SVECW
SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN

SMART INDIA HACKATHON 2024

SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN
BHIMAVARAM
Smart India Hackathon 2024
Internal Hackathon Report
Dt: 18-09-2025

Table of Contents

1. Executive Summary

The Internal Hackathon 2025, organized by Shri Vishnu Engineering College for Women on 18th September 2025, marked a significant milestone in the institution's commitment to nurturing creativity, innovation, and problem-solving skills among young women in technology.

This year witnessed an overwhelming response, with 136 student teams participating. To accommodate the large number of participants, the hackathon was conducted at the college level across five venues within the campus. Each team presented their chosen problem statement before panels comprising distinguished experts from both industry and academia. These panels not only evaluated the projects but also provided valuable feedback and guidance to the students.

From these enthusiastic participants, 50 teams were shortlisted for the Smart India Hackathon (SIH) 2025—with 45 teams selected directly and 5 teams placed on a waitlist. The problem statements, sourced from various government organizations, provided students with the opportunity to tackle real-world challenges of national importance and societal impact.

The hackathon highlighted the technical expertise, creativity, and problem-solving abilities of the students, who developed solutions in critical domains such as smart cities, healthcare, agriculture, and public safety. Their work demonstrated the potential for building practical, scalable, and impactful solutions.

Beyond competition, the event fostered collaboration, innovation, and critical thinking. By working under time constraints and presenting before expert panels, students gained valuable exposure that prepares them for national-level contests like SIH 2025 and future innovation challenges.

2. Introduction

The Internal Hackathon 2025, hosted by Shri Vishnu Engineering College for Women, aimed to provide a platform for young women to showcase their technical talent, creativity, and innovation. Building on the success of previous hackathons, the event focused on developing practical solutions to real-world challenges.

.

The primary objective of the hackathon was to encourage women engineers to embrace technology-driven problem-solving and cultivate an innovative mindset. Participants were given problem statements curated by various government organizations, covering sectors such as healthcare, public infrastructure, smart transportation, and agriculture. These real-world challenges not only exposed participants to hands-on learning but also encouraged them to design impactful solutions with societal relevance and scalability.

Beyond technical innovation, the event strongly emphasized the values of teamwork, collaboration, and interdisciplinary learning. Students from diverse technical domains—including software development, hardware engineering, and applied sciences—came together, leveraging their varied expertise to devise effective solutions. This collaboration enhanced their ability to think critically, communicate effectively, and innovate collectively.

The Internal Hackathon 2025 was more than just a competition; it was a transformative learning experience. It highlighted the creativity, problem-solving capacity, and technical excellence of the students, while also preparing them to excel at the national stage in the Smart India Hackathon (SIH) 2025 and beyond.

3. Event Logistics

3.1 Team Formation

Team formation for the Smart India Hackathon (SIH) 2025 at Shri Vishnu Engineering College for Women was a meticulous and well-planned process, designed to create groups that embodied both diversity and collaboration. The primary goal was to build teams that could leverage a balanced mix of skills, expertise, and perspectives, thereby maximizing their potential for comprehensive problem-solving.

Recognizing that innovation often flourishes when individuals from varied disciplines come together, participants were strategically matched to ensure that each team represented a spectrum of knowledge—from software development and engineering to design, data analysis, and domain expertise. This approach celebrated the unique strengths of every participant while encouraging them to contribute their distinct perspectives toward a shared goal.

As a result, teams displayed a dynamic blend of technical proficiency, creativity, and interdisciplinary thinking. This diversity proved invaluable during the hackathon, sparking fresh ideas, out-of-the-box approaches, and lively discussions. The synergy cultivated through

such collaboration highlighted the belief that true innovation emerges from the fusion of diverse talents working with a common purpose.

In essence, the carefully planned team formation process acted as a catalyst for creativity, synergy, and problem-solving, setting the stage for impactful outcomes during the event.

3.2 Departmental-Level Awareness Programs

To ensure maximum participation and preparedness, all Innovation Coordinators across departments organized a series of awareness sessions leading up to the hackathon. These sessions focused on:

- Encouraging students to actively participate in the event.
- Guiding them in selecting the right problem statements aligned with their skills and interests.
- Providing mentorship in developing proof-of-concepts (PoCs).
- Supporting teams in structuring their presentations effectively.

These initiatives not only motivated students but also equipped them with the confidence and knowledge to approach the hackathon with clarity and purpose. The programs played a pivotal role in ensuring that participants were well-prepared to tackle the challenges of the event.

3.3 College-Level Hackathon

The college-level hackathon formed the final phase of the internal event, bringing together the best talent from across all departments and the Idea Lab. A total of 136 teams competed in this phase, which was held on 18th September 2025 across three venues on campus. Each venue was equipped with the necessary technical and logistical support, allowing participants to fully focus on their projects.

The day began with registration and an inaugural ceremony, which set an energetic and enthusiastic tone for the competition. The problem statements for this phase were challenging and nationally relevant, provided by various government organizations. These problems addressed pressing issues in sectors such as public infrastructure, healthcare, agriculture, and smart cities, offering students the opportunity to work on solutions with real-world impact and scalability.

Within a limited timeframe, teams engaged in intense brainstorming, prototyping, and presentation of their solutions before an expert panel. The panel comprised distinguished

members from industry and academia, who not only evaluated the projects but also provided insightful feedback and constructive suggestions to help teams refine their solutions further.

From the 136 competing teams, 50 were shortlisted for SIH 2025—with 45 selected directly and 5 placed on a waitlist. The projects showcased a rich variety of innovations, ranging from software applications to hardware prototypes, underscoring the technical capabilities and creative spirit of the participants.

The college-level hackathon was a resounding success, reinforcing the event's role as a milestone in the Internal Hackathon 2025 journey. It not only highlighted the potential of young women innovators but also positioned them strongly to compete at the national level in SIH 2025.

3.4 Panels and Jury Members

The Internal Hackathon 2025 featured an esteemed panel of judges with rich experience across industry and academia, ensuring a high degree of credibility and expertise in the evaluation process. The jury included professionals with diverse backgrounds, such as software engineering, hardware development, artificial intelligence, IoT, and sustainable technologies, enabling a holistic evaluation of projects.

Each panel comprised a blend of industry veterans, academic experts, and startup founders. Their extensive knowledge in research, product development, and business innovation ensured that evaluations went beyond technical merit to also consider real-world impact and scalability. The panel members actively engaged with participants in constructive dialogues, providing feedback and insights that extended beyond the immediate scope of the hackathon.

The presence of these experts not only elevated the professionalism and credibility of the event but also created networking opportunities for participants. Students gained exposure to current industry trends and emerging technologies, broadening their perspectives.

In essence, the multi-panel structure and inclusion of knowledgeable jury members made the hackathon both learning-intensive and intellectually stimulating, reinforcing the event's mission to foster innovation, collaboration, and problem-solving.

4. Hackathon Agenda

The Internal Hackathon 2025 at Shri Vishnu Engineering College for Women was carefully structured to ensure an optimal environment for innovation and collaboration. Its well-planned

agenda reflected the organizers' commitment to providing a seamless and enriching experience for all stakeholders.

Registration & Inaugural Ceremony: The day began with an efficient registration process followed by an inspiring inaugural ceremony that set a professional and enthusiastic tone.

Problem Statement Presentation: Teams were introduced to their problem statements, ensuring clarity and a structured approach for brainstorming and development.

Project Showcase: Serving as the core of the event, participants presented their innovative solutions, fostering peer learning and knowledge sharing.

Judging Phase: Expert evaluation ensured that projects were assessed on technical quality, creativity, and real-world applicability, maintaining high standards of assessment.

Closing Session: The hackathon concluded with reflections, acknowledgments, and appreciation of participants' hard work and achievements.

Beyond the structured sessions, the agenda also allowed dedicated time for coding, debugging, mentoring, and project refinement, creating opportunities for interaction with experts and mentors. The design of the agenda ensured that participants not only competed but also learned, collaborated, and grew as innovators.

5. Proof of Concept Showcase

The Proof of Concept (PoC) Showcase was the highlight of the Internal Hackathon 2025, where teams presented their innovative solutions before the panel of judges and their peers. This session provided a platform for students to demonstrate both their technical prowess and innovative thinking in response to real-world problem statements from government organizations.

Projects spanned across diverse sectors such as smart cities, healthcare, agriculture, and public safety, reflecting the wide-ranging skills of the student body. Each team was allotted a structured timeframe to present their work, which included:

- An overview of the problem statement addressed.
- A detailed explanation of the proposed solution.
- A demonstration of the technologies and methodologies employed.

Showcasing software applications and hardware prototypes that illustrated real-world feasibility.

A key feature of the showcase was the interactive Q&A sessions following each presentation. The judges probed deeper into the technical, practical, and business aspects of the solutions, challenging students to defend their ideas and refine their perspectives.

The PoC Showcase created an atmosphere of collaborative learning and knowledge exchange, as teams observed and drew inspiration from each other's approaches. It stood as a testament to the creativity, technical excellence, and teamwork demonstrated by all participants, while also preparing them for future innovations and national-level competitions like SIH 2025.

6. Judging Criteria

The Internal Hackathon 2025 followed a comprehensive evaluation framework to ensure fair and holistic assessment of all participating teams. The criteria were carefully designed to balance innovation, technical rigor, feasibility, and presentation, making sure that every aspect of problem-solving was recognized. The evaluation sheet defined the following parameters (with their respective weightage out of 100 marks):

Idea Novelty & Innovation (15 Marks)

Judges assessed the originality of the idea, focusing on how creative and innovative the proposed solution was, and whether it introduced a fresh approach to the identified problem.

Problem Understanding & Relevance (10 Marks)

This criterion measured how well the team understood the problem statement and its real-world relevance, ensuring alignment with the societal or industrial challenge.

Technical Approach (15 Marks)

Teams were evaluated on the soundness of their technical design, including the methods, algorithms, or hardware approaches adopted to solve the problem effectively.

Proof of Concept / Prototype Implementation (20 Marks)

This was the most heavily weighted criterion, highlighting the importance of practical execution. Teams were judged on their ability to move beyond ideas and present working prototypes or demonstrable PoCs.

Feasibility & Viability (10 Marks)

The practicality of implementing the solution was considered here. Judges looked at the economic, technical, and operational viability of the project.

Impact & Benefits (10 Marks)

Teams were evaluated on the potential of their solutions to make a meaningful difference, considering scalability, sustainability, and societal benefits.

Research & References (5 Marks)

Use of supporting research, relevant data, and credible references to back the solution was assessed, ensuring that ideas were not only imaginative but also well-grounded.

Team Collaboration & Presentation Skills (15 Marks)

Finally, emphasis was placed on teamwork and the clarity of communication. Teams that demonstrated strong collaboration, effective distribution of responsibilities, and clear, engaging presentations scored higher.

Total: 100 Marks

This structured evaluation ensured that every team was assessed not just for technical excellence, but also for their innovation, feasibility, societal impact, and teamwork—reflecting the true spirit of the Smart India Hackathon.

7. Challenges and Learnings

The Internal Hackathon 2025 was not without its challenges; however, these very hurdles served as valuable learning experiences for the participants.

Time Management: One of the most significant challenges was managing the limited timeframe. Teams had to balance ideation, development, and presentation within strict deadlines. This taught participants the importance of prioritization, focusing on critical features to deliver a functional prototype instead of attempting to implement every idea.

Team Dynamics: Effective collaboration proved to be another challenge. Teams learned first-hand the importance of clear communication, role distribution, and collective responsibility. The most successful teams were those that integrated diverse skills seamlessly, demonstrating that strong teamwork is often as important as technical expertise.

Technical Challenges: Many teams engaged with advanced technologies and complex real-world problems, which required them to quickly learn and apply new frameworks, tools, and

methodologies. Facing unexpected difficulties, participants developed adaptability and resilience, often pivoting their solutions when initial approaches did not yield the desired results.

Overall, these challenges instilled a deeper understanding of time management, adaptability, and teamwork under pressure, which are crucial skills not only for hackathons but also for real-world professional environments.

8. Impact and Innovation

The Internal Hackathon 2025 played a pivotal role in fostering innovation and driving impactful solutions within the student community. By addressing problem statements from government organizations, participants were challenged to create solutions with direct societal relevance and potential for large-scale implementation.

Notable Innovations: Several projects stood out for their promise beyond the hackathon stage. Examples included:

- Water conservation systems for agriculture.
- Automated healthcare monitoring solutions.
- Smart traffic management systems for urban areas.

These projects reflected both technical ingenuity and a deep understanding of pressing societal needs.

Women Empowerment in Technology: A key impact of the hackathon was its role in empowering young women technologists. By providing them with a platform to demonstrate their creativity, problem-solving ability, and technical skills, the event contributed to building a more inclusive and diverse tech ecosystem.

Collaborative Innovation: The hackathon encouraged interdisciplinary teamwork, combining skills from various domains to produce practical, scalable solutions. This collaborative approach enriched the participants' learning and emphasized the value of collective innovation.

Stepping Stone to National Level: college-level hackathon ensured that only the most innovative and impactful projects advanced to represent the college in SIH 2025. For many teams, the event was a launchpad to refine their ideas further and prepare for national-level competition, where their solutions could potentially impact industries and communities at scale.

In essence, the hackathon was not only a competition but also a transformative experience, cultivating a spirit of innovation and preparing participants to become future-ready innovators and problem-solvers.

9. Conclusion

The Internal Hackathon 2025 at Shri Vishnu Engineering College for Women was a landmark event that successfully combined creativity, technical expertise, and collaborative spirit. From its innovative two-phase structure to the rigorous evaluation and proof-of-concept showcase, the hackathon provided students with an unparalleled platform to tackle real-world challenges while nurturing their problem-solving and innovation skills.

The event's outcomes extended far beyond competition. Participants gained invaluable exposure to time management, teamwork, adaptability, and technical application, all of which are essential skills in today's dynamic technological landscape. The active involvement of industry experts, academic leaders, and startup mentors further enriched the experience, offering participants insights into the practical and scalable application of their ideas.

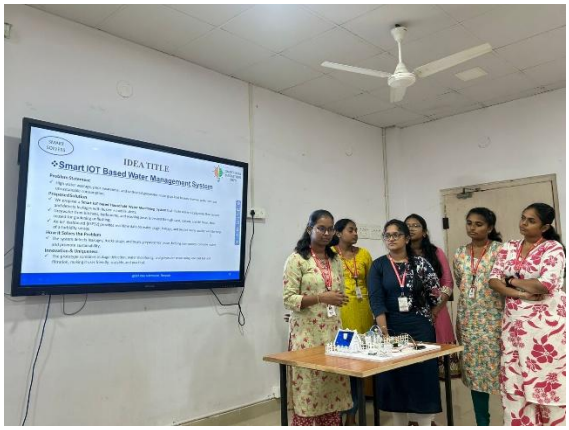
By shortlisting the top 50 teams for Smart India Hackathon 2025, the event ensured that the most promising projects will continue their journey toward national recognition and societal impact. More importantly, the hackathon reinforced the college's mission to empower women engineers, fostering a culture of innovation, inclusivity, and leadership.

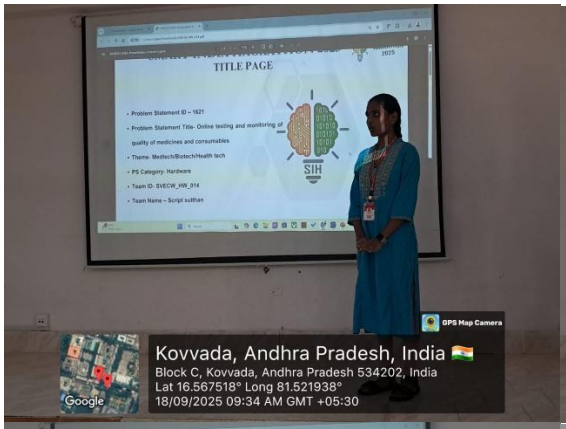
In conclusion, the Internal Hackathon 2025 was not only a resounding success but also a stepping stone toward future achievements. It highlighted the immense potential of the students to emerge as innovators and changemakers, laying a strong foundation for their contributions at the national level in SIH 2025 and beyond.

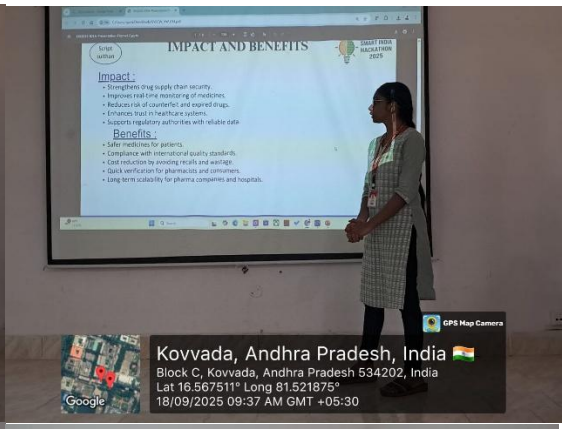
10. Some Glimpses of Internal Smart India Hackathon 2024 at SVECW:

SVECW
SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN

SMART INDIA HACKATHON 2024




TITLE PAGE
GPS Map Camera
Kovvada, Andhra Pradesh, India
Block C, Kovvada, Andhra Pradesh 534202, India
Lat 16.567518° Long 81.521938°
18/09/2025 09:34 AM GMT +05:30


IMPACT AND BENEFITS
Impact :
Benefits :
GPS Map Camera
Kovvada, Andhra Pradesh, India
Block C, Kovvada, Andhra Pradesh 534202, India
Lat 16.567511° Long 81.521875°
18/09/2025 09:37 AM GMT +05:30


SMART INDIA HACKATHON 2025
TITLE PAGE
GPS Map Camera
Kovvada, Andhra Pradesh, India
Block C, Kovvada, Andhra Pradesh 534202, India
Lat 16.56748° Long 81.521884°
18/09/2025 02:13 PM GMT +05:30


RESEARCH AND REFERENCES
GPS Map Camera
Kovvada, Andhra Pradesh, India
Block C, Kovvada, Andhra Pradesh 534202, India
Lat 16.567508° Long 81.521878°
18/09/2025 02:19 PM GMT +05:30


RESEARCH AND REFERENCES
GPS Map Camera
Kovvada, Andhra Pradesh, India
Block C, Kovvada, Andhra Pradesh 534202, India
Lat 16.567472° Long 81.521885°
18/09/2025 02:27 PM GMT +05:30


FEASIBILITY AND VIABILITY
GPS Map Camera
Kovvada, Andhra Pradesh, India
Block A, Kovvada, Andhra Pradesh 534202, India
Lat 16.568364° Long 81.522098°
18/09/2025 08:56 AM GMT +05:30

SVECW
SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN

SMART INDIA HACKATHON 2024

11. Acknowledgments

We extend our heartfelt gratitude to the following individuals and groups:

Participants: The participating teams for their unwavering enthusiasm and dedication.

Jury Members: The panel of 10 esteemed jury members from academia, innovation, and startups for their invaluable insights and expertise.

Organizing Team: The IIC Coordinators, Student Innovation Ambassadors and admin staff of Shri Vishnu Engineering College for Women for their tireless efforts in organizing and executing the hackathon.

We thank Management, Principal, Vice Principal, Deans, HODs for their valuable suggestions and support in organizing the entire event in a smooth manner.

The success of the internal Smart India Hackathon 2025 was a collective effort, and we look forward to hosting more such events in the future to foster innovation, empower women in technology, and drive positive change in our society and industry.

Dr. G Durga Prasad,

SPOC- SIH 2025

Shri Vishnu Engineering College for Women, Andhra Pradesh