

Tab 1

CSE 360

Team Project Phase 2 Report

Team 16

Team Member Names:

1. Luke Sherry
2. Tanner Urness
3. Max Gushchin
4. Anthony Ridings
5. Preston Roser

1.1. Design Documents



1.2. Description of how the code implements the Design Documents

The classes shown in the diagram above implement the required CRUD methods for phase 2. The question and answer classes allow for the creation and updating of questions and answers. There are then new methods and new tables in the database helper to allow adding questions and answers into the database, as well as private messages. There are also methods there for updating and deleting questions and answers. The StudentQAPage and Threads implement the GUIs for users to use the implemented CRUD methods and interact with the Q&A system.

1.3. Evidence that the code was tested

```

Console X
<terminated> dataTest (1) [Java Application] C:\Program Files\Java\jdk-24\bin\javaw.exe (Oct 14, 2025, 8:39:33 PM - 8:39:33 PM elapsed: 0:00:00.276) [pid: 73872]

Testing Automation
Question 1 Title: DuABs&Q
Question 1 Title Length: 7 characters
Question 1 Body: "e8H;97\mjTODUQx--V;W<D[bt&9443xM?rM&dA'I'.d&QwFngZ7^4tIWTM#r7R8(EWHG0\`=XH5cW6^@D'r$P{OPv?W3`RUN e#??^+1AJ:~)Mc[w/
Question 1 Body Length: 116 characters
Question 1 Fail! Question title cannot exceed 100 characters

Question 2 Title: 7E`f&H)RuB~LS07meRXY(W,0tt0ZQ~IDSZ3/SD---Gtot%vG?85KrR<C{kc6r254=IQN0c0S`hi19'bp/A)>R`De=RU)3?I|
Question 2 Title Length: 96 characters
Question 2 Body: i/Qagb!ns)E&*^J(5'ktnLvg(!xrPYU:_?_?HsDj&P2m^wmbXen)JpUmWg~K6@J?%/M#\$F16uf%gSkapzy3%KUx!`
Question 2 Body Length: 91 characters
Question 2 Success!

Question 3 Title: nD-9i)K :y7J|Vhiim Qw5B`xp
Question 3 Title Length: 26 characters
Question 3 Body: hMe$4iw]Dx-2.p8q)91L<~(M|4(>R{S`rli-1:
Question 3 Body Length: 38 characters
Question 3 Success!

Question 4 Title: K+JX-)>2Y6D26"NzkEX6,e7FeLE8X{4?1h8%LZIbI3ni:*(b7bQ13W #]8XmVGTz`!`uP~)lTj 1r b5rp>~7
Question 4 Title Length: 85 characters
Question 4 Body: h;Q6\ELfzS9!@|m+ge9
Question 4 Body Length: 20 characters
Question 4 Success!

Question 5 Title: a?*"7E;M[n!m*6W206f].X-!M+[*|q;
Question 5 Title Length: 31 characters
Question 5 Body: b\Uac0)Wj_r<ghQ4;80@(*5x1d)!J]D6:{Fk6`6L'wldA]Ioz
Question 5 Body Length: 48 characters
Question 5 Success!

Results for Questions Test: | Passes: 4 | Fails: 1 | Tests Run: 5 |

Answer 1 Content: JaCifA7lNt[j$Kd&dsf]</i7A/o,6b?cr<06n>d,c4h;1C6mtc'Qt8MzX,Z'wmR)xJVxwWQ]ECU $_$2m17/D/V7C5@|zwLowCUF**0dT#ZfyF@Y$6Tyn)M_7#5rABGx ]Uhm&*S;T|c@;k9FKrJ:@@-[7.
Answer 1 Content Length: 185 characters
Answer 1 Success!

Answer 2 Content: dzHX>G1P?MW08kg^#?:[YKMa1* [Oxu@*y\2,8_jNtEXzauop1Go-[S#26Pu0hBZ<1dAHP. q3?(DQbTdnst,e,wj$ou'4:[Ia[v[F.okgUC*k4UP[X\,uSjy%>E~0u5eooR\OzeS@NL$Q]_o=1Zxp~cH?
Answer 2 Content Length: 237 characters
Answer 2 Success!

Answer 3 Content: TTS8mC(JPtjJvxbq1 }dS4DfM'N#f8|E{DS< 0B?NZ;p_2:CcxL,a1;ZB`ny?*J'jcnJ2o87L\ZN;6EDCr*Be).mYw_#L] `ujk.G^MC_1sgfV6E6Z_@@"r*[VJjh&Ub(S8-S>)+aLRb\5B4^..n^09B@[o6.
Answer 3 Content Length: 332 characters
Answer 3 Success!

Answer 4 Content: 6c+X7:[\5agZ//~Wke%Yc&a]w&.kD[q].41'1LY:t<|gT=c<rPDx{Xz:'R0Jy@s)Pn^ j&]"VQ"G+,Yi 3V/Xgddh
Answer 4 Content Length: 91 characters
Answer 4 Success!

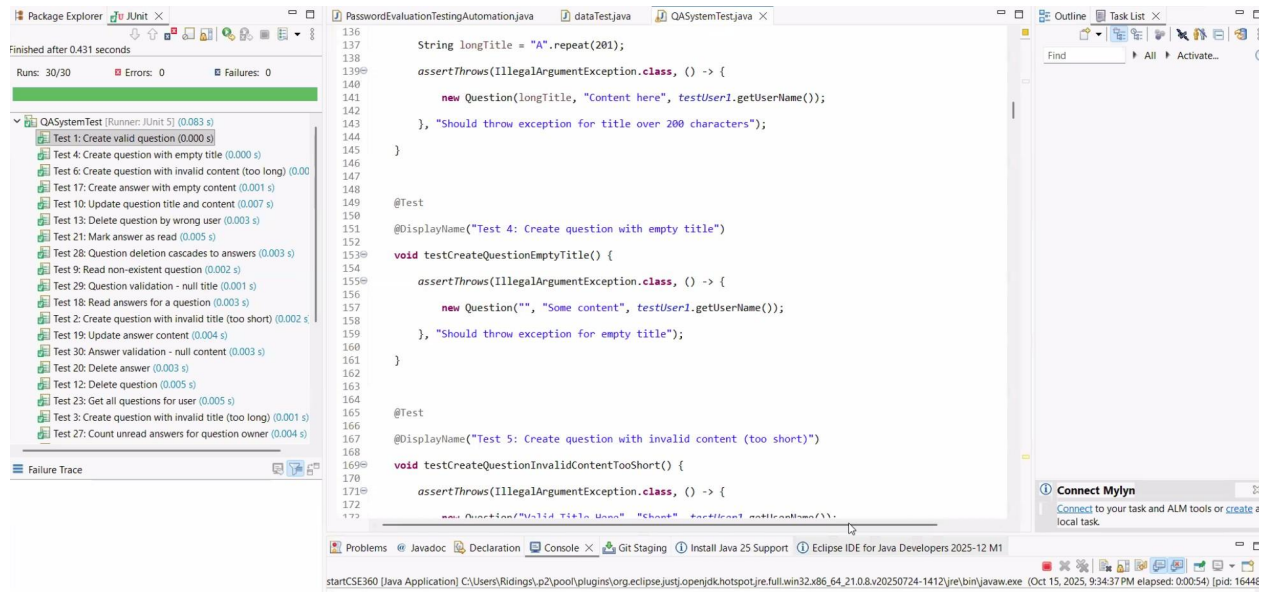
Answer 5 Content: j-[w]r*V0 QJ*4I+<z9brrr&(H){}@R72vZhyVU1{()}sFbZ@?jqA]qtW^cND u'hIQZu0~-aad9'Q1 8>AG+4wEKQw$PN6'q>RX\?ju3cYuKwDv*9N!n"1a"3UB/&q\k>wA5);:TxgI`q=H-cZOf^h%`Tz~
Answer 5 Content Length: 499 characters
Answer 5 Success!

Results for Questions Test: | Passes: 5 | Fails: 0 | Tests Run: 5 |

Testing complete

```

Team Project Phase 2 Report



1.4. URL and access to Source Code in GitHub

[GitHub Repository](#)

2. User Stories

Student user stories to be implemented:

1. As a student, I can ask questions and receive a list of potential answers so I can benefit from the suggestions of others.
2. As a student, I can see a list of questions others have asked that might be related to a question I am about to ask, so I do not waste my time waiting for answers already there, and others don't waste their time reading and answering my question.
3. As a student, I can see my list of unresolved questions and the number of unread potential answers received, so I don't have to scan unrelated messages.
4. As a student, I can see a list of all unresolved questions and a list of the current potential answers for each so I can evaluate the potential answers and, if appropriate, propose a new potential answer without duplicating the work of others.
5. As a student, I can specify that a specific potential answer resolves my issue so others can benefit from my experience. The system provides a separate access method so others can quickly see the answers that resolve issues without needing to traverse the earlier potential answers that do not resolve the issues.
6. As a student, I can read questions from a list of recently asked questions and provide a private message as feedback to the student who asked the question so that that student might be better able to improve the question.
7. As a student who has asked a question, I can see the number of unread private messages about the question, read those messages, and reply with a new private message so it will be possible to improve the question.
8. As a student, I can produce a new question based on a previous question to address the feedback I have received and any new insights gained, so I am more likely to get an answer that resolves my issue.
9. As a student, I can ask questions and ~~receive a curated list~~ of potential answers from sources I ~~trust~~ so I can quickly get back to work.
10. As a student, I can read ~~the reviews of~~ potential answers to questions and ~~add promising reviewers to my potential trusted reviewers list so I can establish and manage a list of trusted reviewers.~~
11. As a student, I can search to find answered questions, currently unanswered questions, ~~and reviewers~~ so I can more quickly get my questions answered ~~and create an effective set of reviewers to curate the results of my searches.~~ (Epic)

3. Implementation Plan and Progress Made

3.1. Implementation Plan

Team Member Name	Assigned User Stories	Completed Stories
Max Gushchin	2, 3	2, 3
Luke Sherry	1, 10	1, 10
Tanner Urness	3, 5, 9	3, 5, 9
Anthony Ridings	1, 4	1, 4
Preston Roser	6, 7, 8	6, 7, 8
Deadline		10/15

3.2. Progress-Made Descriptions and Screencasts

[Meeting Notes](#)

[GitHub Repository](#) (Screencasts included in GitHub as well)

3.2.1. Standup Meeting 1 (10/4)

[Standup 1](#)

Passcode: 9p*m*6yT

3.2.2. Standup Meeting 2 (10/12)

[Standup 2](#)

Passcode: 0.KsuF0r

3.2.3. Standup Meeting 3 (10/12)

[Standup 3](#)

Passcode: 0.KsuF0r

3.2.4. Standup Meeting 4 (10/13)

[Standup 4](#)

Passcode: \$B1.Jd!7

3.2.5. Standup Meeting 5 (10/14)

[Standup 5](#)

Passcode: e2W+7zSA

3.2.6. Standup Meeting 6 (10/15)

[Standup 6](#)

Passcode: i5k+AHx@

4. List of Tests

4.1. Automated Tests

Team Member Name	Test to implement
Max Gushchin	Question validation through automatic tests. Implemented a testing environment to run a specified amount of random tests.
Tanner Urness	Answer validation through automatic tests. Implemented a testing environment to run a specified amount of random tests.
Anthony Ridings	Use JUnit to test the question and answer CRUD methods.

4.2. Manual Tests

Team Member Name	Manual tests
Tanner Urness	Student QA Page tabs, styling, layout (for Q&A CRUD functionality)
Luke Sherry	Question creation, editing, and searching UI functionality (For question CRUD functionality)
Max Gushchin	Question reading, deleting, marking as resolved UI functionality (For question CRUD functionality)
Preston Roser	Q&A Threads UI functionality, private messaging, question threads
Anthony Ridings	Answer creation, editing, deleting, upvoting (For answer CRUD functionality)

5. GitHub Repository

5.1. The URL to access the GitHub Repository with a ReadMe file

[GitHub Repository](#)

5.2. Access to the Team's Solution for HW2

[GitHub Repository](#)

5.3. Access to Screencasts

Screencasts also in GitHub readme

5.3.1. Screenshot testing the Team's HW2

[Team's Initial HW2](#)

Passcode: 9p*m*6yT

[Team's final HW2/TP2 code](#)

5.3.2. Screencasts from each Standup Meeting

Included in GitHub readme

Links also included in 'Implementation Plan and Progress Made' section

5.3.3. Plan for the manual tests

Manual Test Screenshot Plan	
Team Member Name	Covered Tests
Luke Sherry	Ask question page (question creation, searching, and editing)
Preston Roser	Q&A Threads page (private messaging, question threads)
Max Gushchin	My questions page (editing questions, deleting questions, resolving questions)
Tanner Urness	Basic page GUI testing (Student QA Page tabs, styling, layout)
Anthony Ridings	All questions page (Providing answers, viewing answers to a question)

5.3.4. Screencasts showing the manual tests

[Manual Test Screenshot](#)

Passcode: e2W+7zSA

5.3.5. Plan for showing that each requirement has been satisfied

Requirements Screenshot Plan	
Team Member Name	Covered items
Max Gushchin	Automated tests, Question class
Luke Sherry	StudentQAPage class
Tanner Urness	Automated tests, Answer class
Anthony Ridings	Automated tests, DatabaseHelper class
Preston Roser	Q&A Thread class and related methods in database helper and welcome login page

5.3.6. Screencasts showing the satisfaction of the requirements

[Requirements Screenshot](#)

5.4. Console Evidence from the Automated Tests

```

C:\Console >
[terminated> dataTest (1) [Java Application] C:\Program Files\Java\jdk-24\bin\javaw.exe (Oct 14, 2025, 8:39:33 PM - 8:39:33 PM elapsed: 0:00:00.276) [pid: 73872)]

Testing Automation
Question 1 Title: DuABs&Q
Question 1 Title Length: 7 characters
Question 1 Body: "e8H;97\mjTODUQx=-v;W<D[bT&9443xM?rM&dA'I'.d&QwFngz7*4tIWTWlr7R8[ENHG0\="-Xh5cW6"@D"r$P(OPv?V3"RUN e#\\??^+lAj:)Mc[w/
Question 1 Body Length: 116 characters
Question 1 Fail! Question title cannot exceed 100 characters

Question 2 Title: 7E'f&JH)RuB-LS07meR3Y{W,ott0ZQ~|DSZ3/SD--Gtot%vG?85KrR<C{kc6r254-1QN0c0S"hi19'bp/A)>R'De=RU}3?I|
Question 2 Title Length: 96 characters
Question 2 Body: i/Qagblns|E&*^J(5' ktnLvg{1xrPPYU:_?,HsDj&P2m*wwbXen}JpUmlAg~K6|@?%/M#/$F16uF%gSkapzy3C%kUx|'
Question 2 Body Length: 20 characters
Question 2 Success!

Question 3 Title: nD-9i|K :y7j|VhiIm Qw5B'xp
Question 3 Title Length: 26 characters
Question 3 Body: hWe$4iw|Dx-2.p8q)9lL<~(M|4>>R{S'rli-1:
Question 3 Body Length: 38 characters
Question 3 Success!

Question 4 Title: K+|X->)2Y6D26"NzkEX6,e7Fe1E8X(4?1h8%LZ1b13ni:*(b7bQl3W #j8X0vGTz'l'uP~)lTj l'r b5rp>~7
Question 4 Title Length: 85 characters
Question 4 Body: h;QG\ELfzSA9!@\\m+6e9
Question 4 Body Length: 20 characters
Question 4 Success!

Question 5 Title: a?r"7E;N[nlm*6N206f].X-+M+[*]q;
Question 5 Title Length: 31 characters
Question 5 Body: b>UaC0)W)_r<ghQ4;&@(*5x1d|j|D6:[Fk6'6L'wldA]Ioz
Question 5 Body Length: 48 characters
Question 5 Success!

Results for Questions Test: | Passes: 4 | Fails: 1 | Tests Run: 5 |

Answer 1 Content: JaCifA7lNt[j&k4&d&f<|i7A/o,6b?<r<06n>d,c4h;1C6mtc'Qt8HzX,Z'wmR}xJVxwH0]ECU $ _S2m17/D/V7C5@| zwl0wCuf**0dT#ZFy@Y$6Tyn)M_7#5rABgx ]UHm&*S;T|c0; k9FKrJ:@~-{7.
Answer 1 Content Length: 285 characters
Answer 1 Success!

Answer 2 Content: dzHx>G1P?M08kg*#?:[YKMa1*" [Oxu@'y\2,8_jNtEXzaup|Go~[S#26Puj0bHz{<1dAHP. q3?(DQbDtnst,e,wj$ou'4:[Ia[V(F.0kgUC*k4UP[X,uSyj%>E-0uSeooR\OzeS@NL$Q]_o=1Zxp~ch?
Answer 2 Content Length: 237 characters
Answer 2 Success!

Answer 3 Content: TTS8Mc(JPtjJvxbq1 }dS4dFm'N#f8|E[DS< 0B?rNZ;p_2:Ccxl,a1;Zb'nv?*') jcnJ2o87L|ZN;6EDCr*Be}.mYw_#L| `ujk.G*MC_1sgfV6E6Z_6@ "r*[VJ%h&Ub(S8-S>)+aLRb\5B4^..n^09B@|o6.
Answer 3 Content Length: 332 characters
Answer 3 Success!

Answer 4 Content: 6c+X7:[\5agZ|/~Wce$Yc&*ajw&.kD[q.41'lly:t<|gT=<c<rPDx{)Xz:'R0Jy@s)Pn^ j&|~Q"G+;Yi 3V/Xgddh
Answer 4 Content Length: 91 characters
Answer 4 Success!

Answer 5 Content: j-|w~r*Y0 Q*4I+<Zn9brr&(H)}@R72vZhyVU1{({sFbZ?jgA|qtW^cN} u'h|QzUo~-aad91 8>AG+4wEKQw$PN6'>qRX\?ju3cYukwvD9N1r'1a"3UB/&|q/k>wA5);:TxgI"q=H-cZOf^h%Tz~'
Answer 5 Content Length: 499 characters
Answer 5 Success!

Results for Questions Test: | Passes: 5 | Fails: 0 | Tests Run: 5 |

Testing complete

```

The screenshot displays an IDE with three main panels. The left panel shows the 'Package Explorer' with a project named 'QASystemTest'. Under the 'src' folder, there is a 'QASystemTest' class. The 'JUnit 5' tab is active, showing a list of 30 test cases. The 'Test 1: Create valid question (0.000 s)' is selected. The middle panel shows the 'Console' view, which displays the execution output of the test suite. The output indicates that all 30 tests passed successfully. The right panel shows the 'Source' view, displaying the source code of the 'QASystemTest' class. The code is a Java class with a 'main' method and a 'test' method. The 'test' method is annotated with '@Test' and '@DisplayName("Test 1: Create valid question")'. It calls 'testCreateValidQuestion()' and asserts that the question is created successfully. The code is written in Java 17.

Package Explorer

dataTestJava

QASystemTest.java

Find

Outline

Task List

JUnit 5

QASystemTest (Runner: JUnit 5) (0.003 s)

Test 1: Create valid question (0.000 s)

Test 4: Create question with empty title (0.000 s)

Test 6: Create question with invalid content (too long) (0.000 s)

Test 17: Create answer with empty content (0.001 s)

Test 10: Update question title and content (0.007 s)

Test 13: Delete question by wrong user (0.003 s)

Test 21: Mark answer as read (0.005 s)

Test 28: Question deletion cascades to answers (0.003 s)

Test 9: Read non-existent question (0.002 s)

Test 29: Question validation - null title (0.001 s)

Test 18: Read answers for a question (0.003 s)

Test 2: Create question with invalid title (too short) (0.002 s)

Test 19: Update answer content (0.004 s)

Test 30: Answer validation - null content (0.003 s)

Test 20: Delete answer (0.003 s)

Test 12: Delete question (0.005 s)

Test 23: Get all questions for user (0.005 s)

Test 3: Create question with invalid title (too long) (0.001 s)

Test 27: Count unread answers for question owner (0.004 s)

Failure Trace

String longTitle = "A".repeat(201);

assertThrows(IllegalArgumentException.class, () -> {

new Question(longTitle, "Content here", testUser1.getUserName());

}, "Should throw exception for title over 200 characters");

@Test

@DisplayName("Test 4: Create question with empty title")

void testCreateQuestionEmptyTitle() {

assertThrows(IllegalArgumentException.class, () -> {

new Question("", "Some content", testUser1.getUserName());

}, "Should throw exception for empty title");

@Test

@DisplayName("Test 5: Create question with invalid content (too short)")

void testCreateQuestionInvalidContentTooShort() {

assertThrows(IllegalArgumentException.class, () -> {

new Question("A".repeat(201), "Short", testUser1.getUserName());

}, "Should throw exception for content too short");

Connect Mylyn

Connect to your task and ALM tools or create a local task.

Problems

Javadoc

Declaration

Console

Git Staging

Install Java 25 Support

Eclipse IDE for Java Developers 2025-12-M1

startCES360 [Java Application] C:\Users\Ridings\p2\pool\plugins\org.eclipse.jdt.launcher\jre_full\win32_x86_64_21.0.8\20250724-1412\jre\bin\java.exe (Oct 15, 2025, 9:34:37 PM elapsed: 0:00:54) [pid: 16480]

6. Appendix A: Credit Sheet

This appendix lists the members of the team and includes a description of the contribution that team member has made to this submission. Each team member must provide text for their contribution at a team meeting just prior to the submission of this deliverable and the entire team must agree. If a team member fails to provide this information and/or does not participate in the agreement process to fill out this table, that member will receive no credit for the submission of this deliverable.

Team Member Name	Contributions
Luke Sherry	Initially set up and formatted this document and greatly contributed to it. Hosted and recorded all required team meetings and screencasts Wrote the GitHub README file and the team meeting notes. Contributed to the student QA page code. Created the UML Diagrams. Helped with general code work like bug fixing and cleaning up code.
Tanner Urness	Contributed to bug fixes Implemented unread answers to questions Added graphics and updated GUI to enhance readability and feel Added more user roles and user weights for future control Designed Automatic tests Contributed to the document
Max Gushchin	Contributed to Answer and Question classes code Helped with design documents Updated various methods for classes to increase functionality Implemented Automatic tests Provided clarity in documentation of the project Contributed to the creating of this document
Anthony Ridings	Implemented Q&A GUI and code Updated Database code to include Q&A Added many util functions to Database constructor class Added ability to search for messages Provided foundational HW2 code to start from Contributed to this document Added CRUD unit testing framework to the repo, will add to CI/CD pipeline later
Preston Roser	Implemented Threads code and GUI Contributed to the design documents Implemented the private messaging system Contributed to this document Came up with idea and design of the Q&A thread system Served as the scrum master during meetings and led regular meetings.

7. Appendix B: Team Norms

(NO CHANGES)

Issue 1: Team members may fall behind or get stuck on assigned work

- Give progress reports on assigned work
- Ask for help if stuck on assigned work / Offer help

Issue 2: Team members may feel the team is moving in the wrong direction

- Make any concerns known
- Provide constructive feedback if necessary

Issue 3: Meetings could become chaotic

- Don't talk over others in meetings, respect others time
- Use raise hand feature in Zoom if you wish to speak

Issue 4: Team members may miss meetings

- Let team know in advance if you'll be late / miss meeting
- Read meeting notes / watch recording if you miss meeting

Issue 5: Communication

- Minimum 2 scrum meetings per week over zoom
- Regularly check discord and provide reactions so others know their comments were seen
- COMMUNICATE

Signatures:

Preston Roser

Date: 09/17/2025

Luke Sherry

Date: 09/17/2025

Max Gushchin

Date: 09/17/2025

Anthony Ridings

Date: 09/17/2025

Tanner Urness

Date: 09/17/2025