Use Cases

- 1. Post question.
- 2. Answer question.
- 3. Upvote an answer.
- 4. Downvote an answer.
- 5. Update profile page.
- 6. Upload document.
- 7. Add student to NKU-Net.
- 8. Add faculty member to NKU-Net.
- 9. Add class to NKU-Net.
- 10. Edit question.
- 11. Delete question.
- 12. Edit answer.
- 13. Delete answer.

Use Case Diagram

System Boundary

Communication

Post Question

Answer
Posted
Question

Add Student to
NKU-Net

Registrar

Edit Answer

Delete Answer

Use Case (UC1): Post Question.

Scope: Post Question System

Level: user-goal

Primary Actor: Student, Faculty Member

Stakeholders and Interests:

- Student: Wants to be able to post question on NKU-Net.
- <u>Faculty Member</u>: Wants to be able to post question on NKU-Net.
- <u>Administrator</u>: Wants to be able to post question on NKU-Net.
- School: Wants students to be added as immediately as possible.

Preconditions: Student or faculty member is logged into system upon being identified and authenticated.

Success guarantee (or Postconditions): Student or faculty member posts question onto NKU-Net.

Main Success Scenario (or Basic Flow):

- 1. Student/faculty member clicks 'post question' button.
- 2. Student/faculty member clicks textbox in newly displayed window.
- 3. Student/faculty member types out question of their choice.
- 4. Student/faculty member clicks 'submit' button to post question on NKU-Net.

Student/faculty member repeats steps 1-4 until done posting questions.

Extensions (or Alternative Flows):

- *a. At any time, System fails:
 - 1. To ensure security of system, student/faculty member is logged off and connection is shut off.

Special Requirements:

- System posts question within 30 seconds, 90% of the time.
- Compatible with all major Internet browsers.

Technology and Data Variations List:

*a. Student/faculty member can use any major web browser (Firefox, Google Chrome, Safari, Microsoft Edge, etc.).

Frequency of Occurrence: Could be nearly continuous.

Open Issues:

- Should there be a character or word limit on questions?
- Should there be a method in place to censor question content (such as profanity)?

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Use Case (UC2): Answer Question.

Scope: Submit Answer System

Level: user-goal

Primary Actor: Student, Faculty Member

Stakeholders and Interests:

- <u>Student</u>: Wants to be able to post answer to question on NKU-Net.
- <u>Faculty Member</u>: Wants to be able to post answer to question on NKU-Net.
- <u>Administrator</u>: Wants to able to post answer to question on NKU-Net.
- School: Wants students to be added as immediately as possible.

Preconditions: Student or faculty member is logged into system upon being identified and authenticated.

Success guarantee (or Postconditions): Student or faculty member posts answer to question on NKU-Net.

Main Success Scenario (or Basic Flow):

- 1. Student/faculty member clicks 'answer question' button to post answer.
- 2. Student/faculty member clicks textbox in newly displayed window.
- 3. Student/faculty member types out their answer to question.
- 4. Student/faculty member clicks 'submit' button to post answer on NKU-Net.

Student/faculty member repeats steps 1-4 until done posting questions.

Extensions (or Alternative Flows):

*a. At any time, System fails:

1. To ensure security of system, student/faculty member is logged off and connection is shut off.

Special Requirements:

- System posts answer to question within 30 seconds, 90% of the time.
- Compatible with all major Internet browsers.

Technology and Data Variations List:

*a. Student/faculty member can use any major web browser (Firefox, Google Chrome, Safari, Microsoft Edge, etc.).

Frequency of Occurrence: Could be nearly continuous.

Open Issues:

- Should there be a character or word limit on answers to questions?
- Should there be a method in place to censor answers to questions content (such as profanity)?

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Use Case (UC3): Edit answer.

Scope: Edit Answer System

Level: user-goal

Primary Actor: Administrator **Stakeholders and Interests**:

- Administrator: Wants to be able to edit answer on NKU-Net.
- <u>School</u>: Wants students to be added as immediately as possible.

Preconditions: Administrator is logged into system upon being identified and authenticated with admin permissions.

Success guarantee (or Postconditions): Administrator's updated edit of the answer is uploaded to NKU-Net.

Main Success Scenario (or Basic Flow):

- 1. Administrator selects a class forum.
- 2. Administrator selects a question forum.
- 3. Administrator selects an answer that he/she wants to edit.
- 4. Administrator edits the answer to his/her liking.
- 5. Administrator saves the edit.

Extensions (or Alternative Flows):

*a. At any time, System fails:

1. To ensure security of system, Administrator is logged off and connection is shut off.

Special Requirements:

- System posts edited answer within 30 seconds, 90% of the time.
- Compatible with all major Internet browsers.

Technology and Data Variations List:

*a. Administrator can use any major web browser (Firefox, Google Chrome, Safari, Microsoft Edge, etc.).

Frequency of Occurrence: Could be nearly continuous.

Open Issues:

— Should there be a limit on how much can be edited?

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Use Case (UC4): Delete answer.

Scope: Delete Answer System

Level: user-goal

Primary Actor: Administrator **Stakeholders and Interests**:

- Administrator: Wants to be able to delete answer on NKU-Net.
- <u>School</u>: Wants students to be added as immediately as possible.

Preconditions: Administrator is logged into system upon being identified and authenticated with admin permissions.

Success guarantee (or Postconditions): Administrator's chosen answer is deleted from NKU-Net.

Main Success Scenario (or Basic Flow):

- 1. Administrator selects a class forum.
- 2. Administrator selects a question forum.
- 3. Administrator selects an answer that he/she wants to edit
- 4. Administrator chooses to delete the answer.

Extensions (or Alternative Flows):

*a. At any time, System fails:

1. To ensure security of system, Administrator is logged off and connection is shut off.

Special Requirements:

- System deletes answer within 30 seconds, 90% of the time.
- Compatible with all major Internet browsers.

Technology and Data Variations List:

*a. Administrator can use any major web browser (Firefox, Google Chrome, Safari, Microsoft Edge, etc.).

Frequency of Occurrence: Could be nearly continuous.

Open Issues:

- Should there be a limit on how much can be deleted?
- Should we have a secondary check to ensure administrator is not abusing the delete function?

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Use Case (UC5): Add Student.

Scope: NKU-Net Registration System

Level: user-goal

Primary Actor: Registrar **Stakeholders and Interests**:

- Student: Wants immediate access to their course on NKU-Net.
- <u>Faculty</u>: Wants students to be in course before first day of classes.
- <u>School</u>: Wants students to be added as immediately as possible.
- Registrar: Wants to add large number of students quickly and easily.
- System Administrator: Wants registrar to add students easily so they don't have to.

Preconditions: Registrar worker is identified and authenticated.

Success guarantee (or Postconditions): Student is registered and saved under student identifier. Registrar worker is notified of registration success or failure.

Main Success Scenario (or Basic Flow):

- 1. Registrar worker manually enters new student information and submits to system.
- 2. System checks to see if student is already registered.
- 3. System logs student registration and notifies registrar worker of successful registration.
- 4. Registrar worker voluntarily disconnects from system.

Registrar worker repeats steps 1-3 until finished registering students.

Extensions (or Alternative Flows):

- *a. At any time, System fails:
 - 1. To ensure security of system, registrar worker is logged off and connection is shut off.
 - 2. Error message is displayed.
- 1a. Registrar worker manually adds a student that already exists
 - 1. System informs registrar worker that student already exists.
 - 2. System prompts registrar worker if they want to update student information.
 - 3. If Registrar worker says yes then student information is updated and system notifies worker.
- 1b. Registrar worker leaves required fields blank
 - 1. System throws error.
 - 2. System informs registrar worker of fields left blank.
- 1c. Registrar worker batch uploads student information through .CSV file
 - 1. System checks to see if file is valid .CSV file.
 - 2. System checks each student to see if student is already registered.
- 1d. Registrar worker uploads invalid file
 - 1. System throws error.
 - 2. System prompts worker to choose another file.
- 3a. If already registred system automatically updates student and notifies registrar

worker of successful update.

- 3b. If new system logs student registration and notifies registrar worker of successful registration.
- 4a. Registrar worker leaves system on unattended.
 - 1. System disconnects registrar worker after 10 minutes of inactivity.

Special Requirements:

- Useable with various browser and computer types.
- Batch student Registration through .CSV format is available.
- Language internalization on the text displayed.
- Same entry method is used to also update student information.

Technology and Data Variations List:

- *a. Registrar worker could use any web browser to connect to system (IE, Firefox, Chrome, Safari, etc).
- *b. Registrar worker could upload data in .CSV format or do manual entry.

Frequency of Occurrence: Could be nearly continuous—peak up to three weeks before first day of classes through second week of classes.

Open Issues:

- What are laws on accessibility for the system?
- Should batch uploads prompt for student update or should it update automatically?

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Use Case (UC6): Add Faculty Member.

Scope: NKU-Net Registration System

Level: user-goal

Primary Actor: Registrar **Stakeholders and Interests**:

- Student: Wants access to faculty member during duration of course.
- Faculty: Wants to be able to access course/students before first day of class.
- <u>School</u>: Wants faculty and students to be able to communicate with each other.
- Registrar: Wants to add large number of faculty quickly and easily.
- <u>System Administrator</u>: Wants registrar to add faculty easily so they don't have to.

Preconditions: Registrar worker is identified and authenticated.

Success guarantee (or Postconditions): Faculty member is registered and saved under faculty identifier. Registrar worker is notified of registration success or failure.

Main Success Scenario (or Basic Flow):

- 1. Registrar worker manually enters new faculty information and submits to system.
- 2. System checks to see if faculty is already registered.
- 3. System logs faculty registration and notifies registrar worker of successful registration.
- 4. Registrar worker voluntarily disconnects from system.

Registrar worker repeats steps 1-3 until finished registering faculty members.

Extensions (or Alternative Flows):

- *a. At any time, System fails:
 - 1. To ensure security of system, registrar worker is logged off and connection is shut off.
 - 2. Error message is displayed.
- 1a. Registrar worker manually adds a faculty member that already exists
 - 1. System informs registrar worker that faculty member already exists.
 - 2. System prompts registrar worker if they want to update faculty information.
 - 3. If Registrar worker says yes then faculty information is updated and system notifies worker.
- 1b. Registrar worker leaves required fields blank
 - 1. System throws error.
 - 2. System informs registrar worker of fields left blank.
- 1c. Registrar worker batch uploads faculty information through .CSV file
 - 1. System checks to see if file is valid .CSV file.
 - 2. System checks each faculty member to see if member is already registered.
- 1d. Registrar worker uploads invalid file
 - 1. System throws error.
 - 2. System prompts worker to choose another file.
- 3a. If already registred system automatically updates faculty member and notifies registrar worker of successful update.
- 3b. If new, system logs faculty registration and notifies registrar worker of successful registration.
- 4a. Registrar worker leaves system on unattended.
 - 1. System disconnects registrar worker after 10 minutes of inactivity.

Special Requirements:

- Useable with various browser and computer types.
- Batch faculty Registration through .CSV format is available.
- Language internalization on the text displayed.

— Same entry method is used to also update faculty information.

Technology and Data Variations List:

- *a. Registrar worker could use any web browser to connect to system (IE, Firefox, Chrome, Safari, etc).
- *b. Registrar worker could upload data in .CSV format or do manual entry.

Frequency of Occurrence: Could be nearly continuous—peak up to three weeks before first day of classes through second week of classes.

Open Issues:

- What are laws on accessibility for the system?
- Should batch uploads prompt for faculty update or should it update automatically?