Five Days Hands-on FDP on

"Design Thinking for Product Development"

24th – 28th July, 2023.

REPORT

Title of FDP:	Design Thinking for Product Development
Date:	24th – 28th July, 2023
Duration:	Five Days
Location:	RIT AICTE IDEA Lab
Organized By:	RIT AICTE IDEA Lab in collaboration with the Department of Mechatronics and Electrical Engineering.

Introduction:

The Faculty Development Workshop on "Design Thinking for Product Development" was a comprehensive and interactive program aimed at enhancing the understanding and application of design thinking principles in the context of product development. The workshop sought to equip participants with the necessary knowledge and skills to foster innovative and user-centric approaches to product design.

Objectives:

1. Understanding Design Thinking: Introduce participants to the fundamental concepts, principles, and stages of design thinking as a problem-solving methodology.

2. Applying Design Thinking to Product Development: Explore how design thinking can be effectively integrated into the process of product development to create user-centered and innovative solutions.

3. Hands-on Experience: Provide participants with practical, hands-on exercises to apply design thinking techniques to real-world product development challenges.

4. Multi-disciplinary Collaboration: Encourage collaboration among faculty members from different disciplines to promote a diverse and holistic approach to product design.

Workshop Structure:

Day 1: 24 July 2023
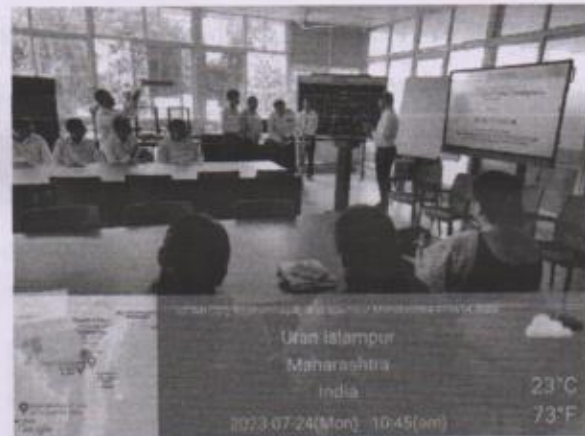
Introduction to Design Thinking and Empathy:

Prof. S. B. Khot started the inaugural ceremony by extending a warm welcome to the esteemed guests of honor, including faculty participants, and special invitees. Also, he

introduced the theme of the workshop - "Design Thinking for Product Development". The Five-days hands-on workshop was inaugurated by Director Dr. P. V. Kodole, RIT Rajaramnagar on 24th July, 2023. In his keynote speech, he touched upon various aspects of importance of product development and converting Ideas into design and keeping up to date with current technology. Also he gave an emphasis on project and product development. After the keynote the Dr. A. B. Kakade discussed about the bjectives, structure, and expected outcomes of the workshops. Also given information about importance of design thinking in modern product development to the participants.

The first session was started by Dr. S. M. Pise. He gives a brief introduction to Idea conceptualization along with hands-on activities. The second section deals with the Converting Idea into the design. And in the last session, he gave a hands-on session on product development.
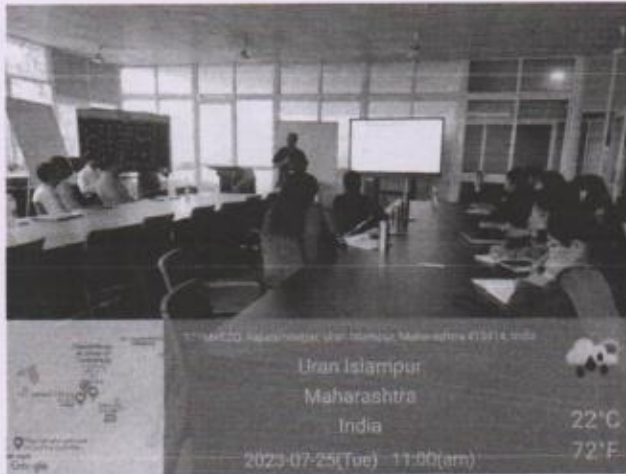

Day 2: 25 July 2023

Empathy and Ideation:

Day two first session was started by Dr. Sham Gurav and covered understanding user needs, behaviors, and pain points. In the second session, he discussed how to convert prototypes in the products. In the last session brainstorming and Idea generation is taken.

Day 3: 26 July 2023

Prototyping and Testing:

The first session was started by Dr. Sandip Anasane, and he discussed about Importance of prototyping in visualizing and communicating design concepts. The second session was conducted by Prof. Pawar and he covered principles of iterative design and its role in refining prototypes. Also some products were discussed with the participants. The third session was conducted by the Prof. S. S. Kumbhar on Arduino and its applications. Some projects were given to the participants as activities of the workshop.

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Day 4: 27 July 2023

Introduction IoT:

In day 4, Introduction IoT and Node MCU was covered by the Mr. Shubham Omase in first session. In the second hands-on session, he covered Android application development using MIT. In the last session integration of android application with firebase is covered using Node MCU.

Day 5: 28 July 2023

Final Projects and Conclusion:

the first and second session was taken by the Prof. S B. Khot and Prof. S. S. Kumbhar and covered hands-on prototype-building activity with the participants. The last session was taken by Dr. A. B. Kakade and discussed product development and its challenges. Also, participants' projects presentations were conducted. At last, collected feedback from participants to assess the workshop's effectiveness and distributed certificates to participants.

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Endorsed by:

Prof. R. D. Khul, Prof. S. S. Kmal kar
Workshop Coordinator,
Mechatronics and Electrical Department,

Dr. A. B. Kakade
R&T A&I Trades Lab Coordinator,
Dean R&D,

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Resource Person details.

Dr. S. S. Anasane (HoD M&IM, COEP)

Prof. N. N. Pawar (Adjunct M&IM, COEP)

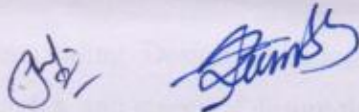Dr. Sham Gurav (CEO, Epiphany Inno)

Dr. S. M. Pise (Dean R&D, KIT)

Dr. A. B. Kakade(Dean R&D, RIT)

Mr. Shubham Omase (CEO, Origin Tech)
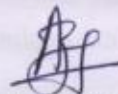
Prof. S. B. Khot (Asst Prof, Mechatronics)

Prof. S. S. Kumbhar (Asst Prof, Electrical)

Submitted by:

Endorsed by:

Prof. S. B. Khot, Prof. S. S. Kumbhar

Workshop Coordinator,

Mechatronics and Electrical Department,

Dr. A. B. Kakade

RIT AICTE Idea Lab Coordinator,

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