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Centre for Innovation (CFI)
Indian Institute of Technology Madras

Application for the WebOps and Blockchain Club Core team, Centre for Innovation (CFI), 2023-2024

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1. Motivation -

- As a part of project member in Webops and blockchain, I have seen a lot more potential than CFI in general. It certainly lacks in working to its full potential, maybe due to Covid 19.
- There is a lack in team culture, club bonding conducting proper events such as research conclave, Project Managements etc.
- I want to dive deeper and take out the maximum potential CFI it has and make it a brand not only in the institute but in the whole world. This is one and most important motivation I have.
- I desire to contribute to the success of the largest and the most active student body in the institute. And I am Willingness to put in the time and effort required for the position and a strong sense of responsibility.

Strength -

- I don't leave something till it is completed. I am highly committed towards completion of any task I am assigned to or towards the betterment of the club and CFI in general.
- Willingness to adapt to changing situations, adjust plans, and take on new responsibilities as needed to meet the club's goals and objectives.
- Deeply committed to the club's goals and objectives, and motivated to work towards their achievement with unwavering dedication.

Skills -

- Excellent organizational and multitasking skills.
- Ability to overcome challenges with determination and perseverance.
- Detail-oriented and proactive approach to tasks.
- I always like to take the lead.

2. The issues that are faced by CFI -

- The number of applicants is reduced significantly, especially in software related fields. Students are more attracted to other clubs like E-cell, Shastra, Saarang etc.
- Due to pandemic when the club activities were shifted to online mode, people lost interest and enthusiasm in the club and its activities.
- There is a lack of knowledge transfer between the ex-core member and the new core number, as the ex-core members got pass out and new core members don't have proper knowledge how CFI works
- There is a significant reduction in the open house audience, earlier a lot of audience used to come to open house, and it was a good way to display the club's capabilities to them.

3. Some of the challenge that will be faced by CFI are-

- Managing the workspace – It will be very hard and crucial to manage the workspace and provide space for every club, there should be separate space given to each club so that they can do their project work and team meeting.
- Managing Infrastructure – first, the infrastructure is not yet complete, and a lot of funds would be required to build it and keep track of every club so that they use the infrastructure properly, without damaging it.
- Many clubs will require a lot of other facilities in their club space, and it will be hard to integrate all the machinery in that small space.

- Although CFI new building has a huge workspace, it is still limited and if more and more clubs are formed, they will also need workspace for their team, and it should be kept in mind that they don't feel left out.
- As it will be a space where all the team will be working, there can be a lot of wastage of resources such as power etc.

Ways to trigger such issues -

- Spending Resources carefully – understand the needs and requirements of all the clubs, so that unnecessary wasting of funds should be avoided.
- A feeling of ownership and Responsibility in each member of CFI to use the resources properly, so that they can get most of the resources and their juniors can also have the same benefit as them.
- Creating Team Culture – things will take time to get normal, intentional efforts by leaders and team members to define and reinforce shared values, foster open communication, encourage feedback and continuous improvement, and recognize and celebrate achievements can help create a get and productive environment for the club.

4. To engage the student community, especially first-year students, and renew the tech culture, the Tech Club can organize a variety of events, competitions, and activities. Some examples include:

- Organize a series of Tech Talks where experienced speakers from the industry come to talk about new trends, innovations, and opportunities in technology. This event can be organized virtually, and it can help introduce first-year students to the club's activities and the world of technology.
- Organize hackathons where students can come together to collaborate on developing tech solutions to real-world problems. These events can be a great way to engage first-year students and build a sense of community around the Tech Club. This can be done in collaboration with tech-soc.
- Host a series of workshops and tutorials focused on teaching students about different technologies and programming languages. These events can be targeted towards first-year students, who may be new to coding or may want to learn a new skill.
- Organize night outs or game nights with the club heads and core members of all the clubs where students can come together to play technology-based games like Among Us or Minecraft. These events can be a fun way to get first-year students interested in technology and help them get to know other members of the Tech Club.
- Host tech competitions like coding challenges, app development contests, or robotics competitions. These events can be a great way to showcase the technical skills of the Tech Club's members and inspire first-year students to get involved in technology.
- Organize community outreach events where the Tech Club members can use their technical skills to help local organizations or non-profits. These events can provide first-year students with opportunities to apply their skills in a real-world context and make a positive impact in their community.
- By organizing a diverse range of events, competitions, and activities, the Tech Club can engage first-year students and renew the tech culture on campus. It is essential to ensure that these events are inclusive and welcoming to all students to ensure maximum participation and engagement.

5. Walk in with the Idea, Walk out with a Product -

- Before investing resources in developing a product, it's important to determine if there is a demand for it. Conducting market research can help the club identify potential customers, competitors, and market trends. We

can include alumni, professors and industry people to get better inside which will be very beneficial in the research phase

- Once the market research is complete, the club should define the product requirements, including features, functionality, and design. This will help ensure that the product meets the needs and expectations of the target market.
- Create a project plan - The club should create a detailed project plan that includes timelines, milestones, and budgets. This will help the club stay organized and on track during the product development process.
- Before developing a final product, it's important to build a prototype to test and refine the design. This will help identify any potential issues or areas for improvement. Many professors and other alumni can help in this stage as they will be giving to many insides helpful for the project.

6. To promote a stronger and closely knit community, improve professionalism in projects, events, management, and retain senior members and projects, the Tech Club can take the following initiatives and strategies:

- Develop a mentorship program where experienced senior members can mentor and guide junior members in their projects, events, and management tasks. This will help build a strong sense of community within the club, facilitate knowledge sharing, and improve the overall quality of projects and events.
- Implement project management tools and techniques to help manage projects more efficiently and professionally.
- Host workshops and training sessions on professional development skills like communication, leadership, and time management. These workshops can help members develop essential skills that will benefit them both in the club and in their future careers.
- Organize team-building activities, such as retreats or social events, that can help build camaraderie among members and foster a strong sense of community within the club.
- Establish a recognition and awards program to acknowledge the hard work and achievements of members. This can include awards for outstanding projects, leadership, or teamwork, and can help retain senior members by showing appreciation for their contributions.
- Maintain engagement with alumni who were part of the club to help retain senior members and projects. Invite them to participate in events, mentorship programs, or provide guest lectures or talks to share their experiences and knowledge.

7. To address the issue of lost project knowledge and lack of documentation, the Tech Club can implement a plan that focuses on centralizing project documentation and knowledge transfer. Here is a plan that can be implemented quickly and effectively:

- Establish a central knowledge management system that all members can access and contribute to. This system can include project documentation, code repositories, meeting notes, and other relevant materials. This will ensure that project knowledge is centralized and accessible to all members.
- Appoint a Documentation Manager responsible for overseeing the documentation process for all projects. This person will ensure that all project documentation is complete, up-to-date, and stored in the knowledge management system. They will also be responsible for coordinating with project teams to gather necessary information and ensure that all documentation is reviewed and approved.
- Provide project teams with standardized templates for documenting their projects. This will help ensure that all necessary information is captured consistently across all projects and clubs.

- Establish a review and approval process for all project documentation. This process will ensure that all documentation is reviewed by multiple members and approved before being added to the knowledge management system. This can include the project lead, the club head, CFI head etc.
- Provide training and onboarding for all members on how to use the knowledge management system and the importance of documenting their work. This will ensure that all members understand the importance of documentation and how to contribute to the knowledge management system.

8. There are several avenues for sponsorship that the Tech Club can pursue. Here are some strategies to create opportunities and potential deliverables for sponsorship from both the perspective of a club/team member and a core team member:

- Reach out to local tech companies and corporations that may be interested in sponsoring the club's events and projects. Offer sponsorships in exchange for recognition at events, logo placement on promotional materials, or access to the club's network of talented students.
- Work with the university's technology department or other relevant departments to secure sponsorship for the club's events and projects. This can be in the form of funding, access to resources, or other types of support.
- Create a crowdfunding campaign for the club's events and projects. This can be done through platforms like Kickstarter or GoFundMe. Offer rewards for different levels of sponsorship, such as branded merchandise or VIP access to events.
- Reach out to alumni who were part of the club to solicit donations for the club's events and projects. Offer recognition for donations, such as a plaque with the donor's name at an event or a mention in the club's newsletter.
- Reach out to companies or individuals who may be interested in donating goods or services that can benefit the club's events and projects. This can include equipment, software licenses, or other types of resources.

9.

The reason behind the poor performance in the inter IIT tech meet may be due to -

- One of the biggest challenges can be finding enough time to train and prepare for competitions, especially if team-members have other commitments like Academics.
- Team-Members of the PS might have insufficient knowledge of all the technical stuff or the current tech stacks.
- Competitions with other IITs can be stressful and put pressure on club members to perform well. It's important to create a supportive and positive team culture that helps members manage stress and build confidence.
- Depending on the resources available to the club, it may be challenging to access the necessary equipment and technology to compete effectively. Finding creative solutions and leveraging available resources can help overcome these limitations.
- In a team-based competition like Inter IIT, communication and collaboration are critical to success. Ensuring that all club members are able to work effectively together can be a challenge, especially if there are personality conflicts or communication issues.

To overcome such issues, we can follow some practices such as -

- I would make sure that my club members understand the purpose of the club and the expectations for competition. This includes setting goals for what we hope to achieve.
- I would encourage my club members to work together and build a strong team culture. This includes promoting collaboration, communication, and respect among members.

- I would encourage my club members to seek feedback from Student Advisors and ex-core members to find out what will be the best possible solution for the PS. This includes reflecting on our Research on the statement and identifying areas where we can improve.
- I would make sure to celebrate our successes and recognize the hard work and dedication of our club members. This includes acknowledging individual and team achievements and showing appreciation for everyone's contributions.

10.

Techsoc –

- They are the technical society of the institute; they are mainly responsible for conducting inter-hostel events and tech events in the institute.
- They are responsible for promoting tech culture in the institute. They also manage inter-IIT events.
- Integrating with them will bring various opportunities for all the clubs in CFI. Clubs will be able to promote technology by conducting this type of event.
- They will be conducting events and we will be collaborating with them to provide technical support.

Shastraa –

- This is the annual tech fest of IITM, this includes technical sessions, speech and everything related to technology. Collaborating with them will be in terms of workshop and conducting sessions.
- They will be approaching us if they need any technical assistance or for conducting technical sessions.

Vision and Mission -

Motivation -

I have worked as a project member in the club, and I have seen a lot of potential in the club. This club can have a huge benefit for non-CS branch students as they can get a good hand with technologies and how actually the things work. They can get hands-on experience on the projects, which cannot come through theories or videos. Although our club has not reached the potential that we actually have. I want to bring out more potential out of the club and make projects that go to startup-level or mass deployment.

Vision and mission -

My vision is simple to make people more interested in software development and to create innovative software that serves people. Make people educate about the web3 and blockchain as many of them are unaware or have a wrong perception about blockchain. And the current projects to take them to a successful level.

Technical experience -

I have worked as a Project member in CFI Webops and Blockchain club of Land registry on blockchain project. I know – html, CSS, JS, react, MongoDB, express, node, Ethers.js, solidity, hardhat, RESTful API, Python and C++.

Strength -

- I am very passionate about software development and technology.

- I always appreciate innovation and new ideas and want to use the latest technology.
- I don't give up on any task I am assigned to till the very last moment and until I am satisfied.

Weakness -

- I always take the biggest role in the project, which in turn makes me suffer a lot. This will surely change when I become core member and lead a project.

At the end of my tenure -

- I want to see at least 2 projects turn ahead and finally reach a stage where they can have value.
- I want to see that all the PMs have a good knowledge of software development and feel interested in the project. in short, I want to see their success.
- Club getting recognition and popularity all over the insti and India.
- Club getting more and more industrial projects and collabs from various industries that need software development for them.
- Most to see more and more people wants to join the club as a PM or coordinator and our club blooms in insti.

Expanding The Club -

I think there is a need for expanding our club to a complete Software Development club. As of now, there is no such club that is subjected to sole software development, and an organization like CFI must have a club that offers such things.

Pros -

- This will be an effective way of attracting more people to our club, and if more people show interest, then we have more applications from which we can pick our PM team.
- We will be having projects that cover every aspect of software development, not only restricted to WebOps and Blockchain.
- Interdisciplinary projects will be increased exponentially. We can collab not only with the clubs that are present in CFI but also with other clubs or organizations that need software development.
- This will lead to a way of developing a project up to industry level.
- This will be even useful of the PMs as they will not only explore the development side of software but every expect of the software development.
- This will also help us to grow professionally.

Cons -

- Initially it will be hard to manage all the projects and PMs as our club size will increase.
- Choosing of good PMs will be an issue and there might be shortage of the PMs.

We will not divide in terms of what vertical they are working on for e.g. - webops or blockchain rather we will have a project that consists of every aspect of software development. For e.g. - a mobile application backed by blockchain technology, this project will cover both app, web and blockchain development. Now the main task is how do we include other SDE aspects such as cyber security, devops and other vertical. Our primary objective would be development so first we will be developing a basic MVP for the project once it is done, and the project has great potential then we can continue this project and try taking it at a startup level. And for that we can hire PMs for devops and cyber security in the subsequent phases, so that they can make the project more secure from cyber-attacks and test it properly before

the final or mass deployment. This will be the best way to include other aspects without affecting the structure of the club and PMs will have a different sector to choose from.

We can start implementing this in the projects what will be continued next year, for example – patent protocol at time of final production, there will be a need for devops and cyber security before final deployment of the project.

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Club Structure -

Club Structure -

- **Head** – 2
- **Strategists** - 4
- **Project Members** – 4 or 5 depends upon the project.
- **Coordinators** – 6

In my opinion,

- only one project should be led by one core member because they will be focusing on a single project and will come up with good results, see this year we had around 9 projects in total and out of which only few of them were working properly, rather we can take around 6 – 7 projects and make them work.
- If we want quality projects, then there is a need that core members to only lead a single project. It is a waste if we take up 2 quality projects and fail to make something out of it. Quality projects need time and focus.
- There might be SIPs which will only take technical support from us.
- I think there should be 5 – 6 coordinators, one from each project, if there is a shortage in the number of applications for the coordinator post then one guy from the project team can be asked to become coordinator, this will be beneficial for the project as well as the club cause if we have a smaller number of Coordinators, it will be hard for them to manage the project and club activities.
- Each project can have 4 – 5 members.
- I prefer quality projects over quantity.

Coordinator -

- To conduct club activities and events.
- They must take us new initiative which will be helpful for the club and will add value to the club.
- They should also do of the club and help in promoting the club in general.
- They will also be taking summer school lectures.

They are different from project member as PMs only look after the project and not the club and its activities, whereas a coordinator will be looking after the project and the club and its activities.

I want to introduce a Supporting team to the club -

- This will be a team of 4 – 5 members that will be supporting all the projects of the club in general.
- They will be helping finalize Ui/Ux for all the projects.
- Making templates and posters for the club and the projects.
- Making presentations for the pitching projects in some meetings.
- Handling the Social media Accounts, PR and outreach of our Club.
- Helping in organizing events.

Other Stake holders -

Faculty Advisor -

- Whenever the club needs some technical support or guidance, we can approach him.
- He is our POC with the DOST and if we need some resources from Dean then we should contact him, and he will help us to approach dost.
- If the club needs some changes Such as, Changing name or Number of heads etc. We will be needing his approval.

Student advisor -

- They are there to help the core members and the club by giving them proper guidance.
- They consist of ex-core members of the club.
- The core members can consult them whenever they have some issue regarding tech, activities or any event.

Managerial team -

- If the club wants to organize some event, they can contact the managerial team.
- They will be looking after the funding of the event.
- They will be having some budget for the club from which we can buy servers or other software.

CFI Head-

- Whenever the club needs to contact some club or someone outside CFI for e.g. - CoCas, it will be don't through CFI head.
- He is the POC of the CFI and any proposal can be passed through him.

Current Projects -

- My vision about the current projects -

Land Registry –

- It was a D-Nft based solution for storing land details on blockchain. The current land registry process has too many loopholes and threats. And to solve them we have used blockchain to store and map land detail with the landowner.
- It can make land registry more secure, transparent, prone to hacking, easily Manageable etc.
- Unfortunately, the current PMs are not willing to take this project forward as it will have many government and political restrictions.

Patent Protocol –

- It was a blockchain based solution for Storing patient.
- As a current scenario there is no centralized Database that Stores patient, institute needs to buy the subscription of a company for a year to securely store them.
- It has great potential as it will make the patent process easier, cheaper, less time-consuming etc.
- I will take this project forward for sure in the upcoming year and will be leading this project as well.

Universal Credit System –

- A Blockchain Based Credit system which will provide security checks on the grades and credits of students.

- When you apply in company or for higher Studies, you cannot provide your fake credits as it can be easily verified through blockchain.
- Now no one can create fake degree from any institute as the credits can only be posted by the institute.
- It too has great potential, and it will be made for the institute next year and I will be in touch with UCS.

MSMEs –

- small and medium scale companies don't get loan easily, so this was a blockchain based solution where the small and medium scale industries will be given loan in term of token based on their credits.
- It tries to solve the problems of small-scale industries, but it business planning issue as if the industry gets bankrupt, they won't be able to pay back the loan and hence there would be no investor interested in this project with a little more ideation on business modal like make investor invest on 100s of MSMEs so that id some industries get bankrupt he will still be in net profit and such more ideation.
- I would surely like to take it forward.

InstiSpace –

- This was the app that was created for the students at the institute. It has all the essential features in it and was launched a few days ago.
- This app was the need of students as they lacked proper platform for various stuff like club related posts, lost and found, forums and connect to people and much more.
- This all as of now, solves all the basic needs of the students and a lot more features can be added in this application to make it all in one app, and this will happen as the time passes on and people will suggest more such features.
- We will be maintaining its server and the application and will be adding more security to the app and adding new and essential features in the application.

Chennai water logging –

- It was built to deal with the water logging issue that people generally face in Chennai during rainy season.
- This was function and is deployed for public use, as of now we are only transferring data to the government that is received by the users, but there is a plan of including this app in the Namma Chennai app and we will be only giving them API so that that can include it in their backend.
- It should surely be included in the Namma Chennai app as it will be very useful at the time of rainy season in Chennai.

Voting System -

- This was built to cure the current voting system, the current voting system has a lot of loopholes, transparency and trust issues.
- The solution to this was to build a blockchain based voting system, this will solve all the problems that are faced in the voting system.
- The current insti election was held on that voting portal that was based on the same technology.
- I will be managing this voting system and will be improving it time to time according to the need.

CVDental –

- This app was built for the assistance of doctors.
- This was proposed by one of the alumni as he wanted a software solution for the doctors.

- This led of this project was given back to him and he hired the PMs as interns and his project.

Virtual Animated Assistance -

- This project was helpful for the website as whenever the customer needs assistance on the website.
- This project used the animated prop which will be roaming around whole screen and will be guiding the customers.
- This was also backed by the ml model that will be providing assistance.
- This was a great project to improve User experience on the website.
- This project was left in the middle as the team members left the project and were not ready to continue the project.

Farm app -

- This was all in one app for all the needs of the farmer. This app used web scraping method to collect data from the Internet and use the ML model.
- This can be used as only source of trust for the farmers this project is the need of farmer in India farmers generally face a lot of issues some of them are lack of information about the government policies, the market and industries.
- This app crashed due to the same reasons.
- This app will solve all their needs. This project has a lot of potential and I will be taking it next year with some upgrades in this project and these upgrades and my new project idea is discussed in the new project section below.

Job Aggregator -

- This was all in one app for connecting job seekers to the employer. This app will fetch data from all the different platforms available and will help users to find the job they are seeking more quickly.
- Users can set a filter to find the most suitable job for them and they will be able to upload multiple resumes or cv and choose from them later.
- It had a lot more features that can simplify the application and job seeking process.

Events -

Summer School -

- It was organized in the summer.
- Main goal of this event was to teach people about basic of web development.
- Although it is a great initiative but very few people actually attended it online.

Portfolio website building session -

- A portfolio website allows you to showcase your work in a professional and organized manner.
- It shows that you are serious about your work and have taken the time to create a professional online presence.
- This session helps people to create a portfolio website that will showcase their skill and professionalism.

24-hr hackathon with techsoc-

- It was an event where individuals or teams come together to collaboratively work on a project, typically involving software development, coding, and problem-solving.

- It was one of the best events that happened last year. The club saw a good number of participants at that event.

Hacktoberfest with corridor platforms -

- It was a hackathon that was organized by our club and the problem statements were given by the corridor platforms.
- This was also a great event and a lot of people including my friends participated in this event.

Research conclave -

- This was an event in which all the research-based projects were displayed.
- The main objective of this event was to bring attraction of peoples and especially professors to our project, so that they can help us in that project and provide useful insides and contacts.

Shastra Workshops -

- We had various workshops on blockchain, web dev, app dev, cloud computing etc.
- This was conducted to educate Shastra audience about software development.

Student Elections -

- Current elections were held on blockchain as this was the very first election in India that happened on blockchain.
- We even got India book of records award.

Strength -

- We stick to our motto of “Walk in with the Idea, walk out with a Product”, promote innovation and try to provide software solutions in various fields. Like agricultural, e-state, finance etc.
- To be part of the club the only thing you need is enthusiasm and interest to work on a project. You join in as a newbie and go out with a good knowledge of software development.
- We don't have hardware requirements as some of the clubs do, so there is no blockage in our progress, this is one of our biggest advantages.

Weakness -

- One of the biggest weaknesses that our club has is PMs after a period start losing interest in project and team.
- There is no proper team bonding and team culture in our team.
- The club's potential is not properly utilized and extracted.
- Most of our projects get scrapped due to some reason or other, this just spoils what potential we have and eventually lowers the standard of our club.
- No proper communication, network or community for the Club. There is no proper knowledge transfer from the club head to the project members.

Opportunities -

- A book can be written on all the opportunities that we have, every sector requires software for them.
- We have seen some of the most creative and innovative software solutions for complex problems.
- We have the opportunity to build a professional connection with the industries, companies and alumni etc. That can help us to take any of our ideas to startup level.

Threats -

- There is no proper timeline and checkpoints for the PMs to learn. This in return makes a bad impression on our club and people won't value us.
- All the weaknesses can turn into threats if we don't solve them, team bonding and culture will eventually break the club into pieces.
- We should try to build our projects neatly and professionally and take them forward so that at least it is used somewhere. If our projects keep on getting scrapped, then we won't be having anything to show, and this will even impact us professionally and bring in more industry projects and collaboration.

collaborative projects -

- This is the best way to extend our reach and build more projects for different sectors.
- This is beneficial for different sectors as they will be getting a software solution that will help them.
- But managing this kind of team is harder, and there is a high chance that these projects might get scrapped.

Case study - Farm App was one such example, the initial idea was very good, and the only problem was the team comprised of 2 tech PMs and 2 non-tech PMs, they gave too much time on research and apparently the PMs lost their interest as they were not able to see any progress in the project, and we cannot expect any kind of technical support from them. So, although the idea was good, and could have been one of the best collaborative projects but got Scrapped.

Some of the solutions to this kind of Problem -

- For collaboration with any other non-tech vertical, it is important to see how enthusiastic they are, this can be done by keeping 4-5 meets with them and giving them some research work.
- Instead of making a team of non-tech and tech people, we can make 2 teams one is a tech-team which will comprise of 4 people and the other is a supporting team or non-tech team comprises of 2-3 members; they will only help us with research work and not with technical stuff.
- The tech-team will have the same learning curve as other projects as discussed in the project management section. This will keep their interest in the project and track their progress.
- They won't be having a research stage as the research will be done by the supporting team side-by-side the learning stage, they will straight away start with the project once the learning and research stage is done.

New Projects -

Blockchain Based Agricultural Supply chain -

Problems in the agricultural supply chain -

- India loses 20% of its agricultural production due to improper logistics.
- The journey of products from farm to fork goes through several steps and at every stage, some wastage happens.
- Most of the companies procure agricultural products through middleman. Their strong lobby and control over the market separates farmers from corporates and companies.
- This complexity of chain increases the price and slows down the speed of products to market. The longer the product is in the market, the higher will be pilferage and inventory holding cost, which finally adds to price.

- Price fluctuation is one of the major issues, as some of the middleman holds the produced and create fake scarcity.

Power of using blockchain -

- By allowing information to be traced across the agricultural supply chain, blockchain agriculture enhances food safety.
- Tracing back the origin of the product can be used to improve the overall quality of the product.
- The data stored on blockchain can improve supply chain transparency and eliminate concerns associated with illegal and unethical operations.
- It can also make it easier to track any contamination or other issues back to their source.
- Blockchain can help implementation of intelligent farming and index-based crop insurance systems.
- The data can be analysis and can help to study the agricultural trend.

The use of this technology can help increase food security and lower the risk of corruption. This can be an improved version of the previous year's Farmers App Project which was dropped.

Potential Audience – All the ones who are involved in the Agricultural supply chain. For e.g. - farmers, consumers, middleman, government etc.

Blockchain based Mutual funds -

Many companies are working on stocks system on blockchain that certainly more useful than the traditional method.

I have come up with a Blockchain based Mutual funds system idea. Some of the benefits of it over traditional methods -

- Users can invest in the off-chain or on chain stocks through mutual funds on blockchain.
- Increased transparency: Mutual funds that operate on a blockchain can provide increased transparency in terms of their investment holdings, transactions, and fees. This can help investors make more informed decisions and increase trust in the fund.
- Mutual fund managers or companies cannot misrepresent the fund's performance by inflating the reported returns, misrepresenting the risk level of the fund, or providing false information about the fund's holdings.
- Blockchain based mutual funds can allow investors to buy and sell fund shares more quickly and easily than traditional mutual funds.
- They will have a wide and diverse range of audiences to test their application and find potential bugs and faults in the system.
- Blockchain based Mutual funds will enhance safety of investments by traceability as mutual funds are regulated by the Securities and Exchange Commission (SEC) and are subject to various rules and regulations designed to protect investors.

Blockchain Based R.E.I.T Investments -

Real Estate Investment Trust – just like mutual funds, in this case the funds are invested to buy the real estate by the fund manager. Making this system on blockchain brings in many advantages with it some of them are -

Advantages -

- Increasing transparency in the system as, Users will be able to track what all Properties their funds are invested in, this will gain their trust.
- Their investments will be secured, and any potential risk of fraud will be reduced.
- Buying and selling the Funds would be faster as compared to traditional method.
- Mal practices by the Company will be stopped.
- Users can decide which Funds do they want to invest in according to the past performance of the fund according by the blockchain data analysis.

Adding one more idea in this would be -

Blockchain Based Agricultural Investments Funds -

This will be beneficial for farmers as well as the investors.

Advantages -

- Medium and small-scale farmers will receive funds from the investors which can be used by them to buy the seed and other equipment, some percent of the total revenue from that crop will be given to investors.
- Farmers who own large pieces of land or the farmer who have unused land can lease their land to the company and will receive some percent of the total yield of the crop. These companies will take funds from the investors and in return will give them profit.
- The investors can also in other Sectors of Agriculture, for e.g. - Storage, Transport etc. This investor Will gain profit according to the investments.
- A Mutual funds type of system can be created, which will diversify their investments and reduce the risk.
- Farmers can track their past performance and can take consulting accordingly.
- Farmers will have more excess to the market which will help them gain better returns.

Blockchain Based User-Testing Dapp -

A decentralized system that will help companies test their Software by letting users use their services, they will in return get rewards for doing so.

Challenges -

- Limited scope.
- Lack of transparency: Some paid testing services may not be transparent about their testing methodologies or the qualifications of their testers, which can make it difficult for businesses or individuals to evaluate the quality of the service.
- Online scams: These include phishing emails or fake websites designed to trick people into providing personal information or making payments.
- Identity theft: This occurs when someone steals another person's personal information, such as their name, date of birth, or social security number, to open bank accounts or credit cards in their name.
- False advertising: This is when businesses make misleading or exaggerated claims about their products or services to deceive consumers.
- Falsifying test results: Testers may manipulate or falsify test results to make it appear that a product or service is performing better than it is.

- Hidden fees: Testing companies may not disclose all the fees and charges associated with their services, which could result in unexpected costs for their clients.
- Payment fraud: Testers may manipulate payment systems or steal payment information to obtain funds or access to financial accounts.
- Refusal to pay: Clients may refuse to pay for testing services that were provided, which could result in financial losses for testing companies or individual testers.

Advantages of Using Blockchain -

- A smart Contract can be developed to Create trust between the client and the testing company, the Tester and the testing company. So that users don't get scammed and will receive payments securely.
- The Testing Data can be analyzed by the company and for the further improvement of their software.
- They will have wide and diverse range of Audience to test their application and find potential bugs and faults in the system.
- Everyone will be uniquely identified and cannot make false claims.

Target Audience – Testers (The one who apply for testing App), Clients (the companies who want to get their app tested).

Blockchain Based insurance -

Challenges -

- Premium diversion: This occurs when an insurance agent or broker collects premiums from policyholders but diverts the funds for personal use instead of forwarding them to the insurer.
- Identity theft: This involves criminals stealing personal information, such as a policyholder's name and Social Security number, to fraudulently obtain insurance policies or make false claims.
- Overbilling: This occurs when healthcare providers or other service providers submit inflated bills to insurance companies for services that were not actually performed or were unnecessary.
- Churning: This occurs when an insurance agent or broker convinces a policyholder to cancel an existing policy and purchase a new policy, often with the same insurer, in order to generate additional commissions.
- Premium evasion: This involves policyholders failing to pay their insurance premiums, either intentionally or inadvertently, resulting in a loss of coverage.

Advantages -

- Blockchain-based smart contracts can automate insurance policy execution and payouts, reducing administrative costs and improving efficiency.
- Blockchain's transparent and decentralized nature can provide increased transparency into the insurance industry, including policy terms, premiums, and claims.
- Blockchain can enable secure and efficient sharing of information among insurance companies, policyholders, and third-party service providers, reducing the time and cost associated with claims processing.
- All the policies and charges will be stored on blockchain, companies and agents cannot fraud with the policy holder in terms of hidden charges or making additional commissions.

Target Audience – Anyone who wants any kind of insurance, for e.g. - life insurance, property insurance, crop insurance etc.

Blockchain based CDN system -

- Traditional CDNs are typically centralized, meaning that content is stored and distributed from a few central servers. In contrast, a blockchain-based CDN can be decentralized, where content is stored across multiple nodes in the blockchain network. This can help improve reliability, availability, and faster delivery of content as content is distributed across multiple nodes, reducing the risk of a single point of failure.
- Blockchain technology is known for its inherent security features. These security features can help protect the integrity of the content and prevent unauthorized access or tampering.
- Content creators can be compensated directly through blockchain-based CDNs using cryptocurrencies or tokens, without the need for intermediaries. This can enable a more direct and transparent revenue sharing model, where content creators receive fair compensation based on actual usage and consumption of their content, without relying on complex revenue sharing agreements.
- Blockchain-based CDNs can provide improved privacy compared to traditional CDNs, as the content can be distributed across multiple nodes and encrypted using cryptographic algorithms.
- Blockchain-based CDNs can be highly scalable and flexible, as they can leverage the distributed nature of blockchain networks to accommodate changing demands for content delivery. New nodes can be added to the network to increase capacity, and content can be replicated and distributed across multiple nodes to improve performance and reduce latency.
- Blockchain-based CDNs can provide global accessibility to content, as they are not limited by geographic boundaries or traditional internet infrastructure. This can enable content delivery to remote or underserved areas where traditional CDNs may have limited reach, providing more equitable access to information and digital services.

Timeline – this is discussed in detail in the Project Management section.

Application, Recruitment and Tenure

Applications -

The application will be comprised of the same two parts described above. It will have two sections, a general section and a specialized section.

general section will be comprised of one general section which will have a JavaScript related question, that will just make them introduce to JS beforehand and then some basic questions to web related stuff like html and CSS (no code).

specific section in which we will ask questions related to specific Projects.

Advantages -

1. We will have applicants that have a Basic knowledge of JS and Basic web stuffs it will be beneficial for the club.
2. This won't be affecting the number of applicants as there will only or two questions about JS and they will be easily able to manage it. And then making them learn stacks would be easier.
3. Easy to pick who is really interested to be a project member.

Good number of applications -

- When we will release the app for the fresher batch. We will be promoting it on all the social media accounts and instispace as well.
- In the grand event, we will be pitching ideas of new projects in such a way that they will be interested to work on the projects.

- The application will have a proper description of the projects from a link to the notion page where there will be a detailed description about the project.

Recruitment Factors -

- They should have basic knowledge of JavaScript and web development basics.
- Even if they have solved the problem given to them in the application, I won't recruit if they don't have proper understanding of the topic and only mug up the thing.
- They should have 2 PORs at max, cause many of them just priorities other PORs more.
- I will try to recruit more people from 2nd year as 3rd year people don't really work on the project as they are busy with the acads and placements.
- They should have high enthusiasm and willingness to work on the project.

If the club fails to receive enough applications -

- I won't be re-releasing the app again at that time as people might be busy with the acads or applying in some other club, rather I will release the app later some time.
- I will drop some of the projects and work on the best project with the valuable PMs that we will have.
- Try to promote our club as much as possible on social media platforms and through the grand event discussed below.

If the project member becomes irresponsible -

- First, I will ask him if he is facing some issue with acads or with life in general, if the reason is genuine, I will give him some time to solve the problem and then start working on the project again.
- If he does not have any reason to not respond, then I will give him a strict warning and ask him if he wants to continue with the project or not.
- If he doesn't response for a long time, then I will kick him from the project as he won't add any value to the project anyways.

To counter such things -

- It is better to first know more about your PMs and then assign them projects.
- Best way to know our PMs is through making them work on a task and see how they respond to the task.
- This task will help them learn the tech stack and will make them see what progress they have made in the past few months.

If somehow, I am forced to kick a PM out of the project, I will distribute the project between PMs such a way that whole development of the project does not depend on a single head but is distributed equally between the PMs. If the PM gets removed, either I will Release the app once again if there is a need to more PMs or I will ask other PMs to create a basic application to be displayed on the Open house and the rest of the project will be continued after that. This won't affect the project's progress.

Initiatives -

Some of my initiatives includes -

A dedicated notion page for our club -

- A notion page for our club. This will be an open-source platform for all the coding related stuff.
- It will have details and GitHub repo link for all the completed projects and documentation of the projects with it.

- It will have a section that will have details of all the stacks that are previously used, this will also contain the useful documentation about the stack and the video links to learn it.
- In the same section there will be a corner for all the bugs and errors and updates for each library or framework, this will be a section where PMs, coders, strats, heads will update news error or bugs, or system updates they will go across and upload code in a common GitHub account's repos managed by the cores.

Why will the PMs be updating the notion page -

- Habit of using notion page and GitHub should be indulged in the PMs from starting of the tenure.
- Each member will receive points based on what errors they solve and what new updates they put up, what stacks they add in the page. This will act as an incentive.
- These contribution points will be printed on their certificates.
- Their contribution points will have weightage while selecting core for upcoming year.

Events -

Grand Club event -

- This will be an orientation type of event organized around August, after the new fresher batch arrives, this will be managed and funded by the CFI management team.
- The main purpose of this event is to make people and the upcoming batch aware of our club.
- This can be organized in the new cfi building.
- It will have various events and we will display our projects and specially the standout projects like instispace, CWL and voting system etc.
- We will be talking about the upcoming projects and ideas so that we can get a good number of applications for the projects as well.
- We will be having various fun activities. So that the audience don't feel boredom in the event.
- We will be distributing goodies. To ensure maximum people participate.

Advantages of organizing this grand event -

- People will get aware about our club and most importantly the upcoming fresher batch because they will be our potential PMs.
- This will even make them aware of Instispace and we can attract more people to our platform. This will even make them use our app for essential needs or features, and we will have a huge and responsive userbase on instispace.

Devlo week events -

This will be like the 24-hour web-development that we had but this will be for a longer period, this will make more people participate in the event and the output of the event will also be good in terms of project submission.

- This will be an event for 7 days and this can be conducted in collaboration with tech-soc.
- In this event there will be various questions based on various aspects of software development.
- This will be an event that can be participated in with a team or individually as well.
- For the team we will give them a problem to build a website and projects, the best team will receive rewards and goodies.
- For individuals, we will have various tasks and problem statements, and the one who solves them first effectively and quickly will be rewarded.
- Questions will vary in different levels from toughest to easiest and from web2 and web3, to gain maximum participation in the event.

Advantages -

- More and more people will come and show interest in our club.
- People more often are interested in events that involve project making and problem solving rather than speech sessions.

Timeline for the events – [Link](#)

Link - https://smailitmacin-my.sharepoint.com/:w:/g/personal/na21b004_smail_iitm_ac_in/EYtzn7oYhdHiABngsDmdPkBzDoLTZFh0fQg1HXQQBtGVw?e=tUunlg

- This can be done either in summer when everyone is free.
- Or this will be conducted in September after Quiz1 gets over.
- According to last year's calendar from 4th September to 11th September.

Stakeholders -

- Core members – this event will be conducted by the core members of the club, problem statement, evaluation etc.
- CFI managerial team – the funding and management of this will be done by the managerial team of CFI.
- Tech-Soc – this can be conducted in collaboration with tech-soc.

Networking and Opportunities -

Enhancing the club's social presence -

- Conducting more events like the 24 hours web OPS event that happened this year this will attract more and more tech lovers towards our club and our social presence will be enhanced.
- Collaboration with other verticals and tech sphere such as shastra and techsoc this will be very useful for our club as the audience that they have will start knowing us, especially shastra as they have audience not only from our institute but also from other institutes and other parts of India.
- Bringing more active users to our platform, InstiSpace, their activeness on the platform is directly linked with the social presence of our club.
- Building more applications for the institute and promoting more and more SIPs. This will be very beneficial for the club in all aspects, and this will add value to the club technically and socially.
- Taking up more and more industry projects and public projects. This will help us to enhance our social presence in the industries, this will help us to gain more industrial knowledge and will raise club standards high.
- Engage more and more audience towards our club by educating them about all the successful projects that we have had and the new ideas that we are planning on.

Clubs Professional Network -

- Be in contact with the ex-core members and club members by forming a community. Because they will be the one who will be working in the Companies and can be a part of our professional network.
- Pitching projects that have a lot of potential to the institute alumni so that they can show interest in our project and help us to take that project forward professionally and make professional contacts.
- Connecting with people who are already working in industries and companies will help a lot. This will help a lot with web3 as it is one of the developing technologies and is still in its early phase.
- Maintaining the already existing connections, so that they don't feel disconnected, or you are using them for your own purpose.

- Pitching projects to the industries and bringing their support. Industrial contacts are very necessary and can play a very huge role for club's professional networks as not only will get benefit technically but also, we can get all the aspects related to business and finance for that project this can help building the project as a startup.
- Involving professor in our project. We can seek help from professor regarding project can be very useful, he will provide contacts of various professional peoples in the industries.

This can be done in various forms -

- Making our social media handles and accounts more professional, keeping them up to date, and be active on them reply to the messages and queries.
- LinkedIn account for our club can be very beneficial in connecting and contacting industrial people professionally.
- To build solid and long-lasting relationships, make sure to keep in touch with your professional network. writing a short networking email or sending a message on LinkedIn, let them know what's going on in our club should work. Involving them in projects, in terms of technical support or for their guidance.
- Networking events are excellent if we are looking to expand our professional network and stay on top of the latest trends in your industry, we can connect more and more people in industries and know about various insides.
- Conducting professional meetings and inviting industry experts and alumni to the meetings.

There can be many ways of connecting and maintaining professional networks, just let them know what's going on in our club and know what's going on there.

Inter IIT -

Recruitment of the team member -

- I will recruit team members that will have a basic knowledge of web development.
- For being a part of web3 specific question, they must at least know about the fundamentals of blockchain and must know how to use different frameworks to connect the blockchain.

Composition of the team -

- The team will consist of 5 – 6 people and 1 lead.
- At least 3 of them should have a good knowledge of web development.
- Everyone should have a basic understanding of web2 and web3.

The team should have an upper limit on the number of members as it is very hard to manage a greater number of people in the team and some other problems such as,

- Coordination problems: As the team grows larger, it becomes more difficult to coordinate everyone's efforts and ensure that everyone is working towards the same goals. This can lead to delays, miscommunications, and errors.
- No proper communications in the team.
- In a larger team, it can be easier for individual team members to avoid taking responsibility for their work. That's what happened with the consensus team.

Participating in inter IIT as a contingent is surely a hectic task and most of them would be already working on some project in the club. This will affect the project as they will be more focused on the PS rather than the project.

Some ways to counter this -

- The projects will be divided in such a manner that even though one member is involved in the Inter IIT team, it won't affect the rest of the project.
- The team member will be told that inter IIT gets over they immediately must work on the project.
- The one whom I'm selecting for inter IIT, their project should be in be in a good condition.

Collaboration with tech Spheres -

Techsoc – They are the technical society of the institute; they are mainly responsible for conducting inter-hostel events and tech events in the institute. They are responsible for promoting tech culture in the institute. They also manage inter-IIT events. They will be conducting events and if any technical support is needed then they will approach us, we will be providing problem statements for the techsoc event. We can collab with them If we have a plan of event that needs to be conducted in the institute, it's always better to collab in such event as we will receive funds and we will get good outreach.

Shastra – This is annual tech fest of IITM, this includes technical session, speech and everything related to technology. Collaborating with them will be in terms of workshop and conducting sessions. We can collaborate with them if we have any event that needs audience all around India as they have a very good outreach and can help in making the event successful. They will be approaching us if they need any technical assistance or for conducting sessions on web3, app or any other kind of development.

Nirmaan – This is the team which will be nurture the startups when MVP of the project is ready. They will be funding the startups, helping them pitch the projects to the funders, and making them get connections and insides from the industry and other startup owners. We will be collaborating with them in terms of when we will have MVP ready of any project and the project wants to be taken at startup level then we will be needing their support.

E-Cell – Ecell is the entrepreneur centered organization, they promote the spirit of entrepreneurship in the young youth of the country, they generally collaborate as in when they have some startup plan and they need technical support then they will reach us, and we will help them in technical stuffs. The project will be led by the one whose SIP it was, and we will only help them with tech.

Web3 and Saas -

Reasons -

- People lack knowledge and proper understanding of what web3 is and how does it work.
- People often relate blockchain with cryptos and all the false demotion of the same.
- We as a club somewhat lack in building proper and functional Software for public use.
- PMs often find other works and PORs more important than our club and they are more focused on them.
- Our club is still in its starting phase, and we also face a lot of technical and managerial issues.

How to promote it? -

- Making fresh, scalable and deployable projects other than NFTs or Cryptos. This will change their minds of associating blockchain with cryptos, NFTs or bitcoin.
- Making people educate about what blockchain is and abstract it from whatever perception they have built of it.
- All the projects that have potential should be pushed in phase 2 of the development.

- Once people get to know about what potential our club has in terms of finding innovative ideas and pushing them to startups, they will automatically get attracted to our club.
- Web3 is in its early phase and often there is a lack of proper understanding of technology and proper guidance in this field.

Team Culture -

Maintaining The Enthusiasm and bonding among club members-

- Giving roles and responsibilities equally to each member, they will be given the opportunity to learn each aspect of the project.
- They should be able to see their work being recognized and given importance in the club as well as the project.
- Keeping the goal set and working according to the plan, each plan will include their consent on what and when a particular task should be done. This will reduce the academic conflicts with the projects and events.
- Celebrating their success – this can be done twice or thrice a year; this can be in terms of a treat or some other reward. This will ensure they work more focused and pay more attention to the project. This can be funded by all the core members or some other means.
- Keeping regular meetings – 4 times a month on each Saturday maybe, this will not let them be off track and even plan the up comings for betterment of the project, this will be fun and will increase team bonding in general.
- Sharing ownership of the project - Make them feel that they own the project, and Their work will be preserved and recognized later.

Transfer of Knowledge -

- Keeping everything documented on notion. (One of my initiatives).
- There will be a meeting, once project starts after the training phase of the PMs, in this meeting the PMs of all the project will come together and discuss about what projects they are working on and what stack are they using. PMs from another project can question them, and this will be a healthy discission in general.
- Keeping regular meetings will obviously help.
- There will be a discord chat that will serve as a platform where project members share knowledge and information easily.
- Keeping meetings with the ex-core members will help them know more about the tech stack and what might be the best way of doing the project, and a lot more insider stuff.

Project Management -

There will be 3 Stages in phase 1 of the project, namely – learning phase, research and documentation and then Development phase.

Learning Stage -

Rather than giving random and Un useful tasks it's better to make a full stake application, for e.g. - Blog website. This application will be broken down in small tasks such as –

- Task 1 - they will build the Navigation bar and basic UI for the application with basic routing.
- Task 2 – they will be using list rendering to display posts.

- Task 3 - he will be using express.js to create APIs (very basic need not to functional).
- Task 4 - he will be linking upload section with APIs.
- Task 5 - he will be storing that in mongo DB.

At the end of the 5th Task our Learning Phase will end and we will be starting with the Research and Documentation Phase.

This Task Assignment and team meetings are scheduled as follows -

- We will be having meetings every Saturday afternoon in the new CFI building as mentioned in the tenure.
- Rather than planning for the whole month we will be planning on a weekly basis. Each Saturday we will meet and decide what should be done till next Saturday, Mini tasks assignment, Status check of task, Fun session of the club.
- This will even be useful to have a check on PMs and their activeness and involvement in the project.
- They will be warned if they do not attend the meeting regularly, I will try to talk with them if they are facing any issue technically, mentally or academically, if still they do not respond to them, they will be kicked from the team. This will be the duty of every project led to bring PMs in the meeting.
- Their task will be assigned on notion page, and they will have to do submit the results on the notion page itself. This will make them use to notion and GitHub as well.

Research and documentation Stage -

This phase will include all the research and documentation of the project. This will also include learning of some specific development fields such as – web3, ML etc side by side. There is no specific Task Assignment or submission of the project but if we build 3 more mini tasks it will be great. Task can be (for web3) -

- Task 6 – Writing and deploying a smart contract and deeply understanding the basic terms.
- Task 7 – Connecting smart contracts through Ethers and using contract functions using JS functions.
- Task 8 – integrating it with the full stack website.

The key points and implementation of Research Phase -

- Once the PMs have sufficient tech knowledge, they will be distributed topic for research and will start with the research and learning simultaneously.
- Each member will be asked to Submit their Research on Notion page itself. In the meeting they will be asked some of the general question and if they are not able to answer them, then they must research and bring solutions in the next meeting, in the next meeting their will again be a QNA round and this will go on for the 1-1.5 month.

After research and documentation is done, we will move forward to the development phase.

Development Stage-

First week of Development Stage, we will be discussing about what will be the flow of the application and frameworks to be used. This will be an ideation period in which we will be planning how our project will go.

Form the second week of Development Stage, we will be distributing the project in small parts assigning them to the PMs. They will be given parts which they have to make from frontend to backend. This will not stop the progress and development of the project even if someone becomes irresponsive, busy with some other work or leaves.

There is no such weekly limit on completing the parts they are assigned to. It totally depends on the Project and speed of the team member and the Leds.

Breaking down projects in stages and getting the goals will help in -

- Regularity in the PMs.
- Track progress check of the project.
- Team bonding.
- Project will go as planned.
- Making projects more organized and keeping track of all steps and tasks of the project.

All through there is no guarantee that every activity will go as planned but here is a rough estimation of how I will be leading the project and how it will go - [LINK](#)

Link - https://smailiitmacin-my.sharepoint.com/:w:/g/personal/na21b004_smail_iitm_ac_in/EYtzbn7oYhdHiABngsDmdPkBzDoLTZFh0fQg1HXQQQtGVw?e=tUunlg

Project Review Meets -

There will be a meeting every month after the start of the development phase of the project. This will help tracking the project and will help to guide them if the project has some issues, or somehow project gets off track.

The current and previous cores will be involved in the review meets and the one who have technical knowledge, they will guide the PMs what changes should be brought in the project and what modern frameworks and technology they can use to build the project more efficiently.

Pros and Cons of last year -

Best part -

- In my opinion, the hackathon that we had was one of the best moments of my tenure. It was interesting and fun because we had to work on problem statements in a limited time
- We had the Openhouse and I liked it very much as we had a very memorable and fun time with other PMs of different projects.

Some Mistakes -

- Many of the PMs did not work on the projects and many of them even left the projects so many projects were short of PMs, this may be due to a lack of motivation or team meetings and team bonding, many of them lost the enthu in the project because they were not seeing any progress in the project.
- keeping events in a tight schedule, many events occurred around quizzes and exams which caused low audience and participation in the event.
- no proper selection of Inter IIT contingent team many of them lagged the fundamental knowledge of web development and most of them proved to be not an asset for the team.
- No Proper Meetings were arranged throughout the year.

Solutions -

- While recruiting the PMs there should be specific questions related to the projects, so the PMS exactly know what project they want to be a part of.
- Making PMs learn the stack properly so that they don't find any tech related difficulties in the projects.
- Keeping regular meets so that they don't feel distant from the project or other members and have proper team culture and bonding.
- Giving too much time on the Research will make them bored of the project and the club.

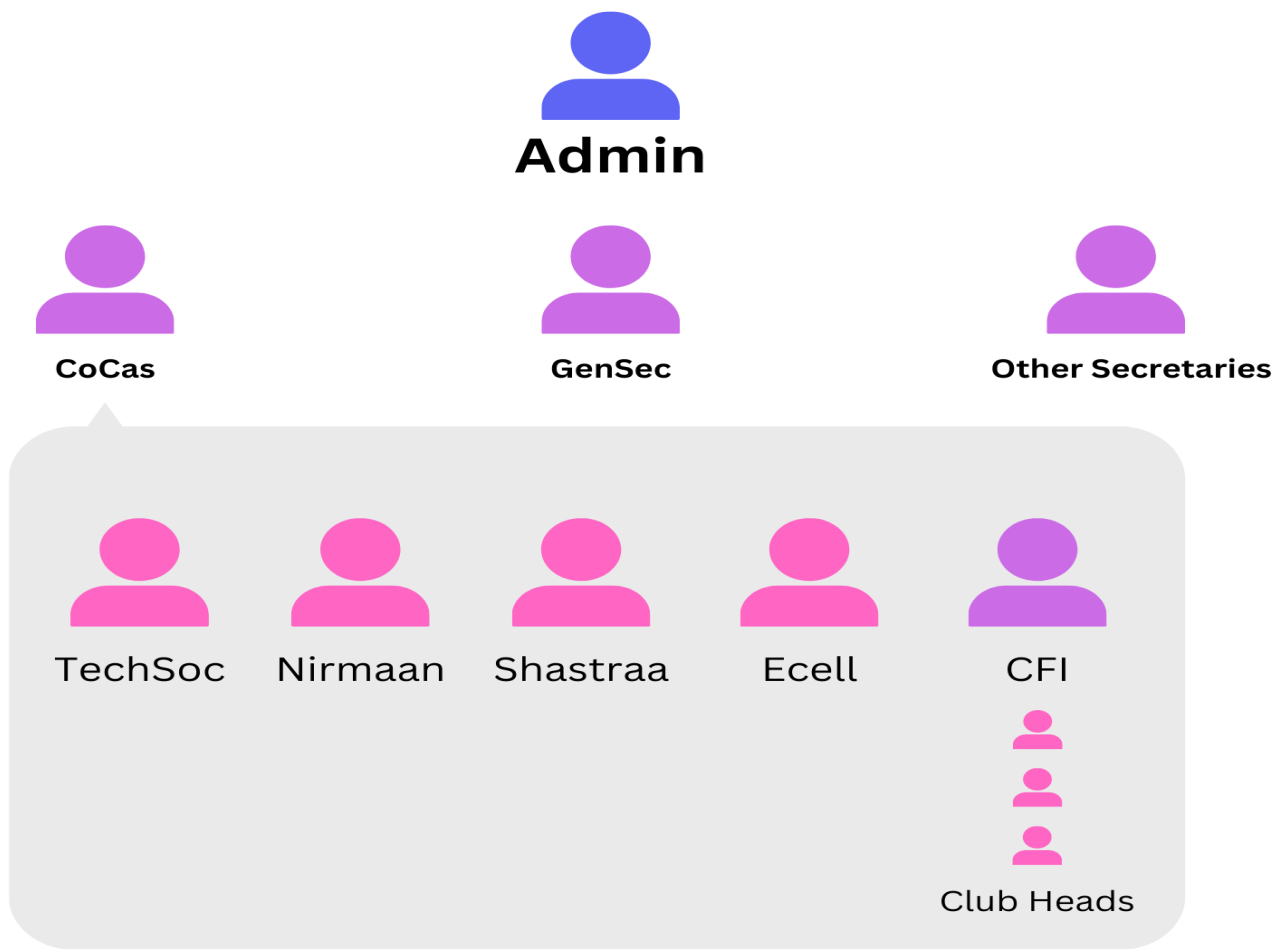
InstiSpace -

First, I don't find any other communication platform within insti; people often use WhatsApp or Instagram for connecting to different people in insti but this limits their reach. As a student I wanted to create a platform only for our college's students, but then I heard that WebOps Club is already working on it, so just like everyone wants such platform.

Some of the Advantages of InstiSpace -

- Connecting People – using this app people can find and connect to people with similar likings. In the Insti which has almost 12k to 15k people, less-interactive people often find themselves alone and most of the time stay in the room. This app will be useful to find new friends with similar liking and enjoy insti life like others do.
- Public Outreach of the clubs and promoting them – Clubs and teams often promote and post events through Smail but that is a huge mess, sometime the one who are genuinely interested in some event might miss that mail, this even leads to lesser audience for the event. Instispace has a feed section that resolves this issue.
- Having a notification before classes. Many students forget about the class, and this can be a huge feature for them.
- Forums – if some have a genuine doubt regarding something they can ask up in the forums rather using the smail, even they can use tags so that forum can target a particular audience.

Role Hierarchy and post approval system -



Admin is at top of the hierarchy tree he has full control of the instiSpace and content in it. Under them there are all the secretaries, for example - cocas, geneses, sportsec, has etc. Under the secretaries there are different leads, for e.g. - under cocas we have techsoc, nirmaan, shastraa, Ecell, CFI. The lower most member of the tree are the LDAP users.

Regarding Post and approval system -

For the feed posts – any lead can add a post regarding their club events and Anyone who are above them can approve it. Their post will be sent for approval to the respected secretaries and the admin because they are higher in the hierarchy tree from them. **CFI** is given sec level power as there are too many clubs and competition teams and CFI and can approve it and it will be shown in the feed posts.

For Forums posts – there is no approval for them, and it will be directly posted.

Moderators or Regulators – If someone reports any post it will be sent to the moderators. There are two types of reports -

- Mal functioning of the app – the post will only be taken down from the users but not from everyone. It will be reported where secretaries and moderators can take actions on the post.
- Sensitive Reports - this post will be taken down from all the users app and it will be reported to the secretaries and the moderators will act on the post.

I don't feel any need for modification of the hierarchy tree as of now.

Advantages for the Super Users -

- Secretaries – They will have power to post, Moderate reports, approve posts on their descendants.
- Leads – they will have power to make post for feed section.
- Moderators – they won't have power to approve any post, but they will have to moderate the reports.
- Admin – they will have full control of the app.

New Features -

- Adding a menu of all the vendors in the insti, this will be helpful for students to first check the menu and then go to the shop. This can be even done the prime mart and other stores.
- Removing the report option for the users who false reports more than 10 times and even banning them if they break the dignity of the app.
- Adding bus timings and bus live tracking features in the app so that instead it would be better rather than missing and staying at the bus stop.

Bringing more people to the platform -

There is no need to convince people once they see what all feature instispace serves they will automatically start using it. InstiSpace serves some of the important features as of now but adding more features will attract more and more people to it. I just must tell my friend that all the important come on instispace and there are a lot more essential features in it such as course notification, lost and found, forums to ask all the doubts you have, and it will be answered by the right person and some more feature will be coming soon. One they will find it useful, which they will, they will do mouth publicity by themselves, and the app will grow by its own.

I think we should inculcate the habit of using instispace in the freshers once they arrive itself. We can have a grand event for webops and blockchain club where we will show all our achievements of the club, they will get some refreshments and goodies in return. In that event we can have a games and activities. Participation form will be out on the apps feed section so that the one who hasn't downloaded it yet will at least download it. More such plans can be made by the upcoming cores.