Answers | Search by | Question has answers | Returns list | Positive |
| | | QuestionID | | | |
| tc28 | Answers | Search by | Question has no | Returns empty list | Negative |
| | | QuestionID | answers | | |

3. Create and Document HW2

3.1. UML Class and Sequence Diagrams







3.2. Information for Grader to access the GitHub, the Source Code, and ReadMe

https://github.com/kshin26/HW2

Instructions to run, readme, source code in repository.

Clone the repository, Compile, Run in bash

To clone:

git clone https://github.com/kshin26/HW2.git

After cloned, run:

cd HW2/UserNameRecognizerConsoleTestbed

javac -d bin src/userNameRecognizerTestbed/*.java src/HW2/*.java

java -cp bin HW2.HW2

4. HW2 Screencast

4.1. Information for Grader to access the GitHub, the Screencast, and ReadMe

https://github.com/kshin26/HW2

Located under folder "Screencasts"