

Ministry of Science of the Republic of Kazakhstan  
Astana IT University

# **REPORT:**

## **Assignment 3**

Group: SE-2411  
Students: Medeubek Dinara  
Toktarbekova Aruzhan  
Kuanysh Bakhtiyar  
Instructor: Nurlybek Taubakabyl

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## ***Project Proposal***

Project title: AITU Student Social Network

### **1. Project Overview**

The **AITU Student Social Network** is a campus-focused social media platform designed exclusively for students of Astana IT University (AITU).

The goal of the project is to create a centralized digital space where students can communicate, share information, join academic and social communities, and stay updated on campus life.

Unlike generic social media platforms, this system is tailored specifically for university needs, combining academic interaction, student communities, events, and daily-life information into a single platform accessible via web and mobile clients.

### **2. Project Relevance**

Currently, AITU students rely on multiple disconnected platforms such as Telegram groups, Instagram pages, and informal chats to exchange information.

This approach has several problems:

- Information is scattered across many platforms
- Important announcements are easily missed
- There is no structured way to find classmates, communities, or events
- Canteen updates and campus news are often spread through rumors or unofficial sources

The proposed system solves these issues by providing a **single, organized, and verified platform** exclusively for AITU students.

### **3. Target Users**

The primary target users of the platform are:

- Undergraduate students of AITU
- Rectorate representatives
- Student clubs and organizations
- University staff and administration

**University staff and administration**, including faculty members and **rectorate representatives**, who can use the platform to publish official announcements, academic information, and campus-related updates.

### **Purpose of including university staff:**

- Enables direct and official communication between students and the university administration
- Reduces misinformation by providing verified announcements
- Improves transparency and engagement within the university community

In the future, different access roles may be introduced, such as:

- Student
- Staff / Rectorate
- Administrator / Moderator

Each role will have specific permissions according to its responsibilities.

## **4. Competitor Analysis**

Existing alternatives include:

- **Telegram groups** – fast communication but unstructured and chaotic
- **Instagram pages** – suitable for announcements, but lack interaction and discussion
- **Learning Management Systems (moodle LMS)** – focused only on academics, without social features

### **Advantages of our solution:**

- Centralized platform for all student-related information
- Structured communities and feeds
- Campus-specific features unavailable in generic social media
- Verified access limited to AITU students

## **5. Planned Features (MVP)**

The Minimum Viable Product (MVP) focuses on essential functionality required for academic social interaction while keeping the system simple and scalable.

### ***Authentication & Authorization***

- Student registration and login
- Role-based access:
  - student
  - admin

Authentication is required to create posts, interact with content, and join communities.

## ***User Profiles***

Each user has a personal profile including:

- Full name
- Faculty / major
- Study group (e.g., SE-2411)
- Short bio and interests

Profiles help students identify groupmates and connect with peers.

## ***Communities (Groups)***

- Course-based communities
- Club and interest-based groups

Examples:

- SE-2411
- AI Club
- Dorm Life
- Internship & Career

Students can join or leave communities and see posts related only to those groups.

## ***Posts, Comments, and Likes***

- Create and delete posts
- Comment on posts
- Like posts

Posts appear in:

- Community feeds
- A simple global feed (latest posts)

## ***Canteen News Module***

A dedicated section for campus food-related updates.

### **Features:**

- Daily menu updates
- Price changes
- Special offers
- Announcements (e.g., “No hot meals today”)

#### **Access control:**

- Read-only for students
- Editable only by admin users (canteen staff or moderators)

This feature adds strong practical value and differentiates the platform from generic social networks.

#### ***Basic Search***

Search by:

- Community name
- Post keywords

This helps users quickly find relevant information.

#### ***Basic Statistics***

- Total number of users
- Total number of posts
- Total number of communities

Statistics demonstrate system usage and are useful for administrators.

## **6. Non-Goals (Out of MVP Scope)**

To keep the MVP focused and achievable, the following features are **explicitly excluded**:

- Real-time chat
- Private messaging
- Stories or video content
- Notifications
- AI-based recommendations
- Mobile application (backend will be API-ready)

These features may be considered in future versions.

## **7. Technical Overview (High-Level)**

- **Architecture:** Monolithic (for initial version)
- **Backend:** Go (net/http)
- **Database:** PostgreSQL
- **API:** RESTful API
- **Frontend:** Web interface (HTML/CSS/JS)
- **Mobile readiness:** API designed to support mobile clients in the future