Student Development Program on Devops and Its Applications

In Association with New Age Innovation Network

Coordinator: Dr Girisha H Professor and Head,Department of Computer Science and Engineering
Co-Coordinators: Dr Shiva Prasad KM Associate Professor,Prof. Prasanna Kumar Shivaraddi
Assistant Professor Department of Computer Science and Engineering RYMEC Ballari

5/23/2025

Student Development Program on "DevOps and Its Applications in association with New Age Innovation Network"
Date: 17th May 2025 – 23rd May 2025

1. Objective of the Program:

The primary objective of the Student Development Program (SDP) on "DevOps and Its Applications" was to bridge the gap between academic knowledge and industry practices in modern software development.

The Student Development Program (SDP) on "DevOps and Its Applications" was thoughtfully designed to bridge the often-noted gap between academic instruction and the rapidly evolving demands of the software industry. Recognizing the need for students to be well-versed in modern development practices, the program set out with a clear focus on fostering both conceptual understanding and practical proficiency.

Key objectives included familiarizing students with the foundational principles of DevOps, such as continuous integration, continuous deployment, automation, and collaboration. Through structured hands-on sessions, participants were trained on industry-standard tools like Git, Jenkins, Docker, and Kubernetes, enabling them to gain real-time exposure to DevOps workflows and CI/CD pipeline implementation.

The program also emphasized showcasing real-world applications of DevOps across the software development lifecycle, thereby helping students connect theoretical learning with industry use cases. Furthermore, it aimed to cultivate critical skills in rapid deployment, system monitoring, and cross-functional collaboration—essential for modern software teams.

By the end of the program, students were better equipped for industry-ready roles, having received personalized guidance and mentorship from experienced professionals. This initiative served as a

stepping stone toward empowering future engineers with the confidence and competence to thrive in DevOps-driven development environments.

2. Program Outcomes:

Student Development Program on "DevOps and Its Applications," participants had developed a strong conceptual and practical understanding of DevOps methodologies, equipping them with industry-relevant skills and competencies. The structured sessions and hands-on workshops enabled students to internalize key aspects of DevOps and apply them in project-based scenarios. The following outcomes were achieved:

Students gained a comprehensive understanding of the DevOps lifecycle—from planning, development, testing, and integration to deployment and monitoring. They appreciated how DevOps facilitates faster, more reliable software delivery and continuous improvement in modern development environments.

- Participants became proficient in using version control systems such as Git and collaborative platforms like GitHub. They learned essential Git commands, branching strategies, and pull request workflows, empowering them to manage code repositories effectively in team settings.

- The students were introduced to continuous integration and continuous deployment (CI/CD) concepts through practical sessions using tools like Jenkins and GitHub Actions. They successfully configured automated pipelines, integrated code, ran tests, and deployed sample applications, thereby experiencing the end-to-end DevOps workflow firsthand.

- With the introduction to containerization technologies such as Docker and Kubernetes, participants were able to build, run, and deploy containerized applications. They explored container orchestration and resource management, which are critical in scalable, cloud-native application development.

- The resource persons provided real-time industry examples that helped students understand how DevOps is implemented in sectors such as e-commerce, fintech, SaaS, and healthcare. This broadened their perspective on how various organizations leverage DevOps to improve efficiency, collaboration, and time-to-market.

- The program also encouraged team-based activities and agile project development. Students collaborated in groups, practiced Scrum methodologies, and followed DevOps principles such as automation, iterative development, and continuous feedback—mirroring professional development environments.

Overall, the program outcomes underscored a significant enhancement in the technical capabilities, teamwork, and industry readiness of the participating students, laying a strong foundation for their future roles in software engineering and DevOps-centric careers.

3. Number of Participants:

A total of 97 students from the Department of Computer Science and Engineering actively participated in the program. The program witnessed enthusiastic involvement in both theoretical and hands-on sessions.

A total of 97 students from the Department of Computer Science and Engineering at RYM Engineering College, Ballari, enthusiastically participated in the week-long Student Development Program on "DevOps and its Applications." The program attracted a diverse group of learners ranging from pre-final to final year students, all eager to expand their technical knowledge and explore practical applications of DevOps in modern software development.

The sessions were designed to balance theoretical instruction with hands-on exposure, and students demonstrated keen interest and active involvement throughout. During the theoretical sessions, participants engaged in meaningful discussions, asked insightful questions, and showed a strong inclination toward understanding the underlying principles of DevOps, agile methodologies, continuous integration/continuous deployment (CI/CD), and cloud-native practices.

The practical sessions, which included tool-based training using platforms such as Git, Jenkins, Docker, and Kubernetes, witnessed particularly high levels of participation. Students worked collaboratively in small groups, solving real-time scenarios, building automation pipelines, and deploying sample applications. These interactive exercises enabled them to not only strengthen their technical skills but also improve teamwork, critical thinking, and problem-solving abilities.

Faculty coordinators and resource persons noted the students' enthusiasm and adaptability in embracing new tools and technologies, which speaks volumes about their readiness for industry-oriented roles. The hands-on components of the program proved instrumental in helping students visualize the end-to-end DevOps workflow and apply their learning in a simulated industry environment.

Overall, the commitment and curiosity demonstrated by the students were instrumental in making the program a dynamic and enriching experience. Their proactive engagement laid a strong foundation for future learning and reflected the department's emphasis on experiential education and continuous professional development.

4. Resource Persons:

The technical sessions and hands-on training throughout the Student Development Program were led by a distinguished panel of industry experts, each bringing a wealth of experience in software development, DevOps practices, and real-world project execution. Their diverse professional backgrounds and domain expertise significantly enriched the learning environment and provided students with a comprehensive perspective on current industry trends and expectations.

- **Mr. Prathik K Takkar, SDE3 at Tesco, Bengaluru**, delivered insightful sessions on the practical implementation of DevOps in large-scale enterprise environments. His expertise in scalable software architecture, continuous integration pipelines, and production deployment strategies provided participants with a deep understanding of how global organizations leverage DevOps for agility and efficiency.

- **Smt. Suma Latha Jali, CEO of Nirmith AI Labs,Bengaluru** brought an entrepreneurial perspective to the program. Her sessions highlighted the integration of AI with DevOps and the importance of innovation, automation, and lean processes in modern software startups.

She also mentored students on industry-aligned project management techniques and agile workflows.

- **Smt. Ashwini K M, Senior Software Engineer at Manvier Software Solutions, Bengaluru,** conducted practical demonstrations on containerization using Docker, orchestration with Kubernetes, and the use of DevOps in cloud-native application deployment. Her ability to translate complex technical topics into accessible learning modules was particularly appreciated by the students.

- **Mr. Pramod Raj K and Mr. Thilak Srinivas M, both Software Developers at Nirmith AI Labs**, played a vital role in conducting hands-on lab sessions and collaborative coding activities. They guided students through real-world use cases and implementation exercises involving DevOps toolchains, automation scripts, and monitoring solutions. Their approachable teaching style and technical mentorship ensured that participants could engage actively and clarify concepts in real time.

Collectively, the contributions of these experts not only elevated the quality of the program but also inspired the students to pursue DevOps practices with confidence and clarity. Their real-life examples, interactive approach, and willingness to share industry insights created a highly impactful learning experience.

5. Conclusion:

The Student Development Program successfully fulfilled its objectives by empowering students with foundational and practical knowledge in DevOps. The collaborative effort between the Department of CSE and the New Age Innovation Network enabled students to align academic learning with industrial expectations. The department acknowledges the contributions of all resource persons, faculty coordinators, and student participants in making this event a success.

The Student Development Program (SDP) on "DevOps and its Applications" proved to be a significant academic initiative that successfully achieved its intended objectives. By integrating both foundational theories and practical, hands-on experiences, the program empowered students with a strong understanding of the DevOps lifecycle, tools, and industry-aligned practices. Through curated sessions, interactive workshops, and real-world use cases, participants were not only introduced to key DevOps methodologies but also gained valuable exposure to modern development workflows and deployment strategies.

This achievement was made possible through the strategic collaboration between the Department of Computer Science and Engineering (CSE), RYM Engineering College, and the New Age Innovation Network. The partnership brought together a diverse group of industry professionals and academic mentors who played a pivotal role in bridging the gap between classroom knowledge and real-time industry practices. The involvement of experts from reputed organizations like Tesco, NirmithAI Labs, and Manvier Software Solutions enriched the learning experience and provided students with practical insights into the ever-evolving DevOps landscape.

The department extends its sincere gratitude to all the resource persons for sharing their expertise, the faculty coordinators for their dedicated planning and execution, and the student participants for their enthusiastic engagement throughout the week-long program. Such collaborative initiatives reflect the department's continued commitment to student-centered learning and industry readiness, paving the way for future endeavors in innovation, upskilling, and academic excellence.

6. Greeting Message to New Age Innovation Network:

We extend our heartfelt gratitude to the New Age Innovation Network and the program coordinators for their generous financial support and invaluable collaboration in organizing the Student Development Program on "DevOps and Its Applications." Your unwavering commitment to fostering innovation and industry-academia partnership played a pivotal role in the successful execution of this initiative.

Your support not only enabled us to deliver high-quality sessions by seasoned industry professionals but also provided our students with a transformative learning experience that bridges the gap between academic knowledge and real-world practices. We sincerely thank you for this opportunity and look forward to continued collaboration in empowering future technologists.

Resource Persons Accounts Details

Sl no	Name of the Speaker	Bank Account Details	Amount to be paid
1	Suma Latha Jali	**Bank:HDFC BANK** **Account Holder:Sumalatha Jali** **Bank Account Number:15691610011176** **IFSC Code:HDFC0001569** **Branch: VIDYARANYAPURA**	**Rs 8000/-(Speaker) +2000(TA/DA)= 10000=00**
2	Pramod Raj K	**Account Name: PRAMOD RAJ K** **Account Number: 5480101002599** **IFSC Code: CNRB0010602** **Branch : RCBELLARY** **Canara Bank**	**Rs 8000/-(Speaker) +2000(TA/DA)= 10000=00**
3	Thilak Srinivas M	**Account Number - 6357760462** **Account Name - Mr. M Tilak Srinivasa** **Bank IFSC - IDIB000C142** **Branch Name - CATHEDRAL BRANCH BALLARI** **INDIAN BANK**	**Rs 8000/-(Speaker) +2000(TA/DA)= 10000=00**
4	Prathik Thakkar	**Bank Name: Kotak Mahindra Bank** **Account Holder:Pratik K Thakkar** **Bank Account Number:04300040029516** **IFSC Code:--KKBK0000427**	**Rs 8000/-(Speaker) +2000(TA/DA)= 10000=00**
5	Ashwini KM	**Bank Name : HDFC** **Account Holder : Ashwini KM** **Account No: 01331050167524** **IFSC Code: HDFC0000133**	**Rs 8000/-(Speaker) +2000(TA/DA)= 10000=00**
		Total	**Rs 50000=00**

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RAO BAHADUR Y. MAHABALESHWARAPPA ENGINEERING COLLEGE
(Affiliated to VTU, Belgaum, Approved by AICTE, New Delhi, & NAAC B++ Accredited)

Department of Computer Science and Engineering
Organizes
One week Student Development Program on Devops
In association with
New Age Innovation Network

Dates: 17th to 23rd May 2025

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Venue: CSE Seminar Hall, RYMEC Ballari
Resource Persons

Smt Suma Latha Jali **CEO, Nirmth AI Labs** **Bangalore**	**Mr. Pratik K Thakkar** **Software Architect** **Tesco Bangalore**	**Mrs Ashiwni KM** **Senior Software Developer** **Mavenir Software Sol** **Bangalore**

Presided by

Sri Janekunte Basavaraj
Vice President, VV Sangha Ballari
Chairman, GB Member RYMEC Ballari

In the Gracious Presence of

Sri Prabhu Swamy S.M   **Sri. Badada Prakash**
GB Member RYMEC Ballari   **GB Member RYMEC Ballari**

Coordinator: Dr H Girisha Professor and Head Department of CSE
Coordinators: Dr Shiva Prasad KM, Associate Professor,
Prof. Prasanna Kumar Shivaraddi, Assistant Professor

Principal, Staff & Students of RYMEC Ballari
All are cordially invited

Figure: Banner of the Student Development Program

Photo of the Event