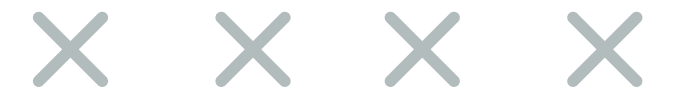


Team System322

# IUTian Threads

Lab 3: Project Management

**CSE 4408: System Analysis & Design Lab**  
**May 29, 2025**



# TEAM MEMBERS



**Sadman Shaharier  
Mahim  
220041133**

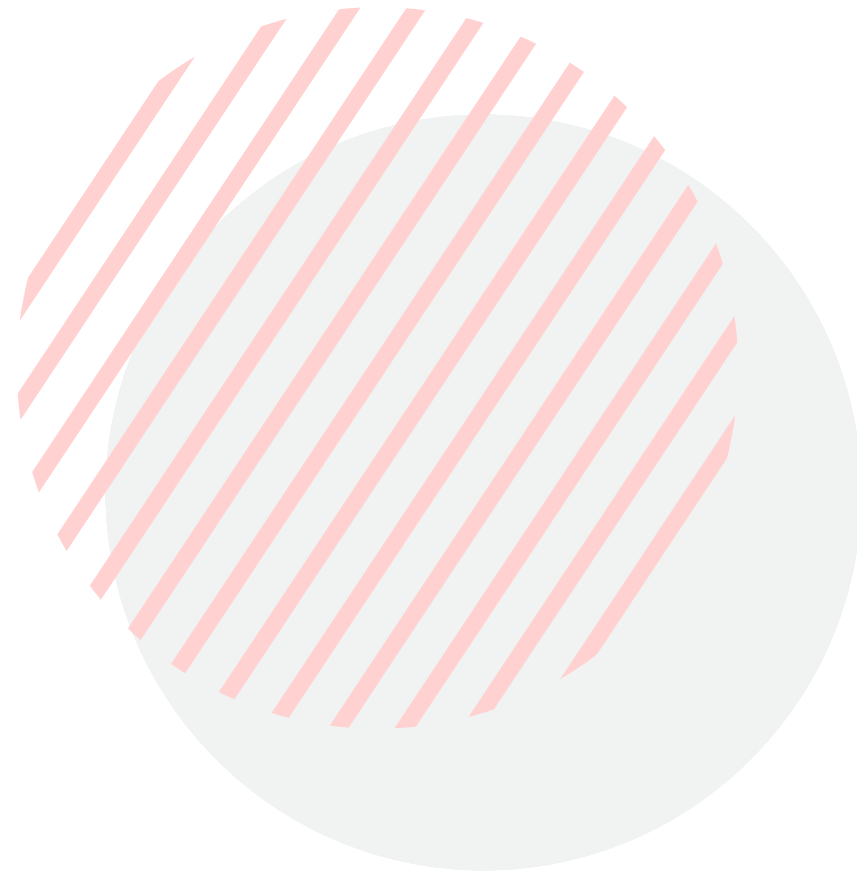


**Alfi Shahrin  
220041153**



**Nayeemul  
Hasan Prince  
220041125**





# Project Overview & Problem Definition





# Brief Overview

IUTian Threads is a university-specific forum-style platform designed for students to share concerns, ask questions, and engage in structured discussions.

## Problem Statement

The current student communication system at IUT is fragmented, relying heavily on an insufficiently moderated and distraction-prone platform (Facebook). This hinders meaningful dialogue and engagement with university administration, resulting in many student concerns going unresolved.

# Issues & Objectives

## Key Issues

- Lack of an official student forum
- Communication gap between students and administration
- Disorganized and repetitive discussions on Facebook groups
- Poor user experience on current platforms
- No moderation or structure in existing discussions

## Project Objectives

- Develop a centralized, university-specific discussion platform
- Enable structured, category-based communication
- Provide moderation tools for content control
- Support anonymous and authenticated posting
- Promote constructive and respectful student dialogue

# High-level Requirements & Constraints



## High-level Requirements:

- User Authentication
- Forum-based issue reporting
- Thread Management
- Post and comment system
- Voting mechanism
- Notifications
- Moderation tools
- Anonymous posting



## Constraints

- Limited budget and development time
- Varying technical expertise among team members
- Organizational resistance to change
- No existing OAuth API in IUT infrastructure for students' login





# Project Justifications



## Management Backing

OSW is supportive of initiatives that promote student welfare and communication.

## Appropriate Timing

In light of recent events at the university, it is the perfect time to set up this forum to uphold the voice of the general students.

## Strategic Goal Alignment

Aligns with OSW's mission to promote student well-being by enabling open, recurring dialogue and empowering students to raise and resolve campus issues collectively.

## Practicality

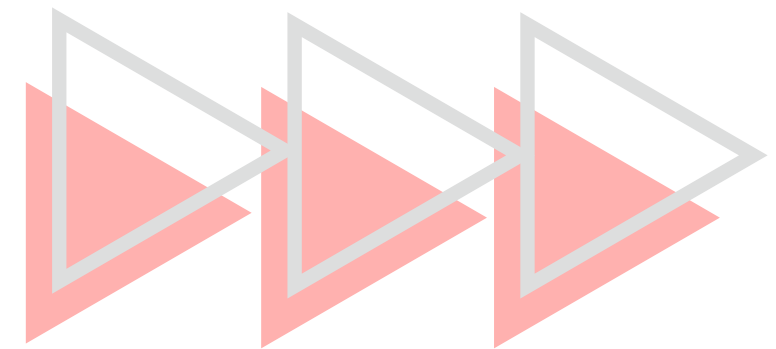
Agile development approach and available student talent along with open-source tools make it feasible within resource limitations.

## Worthwhile Investment

Potential benefits in terms of improved student satisfaction, streamlined communication, and reduced administrative burden outweigh development and training costs.



# Preliminary Feasibility Assessment





# Technical Feasibility

## Technological Availability

- Preferred use of MERN stack
- Readily available authentication tools
- Flutter for a native mobile app
- GitLab for In-house source control

## Skill & Infrastructure

- Team members possess adequate proficiency in web technologies.
- Expand existing IUT server infrastructure

## Obstacles

- Integration with the university system (login servers)
- Ensuring platform security & scalability

# Technical Feasibility

## Hardware vs. Cloud/SaaS

- Why use hardware?

IUT already has a very robust server infrastructure with its own Class-B IP addresses and it is very well maintained by proficient university professors.

- Why not cloud/SaaS?

Since IUT has existing hardware infrastructure, opting for cloud-based options are not necessary.

## Deployment Challenges

- User acceptance and initial engagement
- Cross-platform integration
- Deployment pipeline and version control
- Downtime management

# Economic Feasibility

```
graph TD; A[Economic Feasibility] --> B[Tangible Benefits]; A --> C[Tangible Costs]; B --> D[Qualitative Judgement: Benefits outweigh the costs, especially considering long-term efficiency and engagement improvements.];
```

## Tangible Benefits

- Reduced university administration workload in addressing student concerns
- Faster issue resolution
- Cost savings from avoiding 3rd-party platforms
- Improved student satisfaction
- Data analytics for university policy decision

## Tangible Costs

- Development time and training
- Software licenses (if any)
- Ongoing maintenance and support
- User training and onboarding

**Qualitative Judgement:** Benefits outweigh the costs, especially considering long-term efficiency and engagement improvements.

# Operational Feasibility

- **Cultural Compatibility and Organizational Fit:** Already active student body on social platforms, indicating openness to online forums
- **User Adoption:** Student adoption is expected to be high, given their existing reliance on online platforms and the clear value of a centralized, moderated forum.
- **Workflow Integration:** The system is designed as a non-intrusive supplement to current workflows. It simplifies how student concerns are gathered and responded to—reducing reliance on ad hoc communication channels. Administrative users will benefit from clearer feedback streams and improved prioritization of student issues.
- **Change Management:** To ensure successful adoption, the rollout will include orientation sessions, simple usage guides, and stakeholder walkthroughs.

# **Cost Outline and Benefits**

# Benefits

## Tangible Benefits

- 1.Reduced administrative workload through centralized student communication.
- 2.Faster resolution of student concerns via structured issue tracking.
- 3.Elimination of third-party dependency
- 4.Efficient collection of feedback and reports for university planning.
- 5.Utilization of IUT's existing server infrastructure, avoiding hosting costs.

## Intangible Benefits

- 1.Increased student engagement and sense of representation.
- 2.Enhanced communication and transparency between students and administration.
- 3.Improved decision-making through organized, community-driven dialogue.
- 4.Strengthened campus community and digital literacy.
- 5.Enhanced reputation of OSW and IUT for fostering innovation and openness.

# Costs

## Tangible Costs

1. Developer labor (student team contribution).
2. Domain name and any optional development tools/frameworks.
3. Training materials and orientation workshops.
4. Dedicated devices for moderators/administrators (if not already available).

## Intangible Costs

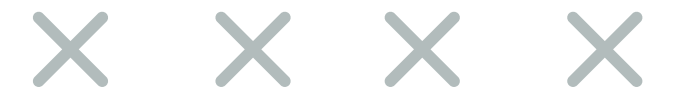
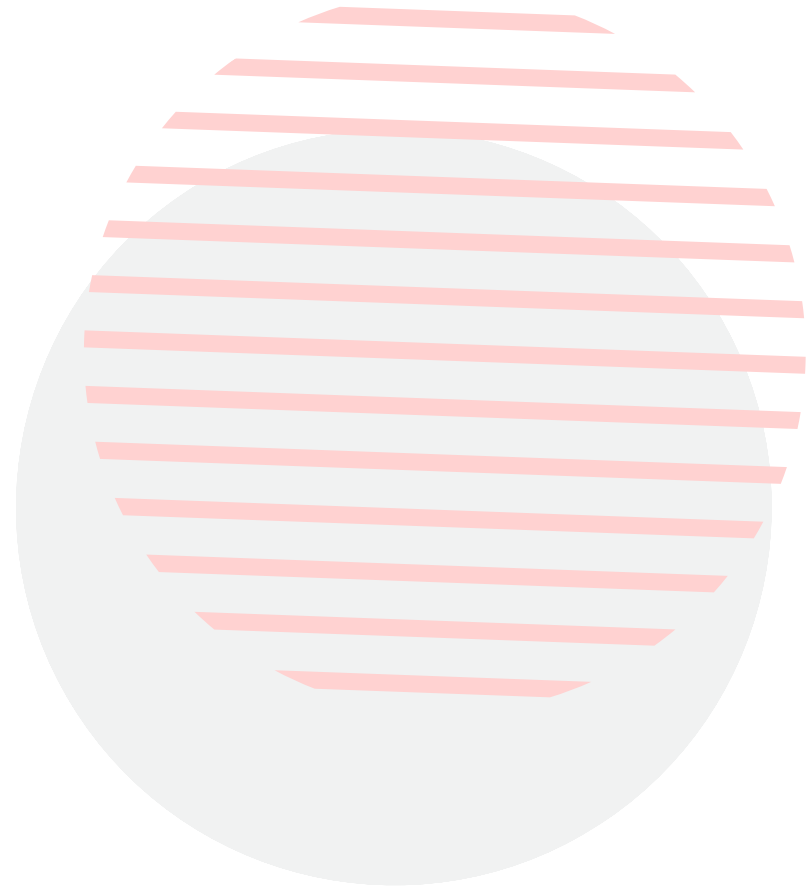
1. Resistance from staff unfamiliar with new digital tools.
2. Temporary productivity dips during training/onboarding.
3. Risk of platform misuse (e.g., spamming or anonymous abuse).
4. Ongoing need for moderation and community oversight.
5. Fatigue or disengagement if platform adoption is not maintained.



# Budget Estimation

| Category             | Description  | Estimated cost |
|----------------------|--|----------------|
| Project Team Expense | ~240 hours @ \$10/hr (student developers, planners, testers) for 4hr work day over 60 days | \$2400         |
| Hardware             | Basic desktop/laptop provisioning for admin/moderator use                                  | \$300          |
| Software             | Domain name, optional UI libraries or back-end tools                                       | \$150          |
| Training             | Orientation sessions, handouts, and documentation for stakeholders                         | \$300          |
| Support / Moderation | Honorarium/incentive for moderation and management   | \$250          |

**Total: \$3400**



# Thank you!

We are open for Q&A

