Revisions

| Version | Primary Author(s) | Description of Version | Date Completed |
| --- | --- | --- | --- |
| 1.0 | Hesham | Initial file created. Draft techniques | 22/4/2025 |
| 1.1 | Nickleirsch | Explained each technique. Added example questions | 22/4/2025 |
| 1.2 | Hesham | Added proper elicitation description format for Interviews | 23/4/2025 |
| 1.3 | Hesham | Added Plan | 05/05/2025 |
| 1.4 | Hesham | Potential Requirements | 06/05/2025 |
| 1.5 | Hesham | Brainstorming format achieved | 06/05/2025 |
| 1.6 | Nickleirsch | Reformatting brainstorming plan, Added preparation | 06/05/2024 |

**Potential Requirements:**

Technique: **Brainstorming**

A close-up of a text

AI-generated content may be incorrect.

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| --- | --- |
| Technique | Brainstorming |
| Subject | The specific requirements engineering context |
| Stakeholder(s) | Students |
| Mode | Virtual (Online) |
| Moderator | Hesham Nader |
| Minute-taker | Nickleirsch |

Goal:

Brainstorming Rules:

Topics to Explore During Brainstorming:

1. Current challenges
2. Preferred communication channels
3. Expectations of features
4. Could add more like customisation?

To help with brainstorming:

1. Voting tools to know the priority of each feature
2. Brief profile of each student participating

Questions: Answer

1. Where should I write the ideas?: Kindly append any brainstorming ideas below in the Brainstorm section.

Initial Brainstorming:

1. Idea
2. Idea
3. Idea

Categorized Brainstorming:

* Usable:
  + Idea
* Not-decided:
  + Idea
* Unusable:
  + Idea

Techniques:

2 Main categories: potential requirements and requirements after elicitation execution.

For potential:

Brainstorming + Mind-mapping

Execution:

Interview, Observation, Questionnaire

1. Interviews

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| Purpose | To gain detailed insight into user expectations, current challenges, and workflows. |
| Participants | Lecturers, administrators, and some senior students. |
| Approach | One-on-one or small group discussions. Questions will be open-ended to allow users to express needs freely. |
| Example Questions | "What tasks do you frequently perform using the campus system?"  "What problems do you face when communicating with students/parents?" |

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| Preparation | * Create a structured interview schedule and timeline with key topics to be discussed. * Utilize appropriate meeting spaces for face-to-face interviews. * Prepare recording equipment and note-taking materials * Identify role-specific question sets according to stakeholder group. |
| Execution | * Interview Structure:  1. Introduction: Explain the project purpose and take note of interviewee’s reactions 2. Main Discussion: Begin with general questions, allow for natural conversation flow. 3. Closing: Summary of key points, ask for additional input.  * Document responses in real-time * Record sessions |
| Follow-Up | * Transcribe interview recordings * Review and organize findings * Identify key patterns and themes * Document initial findings |
| Critical Success Factors | * Clear communication of project goals and view * Well-prepared interview questions * Proper documentation * Participant engagement * Structured analysis approach |
| Benefits for Requirements Engineering | * Detailed understanding of user needs * First-hand exposure to early challenges * Identification of unstated requirements |
| Effort Estimation | Hours and number of interviews |

2. Observation

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| Purpose | To understand how users interact with the current systems and communication methods. |
| Participants | Mainly students and administrative staff. |
| Approach | Observe users during real activities such as checking grades, handling billing issues, or sending updates. |
| Focus | Identify pain points, workarounds, and areas for improvement that users might not mention directly. |

3. Questionnaire

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| --- | --- |
| Purpose | To reach a wider group of users and quantify their preferences. |
| Participants | Students and parents. |
| Approach | Short online survey with both Likert-scale and Kano-style questions. |
| Example Kano-oriented Questions for a Feature (SMS alerts for low attendance) | Functional: "How would you feel if the system sends SMS alerts for low attendance?"  Dysfunctional: "How would you feel if the system does NOT send SMS alerts for low attendance?"  Response options: I like it / I expect it / I am neutral / I can tolerate it / I dislike it |