

Software Engineering (CS 304)

Assignment

1. **Project Task:** Carefully review the proposal and **design & develop** an online system to conduct the **National-Level Coding Competition (Hackathon 2026)**.
2. **Team Formation:** Each team must consist of a **minimum of five (5) members**.
3. **Submission Deadline:** 15/Nov/2025.
4. **Submission Requirements:** Upon completion, submit the **source code folder** along with a comprehensive **README file** to the shared folder provided below. Access will be given to the Team leader for the submission in due course of time.
https://drive.google.com/drive/folders/1qFbqZEvzw1q4-XNIMRS90bAOinRulvIZ?usp=drive_link
5. **Presentation:** Each team must deliver a **presentation of their work** during the scheduled **tutorial class**.

Proposal for Organizing a National-Level Coding Competition (Hackathon 2026)

1. Introduction

The National Institute of Technology, Silchar established in 1967 as a Regional Engineering College, is one of India's premier technical institutions. Upgraded to National Institute of Technology in 2002 and declared an Institute of National Importance under the NIT Act of 2007, NIT Silchar stands out for its excellence in education, research, and innovation.

Recognitions and Highlights of NIT Silchar:

- Consistently ranked among the top engineering institutes in India, with an NIRF Engineering Ranking of 40 and an Overall Category Ranking of 92 in 2024. Internationally, it achieved a QS Asia University Ranking of 541 in 2025 and secured the 205th position in the Green Metric Global Ranking in 2022.
- Hub for advanced research in emerging technologies.

- Active collaborations with national and international organizations.
- Rich history of producing technocrats and researchers who have contributed significantly to industry and academia.

2. Objective of the Event: Hackathon 2026

This Hackathon aims to provide a national platform for students, researchers, and tech-enthusiasts to showcase their coding and problem-solving skills. Participants will tackle real-world problems using artificial intelligence, machine learning, and other emerging technologies.

Key Goals:

- Encourage innovation in AI/ML-driven solutions.
- Foster collaborative problem-solving.
- Identify top talent and creative thinkers in the tech community.
- Provide exposure to real-life problem-solving environments.

3. Competition Details

- The competition will be conducted in **three rounds**:
- Team Size: Participation is limited to teams of up to **Three** individuals (Students from UG/PG/PhD backgrounds)

3.1 Round 1 (Online):

- Objective: Screening round with MCQs, aptitude, and basic coding questions. [you must prepare it]
- Mode: Online
- **Date: January 2026 (Second Week)**
- Top performers securing (50% marks or ranking in the top 75%) will qualify for Round 2.

3.2 Round 2 (Online):

- Objective: Problem statements based on coding and AI/ML application. [You must prepare it]
- Mode: Online
- **Date: February 2026 (First week)**
- Top teams will be shortlisted for the final round.

3.3 Round 3 (Offline at NIT Silchar Campus):

- Objective: Final hackathon challenge with real-time problem-solving. [test data only]
- Mode: Offline
- Venue: NIT Silchar, Assam
- Date: **February 2026** (Last Week)

4. Prizes and Recognition

4.1 Top 3 Winning Teams:

- 1st Prize: ₹50,000 + Certificate of Achievement
- 2nd Prize: ₹40,000 + Certificate of Achievement
- 3rd Prize: ₹30,000 + Certificate of Achievement

4.2 Certificates for Participants:

- Participation Certificate: All registered participants.
- Appreciation Certificate: Participants securing at least 50% marks or ranking in the top 75%.
- Outstanding Performance Certificate: Top 10% of participants (those scoring $\geq 80\%$).

5. Registration Details

- Deadline for Registration: 30th December 2025
- Registration Fee: Rs. 2000 per team. Registration Fee must be deposited to the following Account.
Account Number: XXX
Account Holder Name: YYYYY
Bank: SBI, Branch: NIT Silchar,
IFSC Code: SBIN0007061
MICR Code: 788002004
- **Accommodation:** Free accommodation will be provided to participants during the final (offline) round.
- **Local Visit:** Participants will have the opportunity to explore local attractions.
- **Academic Interaction & Gala Dinner:** Engage with esteemed academicians and enjoy the Conference Gala Dinner.
- Registration Link: [Google Form Link Here]

6. Organizing Team

Faculty & 3rd year B.Tech Students of CSE department, NIT Silchar

7. Contact details:

For any queries or clarifications, participants can contact the coordinators as listed below:

CR, Sec A & B, B.Tech (CSE), 3rd year, NIT Silchar

8. Conclusion

This proposed Hackathon will serve as a catalyst to build a culture of innovation, coding excellence, and entrepreneurial thinking among students and young professionals. With the support of NIT Silchar, this event is poised to become a prestigious national-level competition in the domain of AI, ML, and software development.