Know_Your_Company

PROBLEM STATEMENT

After speaking with my classmates, seniors, and placement coordinators, I've identified several critical issues that make our placement process stressful:

Information Gap: Currently, nobody really knows the complete placement record. How many students from our department got placed last year? highest success rates? What questions do they typically ask in an interview? This information exists somewhere, but it's scattered across different people's emails and Excel sheets.

The Mentorship Gap: I've seen brilliant seniors who are working at top companies, eager to help juniors, but there's no proper way to connect. A senior at Google might have amazing insights about technical interviews, but only their close friends benefit from this knowledge. Meanwhile, hundreds of other students struggle with the same problems.

Company Preparation Confusion: Every company has different hiring patterns, technical requirements, and culture. A student preparing for TCS needs different skills than someone targeting a startup.

Communication: I've personally missed company registration deadlines because I didn't see the email in time. Placement coordinators send hundreds of emails, but students often miss important announcements. Faculty members can't easily track which students are actively participating in placements and which ones need extra support.

No Learning Assessment: Companies often reject candidates not because they lack technical skills, but because they haven't practiced the right kind of problems. We need a way to assess our readiness for specific companies and identify areas for improvement.

These problems affect real people - my friends who are stressed about placements, seniors who want to help but don't have the right platform, and faculty members who work hard but lack the tools to support us effectively.

OBJECTIVES

Based on conversations with various stakeholders, I want to achieve these concrete goals:

1. **Student Placement Database**: Create a system where we can finally answer questions like "How many students got placed last year?" and "What's the average package?"

2. **Connect Students with Mentors**: Build a platform where a junior interested in data science can easily connect with a senior working at a data analytics company. Aim to get at least 80% of interested students connected with relevant mentors.

3. **Fix the Communication Problem**: Ensure no student misses important placement notifications again.

4. **Provide Personalized Interview Preparation**: Give students practice quizzes and preparation materials specific to companies they're targeting, helping improve interview success rates.

RELEVANCE TO ICT DOMAIN

This project touches on several areas I've been studying throughout my ICT program:

Web and Mobile Development: Students need access on their phones and laptops, so I'll build responsive web applications using React.js and mobile apps with Flutter. This gives everyone easy access whether they're in the library or walking between classes.

Data Analytics: All the placement data we collect becomes valuable insights. We can identify trends like "Students who do internships have 60% higher placement rates" or "Companies prefer candidates with specific technical skills."

Cloud Computing: With hundreds of students and multiple companies involved, the system needs to handle high traffic during placement season. Cloud deployment ensures it doesn't crash when everyone logs in at once to register for a popular company.

Database Design: Managing profiles for students, alumni, faculty, companies, and all their interactions requires careful database planning. We need to store everything from student resumes to company feedback efficiently.

FEASIBILITY ANALYSIS

Technical Feasibility

Why These Technologies Make Sense:

- **Mobile App (Flutter)**: One codebase works on both Android and iPhone, crucial since students use different devices

- **Database (firestore)**: Reliable for storing structured data like student profiles and placement records, quiz score etc.

MARKET/USER NEEDS ANALYSIS

Real User Needs I've Observed:

Students tell me they need:

- Clear information about which companies are hiring and what they require

- Connection with seniors who can provide honest reviews about different companies

- Practice materials specific to companies they're targeting

- Transparent tracking of their application status

Faculty share that they want:

- Easy ways to monitor student progress and identify who needs help

- Data to understand placement trends and improve curriculum

- Efficient tools to coordinate with companies and track outcomes

Alumni often mention:

- Desire to help juniors but lack of proper channels

- Interest in staying connected with their college

- Willingness to share insights about industry trends and company cultures

Placement Coordinators express frustration with:

- Manual tracking of hundreds of student applications

- Communication challenges with both students and companies

- Lack of data to analyze and improve placement strategies

HODs need:

- Department-level insights for strategic planning

- Evidence of placement success for accreditation and rankings

- Understanding of industry requirements to update curriculum

CONCLUSION

As someone who has experienced the frustration of disorganized placement processes, I'm passionate about creating a solution that genuinely helps students, faculty, and alumni. This project isn't just about building another software system; it's about creating a supportive community where students get the guidance they need, alumni can effectively contribute their knowledge, and institutions can track and improve their placement success.

The combination of modern technology with human-centered design creates opportunities to solve real problems that affect thousands of students annually. By focusing on actual user needs rather than theoretical requirements, this system has the potential to significantly improve placement outcomes while reducing stress for everyone involved.