Proposals
for the post of
Vice President,
Technology Students' Gymkhana,
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Proposal 1: Creating a Flexible and Student-Friendly Mess Opt-Out System

Overview

This proposal aims to introduce a digital solution to tackle the problems of food wastage and unused meal charges through a mobile app feature. This would enable students to opt out of mess meals at least 24 hours in advance or before ordering raw materials (whichever is earlier).

By enabling students to declare their meal participation in advance, this system ensures that food preparation aligns more accurately with actual demand, significantly reducing food wastage. This approach not only helps mess managers plan meals more efficiently by ensuring that resources are allocated based on accurate, real-time data rather than estimations. Moreover, by integrating this system with mess fee adjustments, students will only be charged for the meals they consume, leading to a more transparent and equitable financial structure.

Need and Objective

Need:

- **Mismatch in Meal Consumption:** Many students miss meals due to academic schedules, extracurricular activities, or menu preferences, leading to a significant amount of uneaten food. Without a system to track meal participation, mess managers must rely on estimates, resulting in over-preparation and increased food wastage.

- **Financial Inefficiency:** The current fixed mess fee forces students to pay for meals they may not consume, creating an unfair cost distribution. Inaccurate meal counts also lead to unnecessary spending on unused food, diverting resources that could be better utilized to improve meal quality and optimize mess operations. A pre-declaration system would ensure fairer fee allocation and more efficient use of resources.

Objective:

- Enable students to opt out of specific meals via an app, providing mess managers with accurate data on expected plate counts.

- Reduce food wastage by aligning meal preparation with actual demand.

- Adjust mess fees reasonably through reimbursements or fee credits based on the meals a student opts out of.

Methodology

- **App Development:** Develop a user-friendly mobile app integrated with the ERP system, enabling students to opt out of specific meals with a minimum of 24-hour notice or before, depending on when the order for raw materials is given. The app will be able to provide real-time updates on expected meal counts, ensuring accurate meal planning and resource allocation.

- **Financial Mechanism:** Establish an automated backend system to track opted-out meals and adjust mess fees accordingly. Students will either receive reimbursements at the end of the semester or have credits applied toward their next semester's fees, ensuring a fair and transparent financial structure.

- **Awareness and Training:** Conduct targeted awareness campaigns, including workshops, digital guides, and in-app tutorials, to familiarize students and mess managers with the system, thus ensuring a smooth transition and effective implementation.

Impact on Students

- **Reduced Food Wastage:** With precise meal count data, mess managers can prepare meals based on actual demand rather than estimations, significantly cutting down on excess food. This targeted approach minimizes waste and optimizes resource utilization, ensuring a more sustainable mess operation.

- **Enhanced Fairness:** The opt-out system ensures that students only pay for their meals, leading to a more equitable distribution of mess fees. Through reimbursements or fee credits, students who frequently miss meals due to scheduling conflicts or personal preferences will no longer bear unnecessary costs, making the system financially fairer.

- **Empowered Decision-Making:** By allowing students to manage their meal participation proactively, the system gives them greater control over their dining choices. This flexibility ensures students can plan their meals according to their needs, leading to higher satisfaction with mess services and a more personalized dining experience.

Background and Groundwork

- **Students' Challenges:** Survey feedback collected from students highlights a significant gap between meal preparation and actual consumption. Many students frequently miss meals due to academic responsibilities, co-curricular activities, or extracurricular commitments, making it challenging to adhere to fixed-mess schedules. Additionally, menu preferences play a key role, as

some students skip meals when they find the options unappealing. This inconsistency in meal participation leads to unnecessary food waste and inefficient resource utilization, emphasizing the need for a structured system to account for fluctuating student attendance.

- **Mess Management Challenges:** Discussions with the Mess Manager revealed that, regardless of student participation, a stable budget is essential for maintaining the smooth operation of the mess. Fixed costs such as staff salaries, kitchen maintenance, and the bulk procurement of ingredients require consistent financial support, making implementing a fully variable fee structure based on individual meal consumption impractical. To address this challenge, a portion of the mess fees will remain non-reimbursable, ensuring a guaranteed base budget for operational stability. This approach balances financial sustainability with the flexibility to adjust costs for students who opt out of meals, making the system practical and fair.

- **Prior Attempts:** Previous efforts to adjust meal planning have lacked a systematic approach to financial adjustments, underscoring the need for a dedicated digital solution.

Stakeholders Involved

- **Students:** The primary users whose participation and feedback are essential to the app's success and overall improvement in meal management.

- **Mess Management Team:** They will use real-time data from the app to plan and prepare meals better, ensuring optimal resource allocation.

- **Hall Management Council:** Ensures accurate processing of reimbursements or fee adjustments, aligning student payments with actual meal consumption.

- **Technical Teams:** Developers tasked with creating, deploying, and maintaining the app and its integration with mess management systems.

Proposal 2: Alumni-Funded Support for Students' Startups & Research at the Institute

Overview

This proposal outlines the use of the Alumni Fund to provide financial aid to student-led startups and research groups at IIT Kharagpur. The proposal aims to address two main issues:

- **Insufficient Seed Funding for Startups**: Most potential student startups never reach the implementation phase from the ideation phase due to the lack of funds.

- **Insufficient Financial Support for Research Purposes**: Research teams cannot mobilize funds to compete in national and international competitions or undertake research projects.

Through the strategic use of alum donations, this program will generate innovation, entrepreneurship, and knowledge acquisition among students. Not only will it enhance student success, but the relationship between alumni and their institution will also improve. The program will additionally benefit the institute by establishing its reputation as an innovative research and entrepreneurial development center.

By directing alumni and corporate funds into a properly designed and transparent funding mechanism, the program will assist in developing entrepreneurship, research quality, and industry connections at IIT Kharagpur. With the active participation of the students, faculty, alumni, and corporate sponsors, we can implement a proper support system to facilitate the next generation of researchers, inventors, and entrepreneurs.

Need and Objective

Need:

- **Startups**: Several student startups in IIT Kharagpur have faced financial challenges in their initial phases. For instance, Rapid Rasoi faced a funding issue in its early phase, and Finolance is facing similar issues acquiring the requisite capital.

- **Research Groups**: Most research groups need much more money to compete in high-profile contests and research activities. For example, TeamKart needs substantial funds to compete at the international and national levels, but funds of that scale are not available to them right now.

Objective:

- Seed Funding for Startups: Offer capital support to student startups early on so that they can implement and grow their ideas.

- Support for Research Groups: Assist research groups to compete in national and international competitions by funding travel, equipment, and other necessary costs.

- Increased Alumni-Student Linkages: Encourage a culture of giving and enhance student-alumni connections.

- Increased Networking Opportunities: Maximize networking among students, alumni, and industry leaders to generate a collaborative innovation community.

- Promoting Innovation & Knowledge Growth: Never allow the budget to hinder research and innovation.

Methodology

a. **Proposal Submission:**

- Research teams and start-ups shall submit a written proposal to the Office of Alumni Affairs through a proper application procedure (e.g., Google Form or identified portal).

- Proposals should contain objectives, anticipated benefits, funds needed, and a comprehensive outline of fund use.

b. **Validation and Selection:**

The proposals will be screened by a committee consisting of the Dean of Alumni Affairs, an RMSoEE faculty member, an Assistant Registrar, and the Vice President, Technology Students' Gymkhana, based on:

- Clarity of objectives

- Impact and feasibility

- Financial justification

- Fund utilization plan

- Profitability (for startups) and long-term viability

c. **Alumni Engagement:**

- Approved proposals will be presented to the alum community through dedicated fundraising campaigns.

- Alumni can contribute directly to specific projects through the Alumni Fund, which allows them to fund projects they favor.

d. Corporate Contributions:

If any firm shows interest in sponsoring student startups or research groups, they will be incorporated under this plan under the same framework.
The Office of Alumni Affairs will channel such donations to achieve the goals and ethical values of IIT Kharagpur.

e. Fund Allocation and Monitoring:

- **Overhead Charge**: 10% will be deducted by the Office of Alumni Affairs in favour of the institute.

- **Disbursement**: Disbursement will follow the approved financial project breakdown and be disbursed accordingly.

- **Transparency**: Recipients will receive regular progress reports to monitor their money's practical use and accountability.

f. Pitching and Hiring Process:

- First-year students will coordinate and organize the pitching sessions for research groups and startups.

- The Office of Alumni Affairs will select and manage these students to efficiently organize the process and acquire practical experience in startup evaluation.

Impact on Students

- **Startups:** Increased seed capital availability will increase student ventures' success rate, further predisposing students to entrepreneurial endeavors.

- **Research Groups:** Extra funds will facilitate research teams' entry into competitive forums, increasing visibility and academic reputation.

- **Skill Development:** Students will learn practical entrepreneurship skills, research processes, budget planning, and project management.

- **Networking & Mentorship:** Improved alums and corporate sponsor networking will increase opportunities for business partnerships, mentorship, and internships.

Background and Groundwork

Alumni have always been extremely keen to give back to IIT Kharagpur in some form. Some prominent alumni-sponsored projects are Miyawaki Forest, Adda, Clock Tower, and other student welfare and infrastructure projects.

Beyond this, business organizations are also interested in funding student research groups and startup firms. An example is IV Cap, which has come forward to offer funding to Research groups and startup firms.

This program will establish a sustainable financial model for long-term student innovation at IIT Kharagpur by segregating alum donations and corporate fundraising opportunities into an organized framework.

Involved Stakeholders

- **Students:** Research groups and entrepreneurs who will be assisted through funding.

- **Office of Alumni Affairs:** In charge of proposal verification, alum engagement, management of funds, and recruitment of first-year students for the pitching process.

- **Alumni Community:** Major contributors and mentors behind student projects.

- **Corporates:** Corporates willing to sponsor student research and startups, fueling IIT Kharagpur's innovation ecosystem.

Proposal 3: Winter School for Technical and Soft Skills Enhancement of Postgraduate Students and Research Scholars

Overview

Postgraduate (PG) students and research scholars (RS) at the institute encounter two fundamental challenges: enhancing their career prospects and efficiently utilizing research equipment.

The first issue is the absence of experiential learning in industry-related skills, especially in high-priority areas such as AI/ML. Several researchers find it challenging to find employment, internships, or research partnerships because of this shortcoming. We recommend a Winter School that provides guided training during the winter vacation. The initiative will assist students in developing practical experience, which will boost their placement preparation and research work.

The second problem is access across departmental research facilities. Unclear procedures for booking research equipment, insufficient coordination, and access restrictions regularly create delays. To resolve this, we advocate a booking portal for research equipment that will make it easier for researchers to inquire about availability, request use, and arrange time of use efficiently, achieving better workflows and usage of available resources.

Need and Objective

Need:

- **Industry Essential Skills:** PG and RS students have difficulty transitioning to industry positions because of limited exposure to soft skills and practical experience. This creates problems for them in obtaining placements and employment opportunities.

- **Equipment Access:** The current manual, paper-based process of reserving research equipment is sluggish and ineffective. This causes a delay in research activities and restricts access to critical resources.

Objective:

- **Soft Skills Training:** Organize training sessions where senior students with placement experience mentor juniors on critical soft skills required for industry jobs.

- **Industry-Relevant Knowledge:** Offer practical training in AI/ML and other frontier technologies to prepare PG and RS students for jobs and align them with the demands of the industry.

- **Centralized Portal:** Create an easy-to-use digital portal for equipment booking, increasing speed, minimizing delays, and enhancing department research productivity.

Methodology

a. **Soft Skills Training Camp:**

  - **Proposal Submission:** Invite placed students to submit proposals for training sessions on critical industry-relevant skills.

  - **Validation and Selection:** The Office of the Dean of Students' Affairs will review proposals based on relevance, impact, and feasibility.

  - **Training Implementation:** Conduct the training camp during the Winter break, emphasizing soft skills and industry-related technologies to prepare students for placement.

b. **Centralized Portal:**

  - **Portal Development:** Coordinate with the ERP Office to develop an easy-to-use system for booking research equipment.

  - **Departmental Involvement:** Cooperate with the faculty to monitor reservations and allow for efficient interdepartmental use.

  - **Testing and Launch:** Run thorough tests to resolve faults before launching for a glitch-free user experience.

Impact on Students

- **Employability Enhancement:** The training camp will condition students for industry placements through experiential learning and required soft skills.

- **Research Efficiency:** A centralized booking portal will make equipment access easier, eliminating delays and enabling researchers to concentrate on their projects rather than paperwork.

- **Skill Development:** Hands-on training will enhance students' communication, teamwork, and project management skills.

- **Networking Opportunities:** Greater alum interaction will provide mentorship opportunities and long-term career relationships.

Background and Groundwork

To ensure this proposal effectively meets the needs of PG students and research scholars, extensive groundwork was conducted through multiple channels-

- **Student Consultations:** In the last few months, formal discussions were conducted with PG students and research scholars from different departments, such as engineering, sciences, and management. Most students reported that though they possessed good technical skills, they could not get industry jobs because of soft-skill gaps, communication, teamwork, and real-world problem-solving—all of which are greatly valued by employers.

- **Faculty Insights:** Discussions with faculty members overseeing research projects identified inefficiencies in equipment availability. Research activities are frequently delayed because booking procedures are unclear, poor inter-departmental coordination, and old-fashioned paper-based systems. A few departments book informally, while others operate on a first-come, first-served basis, which results in conflicting schedules and resource underutilization.

- **Industry Expert Consultations:** Alumni working in top companies in AI, finance, and manufacturing gave feedback on the primary skills needed for placements. Recruiters pointed out that students lack experience with industry-specific technologies and cannot withstand the quick work pace. This observation enhanced the proposal's need for AI/ML training and soft-skill development.

- **Case Studies of Other Institutes:** Studies of institutes such as IIT Bombay, IISc Bangalore, and foreign universities revealed that most have computerized equipment-sharing systems and organized soft-skill training programs. Their success proved the efficacy of such programs, further justifying the implementation of a centralized booking system and a peer-based training program at IIT Kharagpur.

Stakeholders Involved

- **Students:** The PG and RS students will receive industry-specific training, enhancing their employability, while the portal for booking equipment centrally will streamline their research process.

- **Office of the Dean of Students' Affairs:** Handling the scrutiny of training proposals, monitoring the process of organizing the training camp, and coordinating the management of the portal.

- **IT Department:** Created, upheld, and updated the centrally booked portal to ensure seamless and dependable operation.

- **Departmental Professors:** Will oversee the equipment reservation process, adjudicate scheduling conflicts, and promote equitable access to research facilities.

This proposal focuses on improving the scholarly and professional life of PG and RS students at IIT Kharagpur by overcoming significant hurdles in skill development and research accessibility. Through the optimization of resources and improvement of interdepartmental coordination, it will provide a more supportive and effective learning environment. With collaboration and engaging alum support, this initiative is geared to empower students with better professional prospects and a more effective research environment.

Proposal 4: Facilitating Students' Placement and Internship Experience through Wellness Spaces and an Upgraded CV Portal

Overview

This proposal aims to upgrade students' interview experience during the CDC placement and internship drive via 24/7 Nalanda Classroom Complex refreshment kiosks and recreational areas. This will involve students getting food, drinks, and rest areas, and thus being kept on course while reducing stress. In addition, we aim to upgrade the process of creating CVs via a cloud-based, auto-saving process that safely stores students' information while ensuring CVs' compatibility with Applicant Tracking Systems (ATS). This is likely to enhance shortlisting potential. Overall, all these aim to make the placement and internship process more efficient and boost job application effectiveness, ultimately leading to improved student outcomes.

Need and Objective

Need:

- **24/7 Refreshment Stalls & Recreational Spaces**: The placement and internship process at Nalanda Classroom Complex is highly stressful, with students often spending long hours waiting for interviews. Access to food, beverages, and relaxation zones will improve student well-being and performance.

- **Cloud-Based CV System**: The current ERP-based CV-making process is not user-friendly and is prone to glitches that sometimes erase student data. A cloud-based system ensures real-time auto-saving and data recovery.

- **ATS-Friendly CVs**: Ensure that CVs are optimized for both on-campus and off-campus job applications, increasing students' chances of selection.

Objective:

- **Enhance student well-being**: Provide a comfortable and stress-relieving environment with food and relaxation options during placements and internships.

- **Improve CV accessibility and security**: Develop a cloud-based CV storage system for students, featuring auto-save to prevent data loss and ensure a seamless experience. The platform should be easily accessible, allowing students to create, update, and retrieve their CVs anytime.

- **Optimize CV format for ATS compatibility**: Ensure that CVs generated through the system meet industry standards for better shortlisting rates.

Methodology

a. Implementation of Refreshment Stalls & Recreational Areas:

- **Stall Setup**: Create 24-hour refreshment kiosks at Nalanda Classroom Complex by collaborating with food providers, cafeterias, and the campus administration.

- **Recreational Zones**: Set up designated spaces with seating and relaxation areas to help students manage stress.

b. Development of Cloud-Based CV System:

- **User-Friendly Interface**: Integrate the ERP-based system with an intuitive and accessible web portal for CV creation.

- **Auto-Save & Cloud Integration**: Set up a reliable cloud system to automatically save CVs and let students access them anytime.

c. ATS-Friendly CV Formatting:

- **Standardized Format**: Adopt an ATS-optimized format with structured sections and keyword integration for better parsing.

- Implement **LaTeX-powered CV generation** with the help of project interns, allowing students to choose from multiple **predefined, recruiter-approved templates**.

- **Industry Consultation**: Seek inputs from recruiters and HR professionals to fine-tune the format.

- Provide a **real-time preview** feature to help students visualize formatting.

Impact on Students

- **Better Performance in Placements**: Reduced stress through improved facilities will enhance student focus and interview readiness.

- **Efficient CV Management:** Avoiding data loss and ensuring efficient document handling.

- **Provides a professional and polished look** to CVs, improving first impressions with recruiters.

Background and Groundwork

The existing placement support infrastructure at Nalanda Classroom Complex lacks essential amenities, and the CV-making process through ERP has faced consistent complaints regarding usability. Learning from student feedback, this proposal builds on modern technological solutions and practical support measures to create a better experience.

After an initial talk with an ERP section officer, we discovered a scarcity of workforce to implement the integration process of the LaTeX interface. To address this, we propose to acquire student project interns. This will provide them with a platform to implement their skills on a real-time project and also receive a certificate of appreciation for their contribution.

Stakeholders Involved

- **Students**: Beneficiaries of the improved placement/Internship experience and students working on the implementation phase.

- **Career Development Center (CDC)**: Key partner in implementing the CV system.

- **Gymkhana & Administration**: Facilitators for funding and logistics.

- **Alumni & Recruiters**: Industry experts for optimizing the ATS-friendly CV format.

Proposal 5: Enhancing Student Experience at Nalanda Classroom Complex with Better Facilities & Essential Services

Overview

This proposal is focused on resolving several infrastructure and service shortfalls at the Nalanda Classroom Complex. By filling gaps such as the absence of budget eateries, the lack of stationery/printing outlets, substandard condition of water coolers, and the insufficiency of proper cycle stand facilities, the project aims to improve the surroundings around the Nalanda Classroom Complex area to become more student-oriented and efficient in serving academic and everyday needs.

Need and Objective

Need:

- **Affordable Eateries:** Currently, inexpensive food choices are scarce for students, affecting convenience and cost.

- **Stationery/Printing Shops:** Students often travel to the tech market, even for basic stationery needs. In many cases, they are even forced to go off-campus, which is time-consuming and inconvenient. Having a well-stocked stationery outlet near Nalanda Classroom Complex would save time and reduce hassle.

- **Water Cooler Maintenance:** Repeated maintenance issues disrupt drinking water, which is necessary for hydration in an active learning environment.

- **Cycle Stand Infrastructure:** The existing cycle stand is insufficient for the growing number of students, causing congestion and safety issues.

Objective:

- Improve student convenience through on-campus availability of affordable food and academic resources.

- Ensure safe and reliable maintenance of water coolers to promote health and comfort.

- Create a cycle stand to hold the growing number of cyclists in a structured and organized parking manner.

Methodology

- **Surveys & Feedback:** Conduct targeted surveys of students to gauge the demand and ascertain particular preferences for restaurants and stationery services.

- **Vendor Partnerships:** Partner with local vendors and well-known brands to establish low-cost eateries and stationery/printing outlets within the complex.

- **Scheduled Maintenance:** Maintain a rigorous, time-to-time maintenance schedule for water coolers, with feedback loops to correct problems on an immediate basis.

- **Infrastructure Assessment:** Work with campus facilities and engineering to develop and construct a larger cycle stand that allows space for future development.

Impact on Student

- **Enhanced Convenience:** Students will have convenient access to required services without having to venture off campus, saving time and trouble.

- **Cost Effectiveness:** Low-cost food and study materials will enable students to manage their money more effectively.

- **Improved Health & Infrastructure:** Periodic water cooler maintenance ensures consistent availability of drinking water, and better cycle parking is a success campus-wide.

- **Productivity Boost:** Students can spend more time on studies and co-curricular activities with fewer interruptions and better access to resources.

Background and Groundwork

- Engagement with the student community revealed common challenges faced by students during emergencies and urgent needs of essentials in the vicinity of the Nalanda Classroom Complex.

- According to reports from the institute's student-run media body, the water filter and cooler facilities in the Nalanda Classroom Complex do not meet the required standards

- Informed interviews and anecdotal evidence suggest that better facilities would significantly impact daily campus life, resulting in more systematic intervention.

Stakeholders Involved

- **Student Community:** Primary users and main respondents for usage and feedback patterns.

- **Institute Administration:** For approval, policy direction, and resource allocation.

- **Vendor Partners:** Local eateries and printing/stationery shops that can provide the services at a reasonable price.

- **Maintenance and Infrastructure Teams:** Look after water cooler maintenance and new cycle stand facility planning.

- **Alumni & External Consultants:** Potential valuable sources of information, funding, or partnership opportunities to ensure the sustainability of the projects.