



MECHANICAL
ENGINEERING
ASSOCIATION

MEA WebOps

CORE APPLICATION 2024

DEEPMOY RUDRA SARMA

ROLL NO -ME22B120

CONTACT NO -9774552124

EMAIL - me22b120@smail.iitm.ac.in

Questionnaire

WHAT IS YOUR MOTIVATION TO APPLY FOR THE POSITION OF CORE IN MEA?

The reason behind my interest in assuming the role of Core within MEA stems from a genuine enthusiasm to elevate the aesthetics of both the MEA and Mechanica websites. I am particularly drawn to this opportunity because of the potential it offers to directly shape and enhance the visual aspect of these online platforms. As the Core, I recognize that I would possess a substantial degree of influence over the design and presentation of these websites.

By securing the position of Core in the WebOps team, I would hold a pivotal position within the organizational hierarchy, affording me the authority necessary to orchestrate meaningful changes in the website's appearance. This level of influence is pivotal in achieving my aspiration of making both the MEA and Mechanica websites exude a distinct and appealing visual appeal.

In essence, my motivation to assume the role of Core in MEA is rooted in the notion that by occupying this position, I can directly contribute to making these platforms look cooler and more engaging. The prospect of having the highest degree of control and decision-making authority within the WebOps team is a driving force behind my pursuit of this role.

Questionnaire

WHAT, ACCORDING TO YOU IS THE GOAL AND VISION OF MEA?
HOW CAN THIS GOAL BE MEASURED QUALITATIVELY AND
QUANTITATIVELY?

MEA's Goal and Vision: The main aim of MEA (Mechanical Engineering Association) is to foster a strong sense of community among mechanical engineering students. This is achieved by organizing events and activities that encourage interaction and learning among students within the vast field of mechanical engineering. MEA envisions creating an environment where students can easily collaborate and gain insights from each other's experiences.

Measuring the Goal Qualitatively: The success of MEA's goal can be qualitatively measured by assessing the level of student engagement and participation in the organized events. Qualitative indicators include the extent to which students actively interact, share knowledge, and learn from their peers. Feedback and surveys can gauge whether students feel a sense of community and if they believe their interactions have enhanced their understanding of mechanical engineering concepts.

Measuring the Goal Quantitatively: Quantitatively, the achievement of MEA's goal can be measured by tracking attendance numbers and participation rates in the events organized by the association. Increased attendance over time indicates growing interest and involvement among mechanical engineering students. Additionally, feedback collection can provide quantifiable data on the perceived benefits and improvements resulting from the interactions facilitated by MEA.

Simpler Rephrasing of Provided Information: MEA's purpose is to make sure mechanical engineering students connect with one another. They do this by planning events where students can interact and learn together. For instance, they organize a tech fest called "Mechanica" that's only for mechanical students. The idea is to help everyone learn from their peers and build a supportive community. To know if this is working, they see how many students are taking part and if people feel more connected and knowledgeable after these events.

Questionnaire

ELABORATE ON THE FOLLOWING WITH REGARD TO YOUR DEPARTMENT IN MEA 2021-22

A)STRENGTHS AND ACCOMPLISHMENTS

B)ISSUES AND CONCERNS

C)INDICATE HOW YOU ADDRESS THESE ISSUES IN THE NEXT TERM

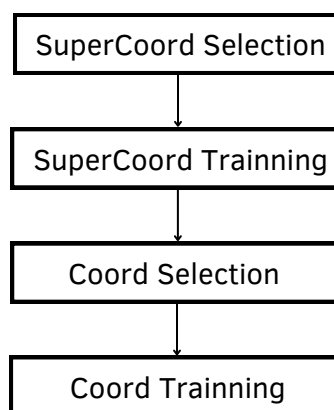
a) Strengths and Achievements: During 2021-22, the MEA department excelled in webpage design, creating an appealing and user-friendly interface. Additionally, the successful integration of backend code automated payment-related emails, streamlining processes.

b) Challenges and Concerns: However, excessive and redundant code negatively impacted webpage performance and storage efficiency, posing challenges such as slow loading times and high storage usage.

c) Addressing Challenges: To combat these issues in the next term, a proactive approach will be adopted. Beginning early, the department will rebuild the webpage from scratch, eliminating outdated code.

Incorporating a modern tech stack will further optimize performance, aligning with industry standards.

MAKE A PROPER TIMELINE OF YOUR DEPARTMENT MENTIONING THE TASK, PERSON CONCERNED AND DATE/MONTH OF THE TASK.



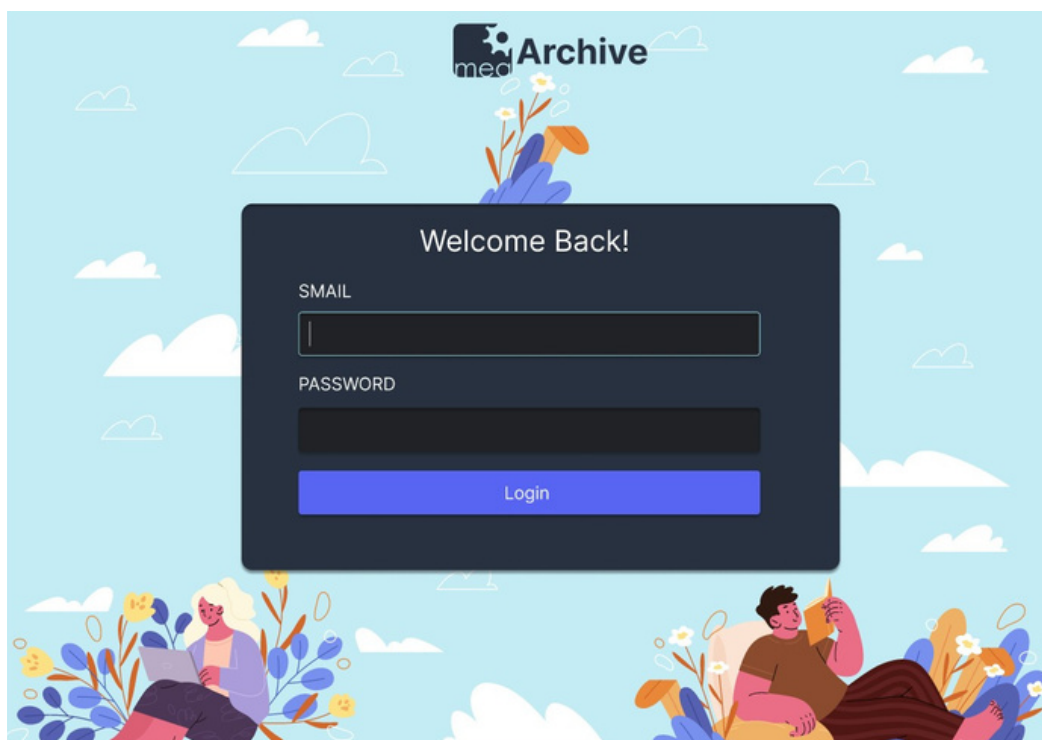
This is a rough timeline. The overall timeline of the WebOps team depends on the overall timeline of the team. So, I have to know how the team is working to synchronise my teams timeline.

Questionnaire

MEA WANTS TO CREATE AN ACADEMIC ARCHIVE FOR THE FRESHERS STUDENTS (AND LATER ON EXPAND IT FOR STUDENTS ACROSS ALL YEARS). OUTLINE A WIREFRAME USER FLOW AND DESIGN MOCKUP FOR THE DEVELOPMENT OF AN ACADEMIC ARCHIVE (DEDICATED TO CATER JUST FRESHMAN STUDENTS FOR NOW). ADDITIONALLY, PROVIDE INSIGHTS INTO THE PREFERRED TECHNOLOGICAL STACK YOU WOULD EMPLOY TO REALIZE THIS PROJECT.

<https://www.figma.com/file/kK7V8bklLINGikbGUZuXhp/MEA-acad-archive?type=design&node-id=0%3A1&mode=design&t=mWhouUD6orqyoXvy-1>

I will use MERN stack to deploy this project.



Questionnaire

WHAT STEPS DO YOU TAKE TO ENSURE THAT THE USER EXPERIENCE IS AT THE FOREFRONT OF ALL WEBOPS INITIATIVES? LAYOUT TECHNICAL POINTS AND STRATEGY THAT WOULD ENABLE YOU TO ENHANCE THE USER EXPERIENCE BY ANALYSING THE FLAWS IN THE CURRENT MEA AND MECHANICA WEBSITE. ([MECHANICA'23](#)) ([MEA IITM](#))

To make user experience (UX) a top priority in WebOps initiatives, I'd follow these steps:

1. **User-Centered Design:** Prioritize users' needs and behaviors through research and user personas.
2. **Responsive Design:** Ensure the websites work well on all devices, enhancing accessibility.
3. **Performance Optimization:** Improve loading speed by optimizing images, code, and utilizing content delivery networks.
4. **Clear Navigation:** Simplify menus and improve the overall structure for easy content discovery.
5. **Consistent Visuals:** Maintain a uniform look and feel across both websites for visual harmony.
6. **Feedback Integration:** Gather user feedback to identify pain points and areas for improvement.
7. **Iterative Development:** Continuously test and refine elements based on user behavior and feedback.
8. **Stay Updated:** Keep track of design trends and emerging technologies to enhance UX further.

Analyzing flaws in the MEA and Mechanica'23 websites I got insights such as slow loading times or confusing navigation. By applying these strategies, specific issues can be addressed effectively, resulting in enhanced user experiences.

Questionnaire

MENTION YOUR TEAM STRUCTURE AND EXPLAIN HOW YOU WOULD ALLOCATE RESPONSIBILITIES TO THEM. HOW WILL YOU IMPROVE THE LEARNING CURVE AMONG YOUR COORDINATORS?

The team structure is fairly simple.

The WebOps team will have one CORE ,Some 2-3 Supercoords under the core and 2-3 coords working under the supercoords.

I would allocate responsibilities on following basis:

- Skill Matching: Assign responsibilities based on individuals' skills, strengths, and interests. Match roles to volunteers' abilities to optimize performance.
- Vertical Alignment: Ensure that each Coordinator's responsibilities align with their vertical's objectives. This promotes focused and efficient execution of tasks.
- Clear Communication: Clearly communicate roles, expectations, and reporting structures to all team members. This minimizes confusion and enhances accountability.
- Delegation and Empowerment: Empower Super Coordinators and Coordinators to delegate tasks to volunteers as needed. This fosters a sense of ownership and involvement.
- Regular Check-ins: Schedule regular check-ins among Core Team, Super Coordinators, and Coordinators to discuss progress, challenges, and opportunities.
- Collaboration: Promote collaboration among all levels of the team. Encourage open communication and cross-functional interaction.
- Feedback Loop: Establish a feedback loop for ongoing improvement. Collect feedback from all team members to refine processes and address concerns.
- Flexibility: Be open to adapting roles based on changing circumstances or the evolving needs of the organization.

I will take the following steps to improve the learning curve among the coordinators-

- I want to hire coordinators as early as possible , so that I get more time to train them.
- When the tenure starts I will keep regular meets , where I will be giving them assignments related to web development.
- I am also thinking to hire same number of coordinators as supercoordinators so that supercoords can act as a mentor ,for whenever the coords face an issue.

Questionnaire

WHAT QUALITIES DO YOU LOOK FOR IN YOUR :

- SUPER COORDINATOR TEAM
- COORDINATOR TEAM

MENTION QUALITIES THEY SHOULD HAVE AND SHOULDN'T POSSESS.

Qualities for Super-Coordinators:

Should Have:

- Leadership Skills: Super Coordinators should possess strong leadership qualities to guide their respective teams effectively.
- Strategic Thinking: The ability to think critically and plan strategically to achieve long-term goals for their vertical.
- Communication: Excellent communication skills to convey information clearly, delegate tasks, and collaborate with other teams.
- Problem-Solving: Quick and effective problem-solving skills to address challenges and unexpected situations.
- Team Player: Being a team player who can collaborate with other Super Coordinators and Core Team members for holistic decision-making.
- Adaptability: Flexibility to adapt to changing circumstances and adjust strategies as needed.
- Mentorship: Willingness to mentor and support Coordinator, fostering a growth-oriented environment.
- Time Management: Strong organizational skills to manage multiple tasks and projects simultaneously.

Qualities for Coordinators:

Should Have:

- Organization: Strong organizational skills to manage tasks, timelines, and resources efficiently.
- Initiative: Willingness to take the lead and drive projects within their verticals.
- Communication: Clear and open communication to effectively convey goals, expectations, and updates.
- Problem-Solving: Ability to identify and address challenges with creative solutions.
- Collaboration: A team-oriented approach, working closely with other Coordinators, Super Coordinators, and Volunteers.

Questionnaire

A SMALL TASK: MAKE A PDF VIEWER TO VIEW PROBLEM STATEMENTS IN OUR WEBSITE ITSELF RATHER THAN REDIRECTING THEM TO GOOGLE DRIVE LINKS FOR DOWNLOAD. (INSERT DOWNLOAD OPTION IN THE VIEWER ITSELF). REMEMBER YOUR APPROACH TO ATTEMPT THE QUESTION IS MORE IMPORTANT THAN COMPLETING IT FULLY

https://drive.google.com/drive/folders/1uiMu-dIVxu1VieBlrCj6NQ_Xd2yp03Ri?usp=sharing