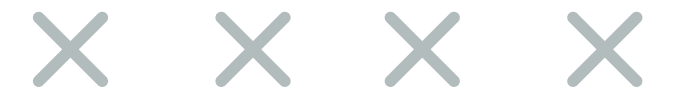


Team System322

IUTian Threads

Lab 5 - Information Gathering: Interactive Methods

CSE 4408: System Analysis & Design Lab
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THE TEAM



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Stakeholder Interviews

Key Stakeholders

GENERAL STUDENTS & ALUMNI

- Understand the daily communication challenges
- Platform desirability and preference

FACULTY MEMBERS

- Understand student faculty interaction
- Participation as category experts
- Platform opinion

UNIVERSITY ADMINS & IT

- Feasibility information
- Concerns and oversight
- Responsiveness to student-reported issues

Interview Guide: Students and Alumni

(Funnel Flow)

Open-Ended

- How do you usually raise concerns or share feedback at IUT?
- Have you faced any difficulties using Facebook or other platforms for campus discussions?

Closed-Ended

- Would you be willing to use an official university forum if it were easy to access? (Y/N)
- Rate your satisfaction with current communication channels (1–5).

Probing

- Why do you think some students hesitate to speak up online?
- What kinds of topics do you think need more visibility but get buried online?

Interview Guide: Faculty Members

(Pyramid Flow)

Close-Ended

- Would you be comfortable moderating or advising discussions if needed? (Y/N)
- Do you think anonymous participation can improve openness in student discussions? (Y/N)

Open-Ended

- How do you currently receive feedback or concerns from students outside class?
- What role do you think the faculty should play in a student forum?

Probing

- Why do you think some students hesitate to speak up online?
- What kinds of topics do you think need more visibility but get buried online?

Interview Guide: Admins and IT

(Diamond Flow)

Close-Ended

- Is there an existing server resource that can be used for deployment?
- Would official student feedback via this system be reviewed regularly? (Y/N)

Open-Ended

- What is your view on the current communication flow between students and OSW?
- How do you assess the feasibility of hosting an internal forum platform?

Probing

- What kind of discussions should be encouraged on the forum?
- Would you prefer to be notified of activity in your category of expertise?



Interview Outcomes: Students and Alumni



Key Points

- Students feel current communication channels (e.g., Facebook groups, informal chats) are cluttered and unreliable.
- Students want faster responses and easier ways to track their queries.

Wants and Needs

- A dedicated, organized forum for academic and administrative queries
- Notification system for replies and updates.
- Tagging, categorization, and search features for efficient information retrieval.
- Profile customization to showcase interests, expertise, and availability for networking.

Interview Outcomes: Faculty Members

Key Points

- Faculty expressed openness to being involved if moderation responsibilities are clearly defined.
- They are concerned about misinformation or disrespectful behavior on the platform.
- Some faculty currently use informal channels (whatsapp, Facebook, Messenger) to respond to student feedback

Wants and Needs

- Notification system for flagged posts or category-specific activity
- Clear content guidelines and escalation paths for handling sensitive topics

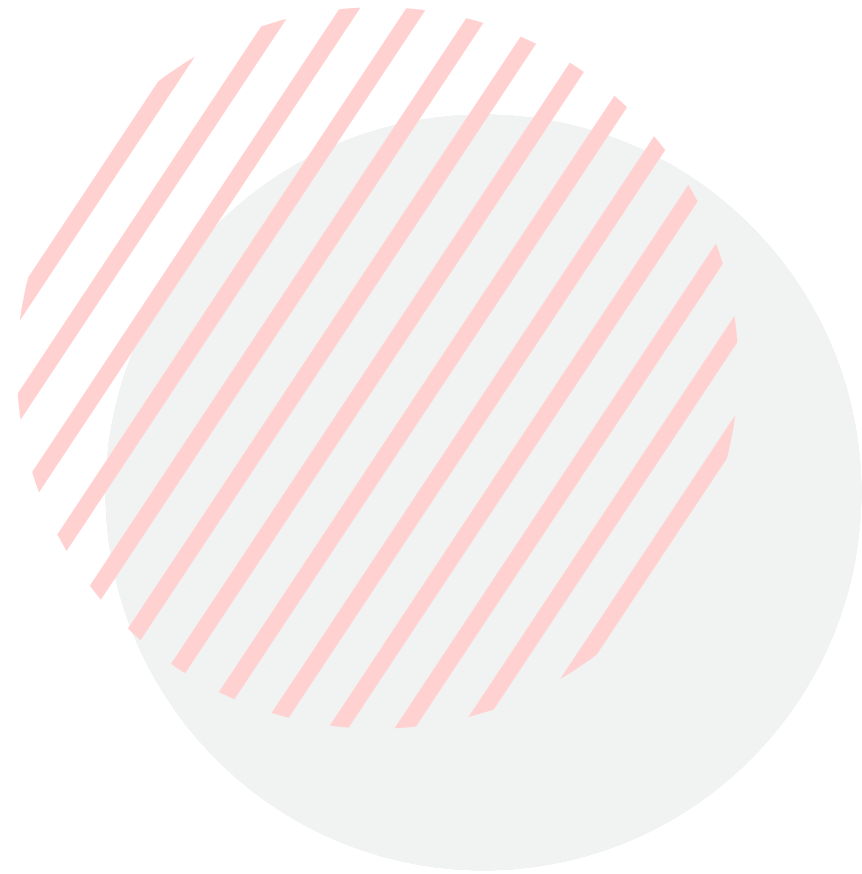
Interview Outcomes: Admins and IT

Key Points

- Admins and IT staff prioritize strict compliance with university policies and data security.
- They require a reliable, scalable, and easy-to-maintain system.
- Admins value analytics and reporting for monitoring engagement, while IT focuses on technical integration and support.

Wants and Needs

- Require robust access control and user management.
- Need audit logs, reporting tools, and integration with university authentication.
- Want scalable infrastructure, automated backups, and dedicated technical support.



User Survey & Feature Requirements



User Questionnaire

Objective:

- To gather broad, quantifiable insights on student and stakeholder communication habits
- To identify satisfaction levels with current communication tools
- Determine feature preferences for a centralized platform
- Assess willingness to adopt a university-hosted discussion system

Target: Students & Alumni.

Distribution: Publicly posted Google-form link on Facebook and other platforms.

Timing: 5-day window, 2 reminders (Day 2 and Day 4)

User Questionnaire

Sample Questions

- **How often do you share concerns or feedback with IUT authorities (e.g., OSW, admin)?**
☐ Frequently ☐ Occasionally ☐ Rarely ☐ Never
- **Which platform do you currently use most to share or read student concerns? (Select all that apply)**
☐ Facebook Group ☐ Messenger/WhatsApp ☐ Email ☐ In-person ☐ Other: _____
- **How satisfied are you with the current methods of communication with IUT administration? (1 = very dissatisfied, 5 = very satisfied)**
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Survey Observation

Pain Points

1. Student concerns often are buried in Facebook group noise
2. Lack of structured communication
3. Delayed moderator response
4. Overreliance on informal social media channels
5. Existing communication methods (email, in-person, informal messaging) are inefficient or inconsistent

Expectations

1. Anonymous posting
2. Moderated discussions
3. Threaded discussions
4. Secure login and identity protection
5. Admin involvement when appropriate

Feature List

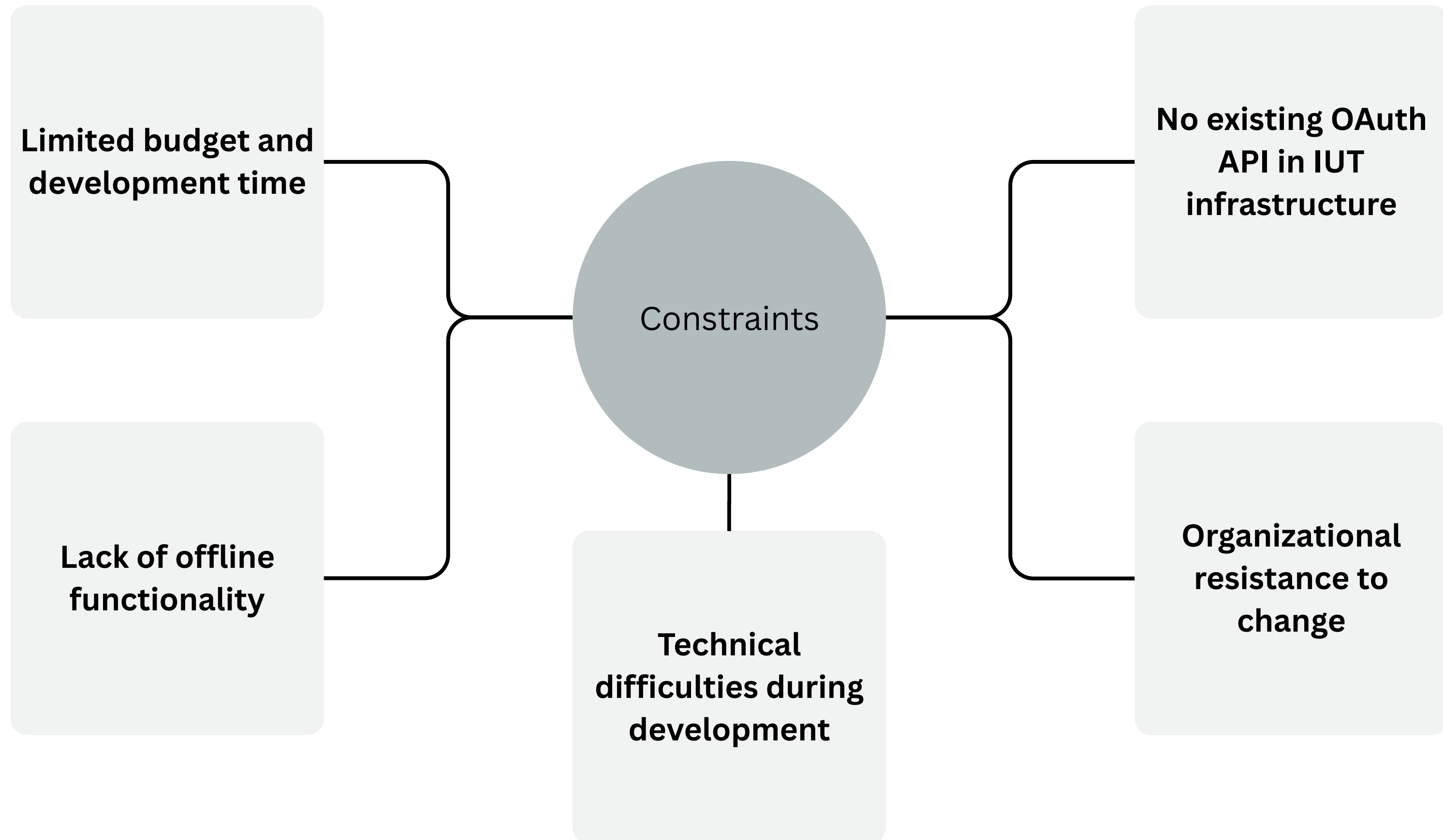
Functional Requirements

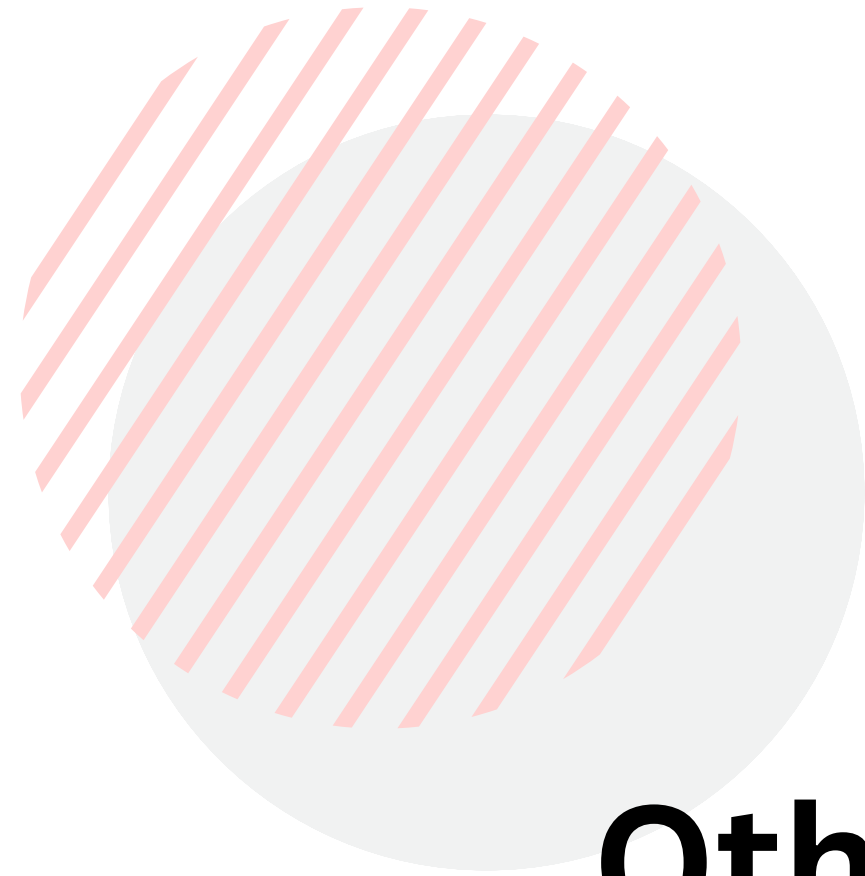
1. User Authentication
2. Thread Management
3. Moderation tools
4. OAuth authentication with IUT-server
5. VPS hosting environment
6. APIs
7. Multiplatform support

User Requirements

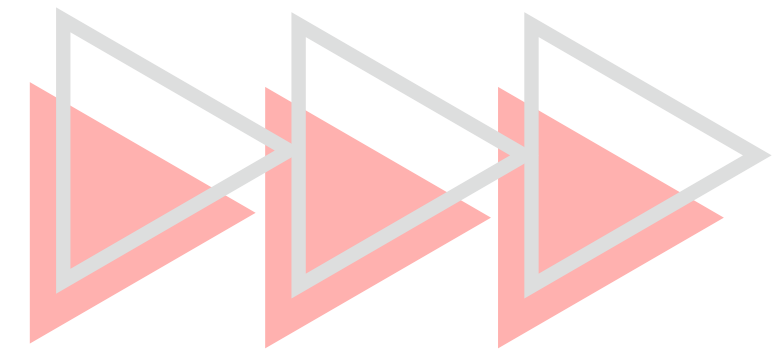
1. Topic based sub-forums
2. Replies & update notifications
3. Post and reply upvotes and downvotes
4. Anonymous posting
5. Customizable profiles

Feature List





Other Interactive Methods



Other Interactive Methods

Storytelling:

- **Example:** A student wanted to report about irregularities in the IUT bus service on Facebook group but it was quickly buried under other irrelevant posts.
- **Benefits:**
 - Conveys the purpose of the platform
 - Relates emotionally, increasing user buy-in and trust.
 - Encourage higher user engagement by reflecting real experience

Other Interactive Methods

Joint Application Development (JAD)

Potential Benefits:

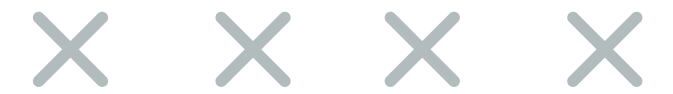
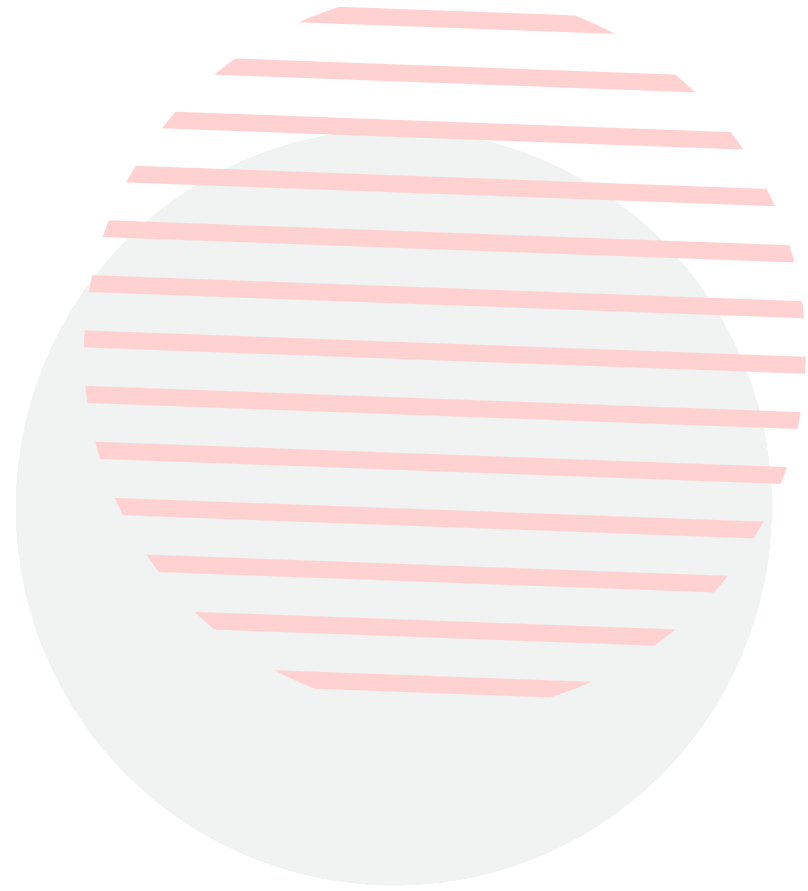
- Aligns students, alumni, faculty, and admins on platform goals
- Helps sketch key features early on
- Promotes quick feedback and reduces misunderstandings

Challenges:

- OSW and faculty scheduling is often tight and inconsistent
- Stakeholders prefer short or async input
- Not all students want to participate in design-level discussions

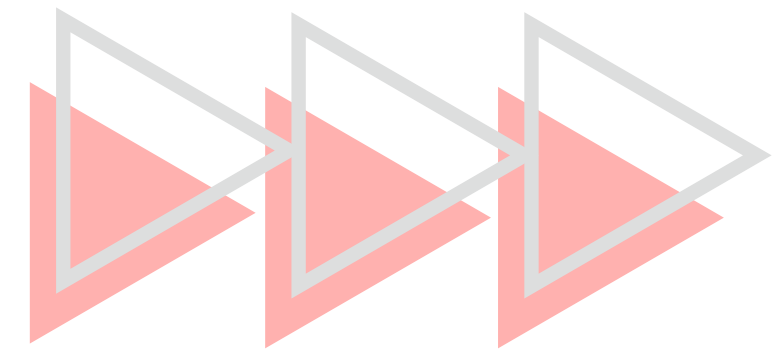
Conclusion: A full-scale JAD session is not feasible within our timeframe

Suggestion: We'll use mini-sessions and 1:1 follow-ups to gather input efficiently



Thank you!

We are open for Q&A



Interview Outcomes and Stakeholder Needs

Group A: Students & Alumni

Interview Outcomes:

- Many students feel their concerns are lost or ignored when posted in Facebook groups.
- Some expressed fear of backlash for raising sensitive issues publicly.
- Alumni mentioned difficulty in staying engaged with campus matters post-graduation.
- Students prefer platforms that are distraction-free and officially recognized by IUT.

Wants & Needs:

- Ability to post anonymously and safely
 - Categories or tags to separate academic, administrative, and welfare-related issues
 - Voting system to prioritize high-impact topics
 - Mobile-friendly UI and minimal login friction (e.g., OAuth-based access)
 - Inclusion of alumni-specific categories or guest access
-

Group B: Faculty Members

Interview Outcomes:

- Faculty expressed openness to being involved if moderation responsibilities are clearly defined.
- They are concerned about misinformation or disrespectful behavior on the platform.
- Some faculty currently use informal channels (Messenger, email) to respond to student feedback.

Wants & Needs:

- Role-based access (moderator privileges with review capability)
 - Notification system for flagged posts or category-specific activity
 - Clear content guidelines and escalation paths for handling sensitive topics
 - Dashboard or summary view to quickly assess trending issues
 - Option to opt-in to moderation roles by department/topic
-

Group C: University Administration & IT Team

Interview Outcomes:

- Admins are concerned about how to manage and filter anonymous reports.
- They asked whether moderation would be manual or assisted (e.g., AI/mod bots).
- IT confirmed that server infrastructure exists and can support internal hosting.
- Admins agreed that structured issue tracking could reduce chaos and improve transparency.

Wants & Needs:

- Backend access for OSW to review and respond to submissions
 - Audit logs, post tracking, and content control tools
 - Scheduled reports or notifications to monitor activity
 - Assurance that platform will follow university data and moderation policies
 - Confirmation that feedback gathered will be acted upon, not just stored
-

Let me know if you'd like a slide/table version, or help turning this into insights for your Lab 5 summary!

elaborate and write for all our stakeholders students, faculty and admins

Certainly! Here's an **elaborate and structured set of interview outcomes** for your three main stakeholder groups: **students, faculty, and admins**. This format is concise, clear, and ready for your presentation slides.

Interview Outcomes: Students

Key Points

- Students feel current communication channels (e.g., Facebook groups, informal chats) are cluttered and unreliable.
- Many hesitate to post sensitive questions due to fear of judgment or lack of anonymity.
- Students want faster responses and easier ways to track their queries.

Wants & Needs

- A dedicated, organized forum for academic and administrative queries.
- Option for anonymous posting to encourage open discussion.
- Tagging and search features for quick information retrieval.
- Notification system for replies and updates.
- Peer-to-peer support and mentorship matching features.

Interview Outcomes: Faculty

Key Points

- Faculty members are concerned about misinformation spreading on informal platforms.
- They want a manageable way to monitor and respond to student queries.
- Faculty see value in structured discussion threads for recurring topics.

Wants & Needs

- Moderation tools to flag, edit, or remove inappropriate content.
- Ability to pin important announcements or FAQs.
- Dashboard to track unresolved or high-priority threads.
- Clear categorization of questions (academic, administrative, etc.).
- Option to respond publicly or privately to student posts.

Interview Outcomes: Admins

Key Points

- Admins need oversight to ensure the platform aligns with university policies and data privacy standards.
- They are concerned about technical support and system reliability.
- Admins want analytics to monitor platform usage and engagement.

Wants & Needs

- Access control for different user roles (student, faculty, admin).
- Audit logs and reporting features for accountability.
- Integration with existing university authentication systems.
- Tools for bulk communication (e.g., announcements, alerts).
- Support for technical troubleshooting and user management.

Tip:

Present each group on a separate slide with bullet points for clarity. You can also add a short "Summary" slide to highlight overlapping needs (e.g., organized communication, moderation, notifications).

Lab 5 Information Gathering: Interactive Methods

Following the development and presentation of your initial project proposal in Labs 3 and 4, this lab focuses on planning the crucial next step: gathering detailed information requirements from stakeholders. While your proposal outlined the problem, feasibility, and high-level plan, effective system design requires a deep understanding of user needs, attitudes, current processes, and desired features. This lab requires you to apply the interactive information-gathering techniques discussed in Chapter 4 (Interviewing and Questionnaires) to your specific project. This planning bridges the gap between the high-level proposal and the detailed analysis to come.

1 Tasks List

Complete the following tasks as a group:

1.1 Task 1: Plan Stakeholder Interviews

Begin by refining who you need to talk to in order to gather deep insights about the system. Review your project scope and previous models to finalize a list of key stakeholder groups, for example, end-users (e.g., front-line staff), managers (e.g., department heads), and technical personnel (e.g., IT support). Ensure you capture all roles whose input is critical to understanding requirements.

For 2-3 distinct stakeholder groups, clearly articulate what you intend to learn from each. For instance, for front-line users you might want to uncover hidden workflow pain points; for managers, understand high-level reporting needs; and for IT staff, assess integration constraints and infrastructure concerns. These objectives will guide your questions.

For each targeted group, draft a detailed interview guide including:

- ▷ Introduction script that explains the purpose and builds rapport.
- ▷ A curated mix of open-ended questions (to elicit narratives), closed questions (to confirm specifics), and probing follow-ups.
- ▷ A clear question flow using a recognized structure (e.g., Funnel: start broad, then narrow to specifics).
- ▷ Closing script that thanks the interviewee and outlines next steps.

Finally, conduct interviews, one for each stakeholders (real or simulated), and write the interview reports.

1.2 Task 2: Design a User Questionnaire

To reach a broader set of participants efficiently, craft a questionnaire. Decide what quantitative or comparative data you need—such as frequency of certain tasks, satisfaction levels with existing tools, or preferred communication channels. These objectives will ensure each question ties back to actionable insight.

Write approximately 10-15 questions, beginning with a brief introductory note on purpose and confidentiality. Use a mix of:

- ▷ Closed questions (multiple-choice, checkboxes, Likert scales) for easy analysis.
- ▷ 1-2 open-ended questions to capture unexpected feedback. Keep wording neutral, concise, and user-friendly to avoid bias.

Identify your target respondents (e.g., all departmental staff, specific role groups) and choose a delivery

method, such as an institutional survey platform or email with embedded form links. Briefly note timing and reminders strategy to maximize response rates.

Finally, conduct the survey among at least 10 participants (real or simulated).

1.3 Task 3: Perform Requirement Elicitation

Using insights from your interviews and questionnaires, you will now perform structured requirement elicitation. The objective is to identify, organize, and document the system requirements based on stakeholder needs and constraints.

Start by analyzing your collected data to extract key themes, pain points, desired features, and implicit expectations. Categorize the requirements into types such as Functional, Non-Functional, Business, User, and Technical Constraints.

Document each requirement clearly using standard syntax (e.g., “The system shall...”) in your report, and where applicable, link them to your data sources for justification.

Optionally, validate your requirements with stakeholders (real or simulated) to ensure accuracy, completeness, and alignment with expectations.

1.4 Task 4: Consider Other Interactive Methods

Reflect on additional elicitation techniques beyond interviews and surveys.

Discuss whether inviting stakeholders to share real-world “stories” of how they currently work could reveal hidden requirements or pain points. For example, user stories might illuminate rare but critical exceptions that structured questions miss.

Assess if a Joint Application Design (JAD) workshop is feasible: weigh factors such as stakeholder scheduling constraints, organizational culture’s openness to collaborative sessions (from Lab 2), and the complexity of system functionality. Conclude whether a JAD session would likely accelerate consensus or if more targeted methods are preferable.

2 Presentation Requirements

The general guidelines for preparing for the presentation can be found in [Appendix A](#). For this lab, your presentation must include the following sections:

- ▷ A quick overview of the key stakeholders identified and the objectives for interviewing them.
- ▷ Examples of key questions from one of your interview guides (highlighting open/closed/probe use).
- ▷ The primary objective of your questionnaire and 1-2 sample questions.
- ▷ The key outcomes of the interviews and survey.
- ▷ The list of potential features extracted from the interview and survey.
- ▷ A brief statement on the potential role of Storytelling or JAD.

3 Report Requirements

For this lab, your report must include the following information:

- ▷ Cover Page
 - ◇ Group member names and student IDs
 - ◇ Course code and title (CSE 4408: System Analysis and Design Lab)

- ◊ Lab number (Lab 5)
- ▷ Stakeholder Interview Planning and Reports
 - ◊ Final list of key stakeholder groups with role descriptions
 - ◊ Interview objectives stating what you intend to learn from each group
 - ◊ For each group, provide introduction script explaining the purpose and building rapport, question flow outline, open-ended, closed, and probing questions, and closing script thanking the interviewee and outlining next steps
 - ◊ One report per interview (real or simulated) containing the brief context, summary of key findings organized by objective, and notable quotes or insights
- ▷ User Questionnaire Design and Results
 - ◊ A short note on purpose, confidentiality, and instructions
 - ◊ Set of questions with mix of closed-ended items and 1-2 open-ended questions, clear numbering, neutral wording, and response options defined
 - ◊ Target respondent profile, chosen delivery method, and timing and reminder strategy to maximize responses
 - ◊ Statement of how many participants were surveyed, with tabular summary of response rates for closed questions, and thematic synopsis of open-ended feedback
- ▷ Requirements Prioritization Planning: List of high-level system features derived from your interview, questionnaire, and scope/objectives along with justification.
- ▷ Other Interactive Elicitation Methods
 - ◊ Discussion on how soliciting “real-world stories” can reveal hidden requirements or exceptions
 - ◊ JAD Workshop Feasibility assessing scheduling constraints, cultural readiness, and complexity factors along with conclusion on whether a JAD session is advisable or if alternative methods are preferable
- ▷ Formatting
 - ◊ Use consistent, professional formatting (A4 paper, 12pt font, 1.5 line spacing, 1-inch margins)
 - ◊ Number all figures and tables sequentially; include captions

Ensure each section is clearly labeled, contains the required artifacts (guides, tables, summaries), and is accompanied by concise narratives so a reader unfamiliar with your group’s process can follow your planning and analyses.

4 Presentation Rubrics

Your presentation will be evaluated based on:

- ▷ Interviewing: Demonstrated understanding and appropriate application
- ▷ Questionnaire: Demonstrated understanding and appropriate application
- ▷ Requirement Elicitation: Identification of the appropriate features with proper justification
- ▷ Other Interactive Elicitation Methods: Thorough evaluation of other methods
- ▷ Clarity of explanation, professional quality of slides, effective communication by the group, adherence to time limit, and effective teamwork (evidence of collaboration, participation of all members).

5 Report Rubrics

You report will be evaluated based on:

- ▷ Stakeholder Interview Planning and Reports: Completeness of stakeholder selection, depth of interview guides, and quality of interview reports.
- ▷ User Questionnaire Design and Results: Quality of questionnaire design and clarity of results presentation.
- ▷ Requirement Elicitation: Thorough extraction of list of features from the interview and questionnaire.
- ▷ Presentation and Formatting: Professional consistency, cover page accuracy, figure/table numbering, and overall readability.

6 Deliverables

Convert your presentation slides the report into PDF files and submit them in the Google Classroom at the end of your presentation. File naming convention: Convert your presentation slides the report into PDF files and submit them in the Google Classroom at the end of your presentation. File naming convention: [WWW_XXX_YYY_ZZZ]_L5_Slides.pdf and [WWW_XXX_YYY_ZZZ]_L5_Report.pdf (Replace [WWW_XXX_YYY_ZZZ] with the last three digits of each of your student IDs.).