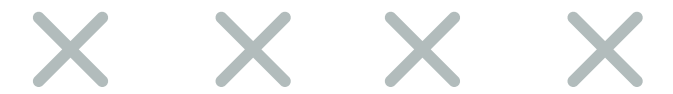Team System322

IUTian Threads

A forum for IUTians

CSE 4408: System Analysis & Design Lab
Lab 1 | May 15, 2025

TEAM MEMBERS

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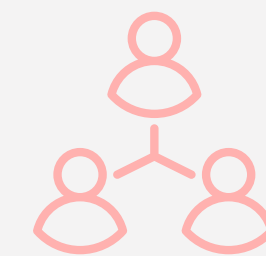
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Introduction

Why IUTian Threads?

IUTians Threads is a collective space for IUTians to share and discuss current issues with reddit like Q&A Forums and Threads.
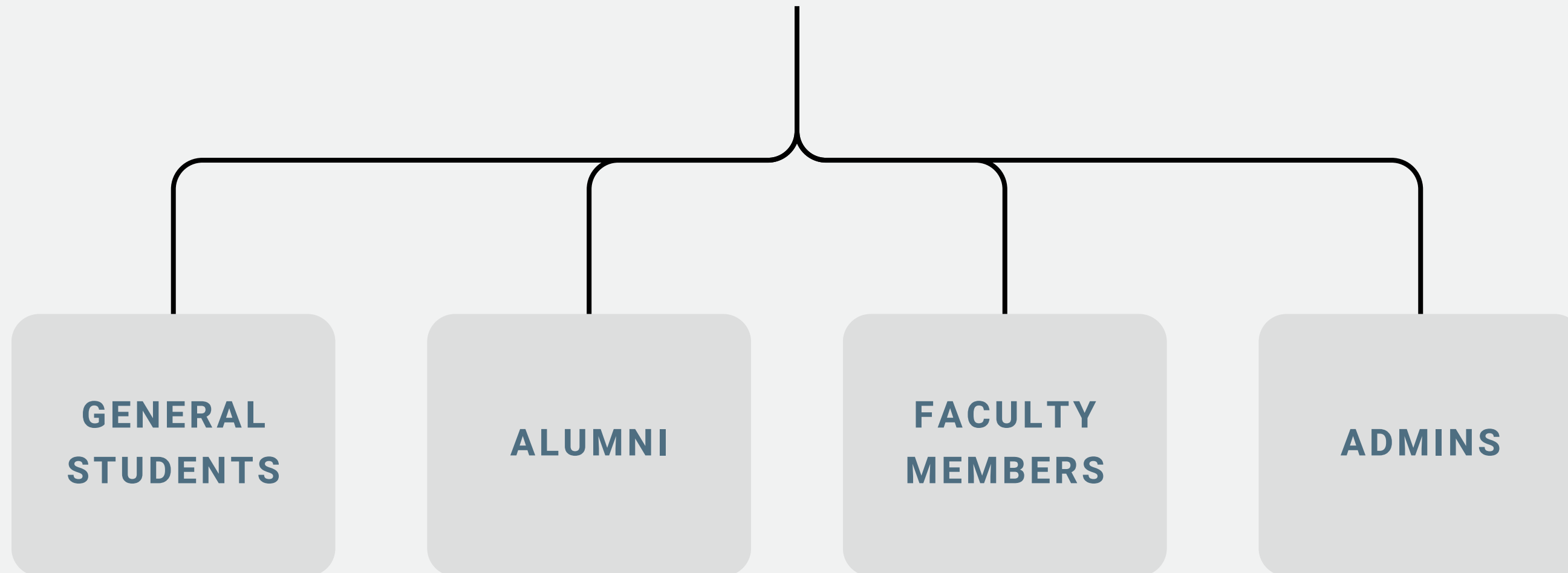
Preliminary Organizational Assessment

Chosen organization: IUT Organization of Student Welfare(OSW)

Core Mission & High Level Goals:

IUT-OSW aims to support and promote students' overall well-being at IUT.

- Serves as a bridge between students and the university administration
- Fosters a favorable academic environment within the university

Stakeholders

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                    Stakeholders
                         |
    ┌────────────┬───────┴───────┬────────────┐
    │            │               │            │
GENERAL        ALUMNI        FACULTY       ADMINS
STUDENTS                     MEMBERS
```

The Organization's Challenges

- Communication gap
- Communication structure frequently obstructs the direct flow of student issues to university leadership.
- Unofficial Facebook groups like PRESENT IUTians and All IUTians do not suffice the needs
- Existing website does not offer any scope for being vocal or sharing opinions from the students

Why System Analysis?

Limitations of current platforms:

- Existing website does not offer anything
- Posts often buried by Facebook's algorithm
- Lack of Categorization
- Repetition of Questions
- Limited Moderation and UI
- Comment-based discussion
- Distracts users from relevant topics

How to Improve:

Design and develop a university-specific Forum-style platform which will be tailored to IUT's academic and community needs

System Analyst's role:

No current system analyst exists. Having an analyst can:

- **Requirements & Design**: Ensures the forum meets actual needs with a well-defined technical blueprint.

- **Efficient Development:** Facilitates clear communication and manages scope for a smooth, effective build.

- **User-Focused & Sustainable:** Optimizes user experience and plans for long-term functionality.

Vital Qualities in Analyst:

- **Strong communication and stackholder empathy**

- **Solid grasps of user experience (UX) design**

- **Problem Solving and Critical thinking**

- **Adaptability to student culture and workflow**

System Analyst Role Mapping

- *Consultant*: Focuses on strategic recommendations and high-level digitization insights.

- *Supporting Expert:* Concentrates on technical guidance and handling documentation.

- *Agent of Change:* Drives system adoption, manages change, and trains users for a smooth transition.

Most Relevant Role: *Agent of Change*
 - lead shift from facebook to forum
 - ensures smooth user adoption of the new system
However, **Supporting Expert** will provide technical guidance and maintenance in the long term

Evaluation and Selection of Development Methodology

Methodology	Strengths	Weakness
SDLC	• Well-defined structure and precise planning • Strong quality assurance and risk mitigation	• Slower initial deployment • Inflexible when responding to sudden changes
Agile	• Quickly adapts to evolving requirements • Fast development iterations • Ongoing feedback ensures user satisfaction	• Documentation may be incomplete or inconsistent • Integrating multiple subsystems can be challenging
O-O	• Promotes reusable and modular code design • Simplifies future scaling and enhancements	• Requires significant time investment at the start • Less effective for rapid iterative development

Ideal Methodology with Justification

Chosen Method: Agile Approach with Object Oriented principles

- **Flexibility and Adaptability**

- **Faster Delivery and Early Adoption**

- **Better Risk Management through Iterations**

- **Collaboration and Communication**

- **Feedback driven development**
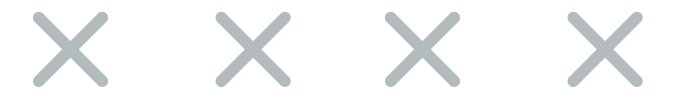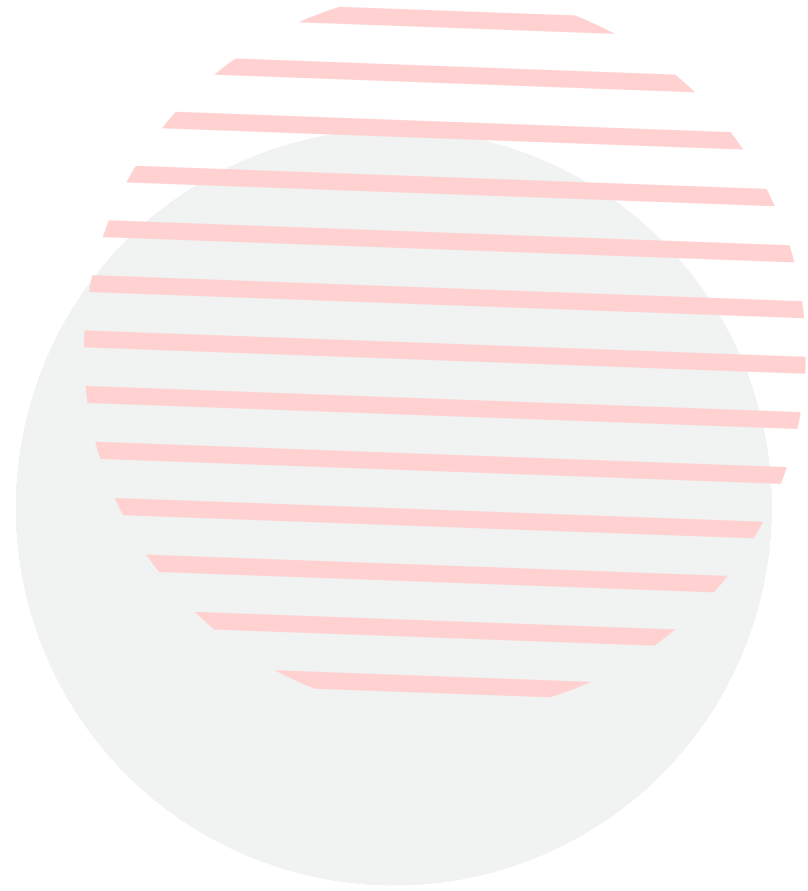
Why not SDLC ?

- *Too rigid, not ideal for evolving requirements of a dynamic platform*

Why not standalone O-O ?

- *Good for design, not a full methodology - Supportive only*
- *Lacks own workflow and management*

Conclusions

- IUTian Threads ensures a smooth communication among all stakeholders.
- Current students are the main stakeholders.
- Communication gap is the major challenge in the existing system.
- An Agent of Change is the most crucial system analyst for leading the shift to a new platform.
- Agile stands out as the optimal choice for its flexibility and continuous engagement of users.

Thank you!

We are open for Q&A