

ICPC ASSUIT TRAINING MANAGEMENT SYSTEM

Project Presentation By Omar Abbas



وزارة الاتصالات
وتكنولوجيا المعلومات



Team Members

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What is ICPC?

ICPC Assiut Community helps students improve problem-solving and programming skills through training, contests, and guidance, supporting growth in Upper Egypt.



Problem

The problem is that we currently perform the following tasks manually:

- Announcing trainings
- Filtering applications
- Tracking participants
- Assigning mentors
- Tracking tasks
- Recording attendance



• Project Overview and Solution



Automate Training Management: Develop a web application for streamlined training processes.



Training Announcements: Easily create and share updates on upcoming sessions.



Application Filtering: Systematically review and select candidates for training.



Mentor Assignment: Efficiently assign mentors to enhance learning experiences.



Tasks Tracking: Organize and track tasks associated with each training.



Attendance Recording: Automate attendance tracking for training sessions.

User Features



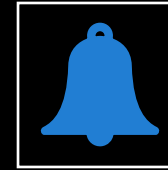
User Registration & Login: Secure sign-up and authentication.



User Dashboard: Personalized interface for users.



Training Applications: Users apply for available trainings.

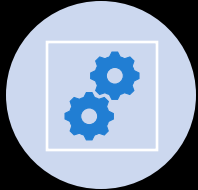


Notifications: Alerts for application acceptance or rejection.



Mentor Communication: Chatting functionality with mentors.





**ADMIN TRAINING
CREATION:** ADMIN
CAN CREATE NEW
TRAINING SESSIONS.



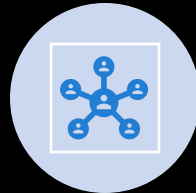
**APPLICATION
REVIEW:** ADMIN
CAN ACCEPT OR
REJECT TRAINEES.



**FILTERING
OPTIONS:** ADMIN
CAN FILTER
TRAINEES FOR
ACCEPTANCE.



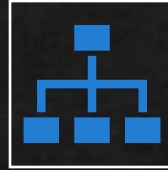
**ROLE
ASSIGNMENT:**
ADMIN CAN ASSIGN
ROLES TO USERS
AND MENTORS.



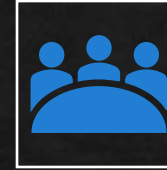
**MENTOR
COMMUNICATION**
: MENTORS CAN
EASILY
COMMUNICATE
WITH THEIR TEAM.

Admin Features

Technical Features



Role-based access control
(User, Mentor, Admin).



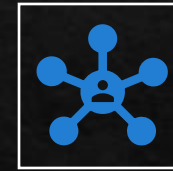
Application management
with status updates
(pending, accepted,
rejected).



Notification system for
important updates.



Integration with Codeforces
for user validation.



Chatting system for mentor-
mentee communication.

Technologies Used

- **Frontend**

React

Bootstrap

- **Backend**

Node.js

Express.js

MongoDB

Mongoose

- Authentication and Security

JWT (JSON Web Tokens)

Email Verification

- Integration

Codeforces API

- Communication

WebSocket (soon)

Database Models

User Model

**Training
Model**

**Application
Mode**

Role Model.

Log Model

User Journey Overview

- Users register and provide personal information.
 - Users open the training dashboard.
 - Users apply for a training (data automatically filled).
 - Admin reviews applications and assigns mentors.
 - Users join their assigned training sessions and mentors.
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User Journey Overview

01

Users register and provide personal information.

02

Users open the training dashboard.

03

Users apply for a training (data automatically filled).

04

Admin reviews applications and assigns mentors.

05

Users join their assigned training sessions and mentors.

Conclusion

- **The ICPC Assuit Training Management System:**
Significantly improves community management.
Enhances registration and application processes.
Provides better tracking of trainees.
Ensures a more organized and efficient training experience.
 - “Smart systems save time, letting us focus on our goals and priorities.”
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