









# INSTITUTION'S INNOVATION COUNCIL(IIC)

'GIVE WINGS TO YOUR IDEAS'

# SRI DURGA MALLESWARA SIDDHARTHA MAHILA KALASALA

VIJAYAWADA-10



In Celebration of the GOLDEN JUBILEE of Siddhartha Academy of General & Technical Education (1975-2025)

An IQAC Initiative

#### **DEPARTMENT OF COMPUTER SCIENCE**

In Association with



Cordially invites you to attend

# A Three-Day Workshop

On

## Community - Centric Innovation with Design Thinking

#### Schedule:

DAY	TOPICS
Day - 1	Design Thinking & Innovation, SDLC & Phase of Design Thinking, Team Formation
Day - 2	DTI Phases: Empathize and Define
Day - 3	DTI Phases: Ideation & Prototyping, Industry practices (UI/UX,Git)

#### From

20th August To 22nd August, 2025

Venue: Webinar Hall From: 10:00 AM - 04:00 PM

M. Praveena, Head Department of Computer Science Dr. V. V. Subramanya Kumar Principal

# CENTRIC INNOVATION WITH DESIGN THINKING

Date: 20th August 2025 TO 22th August 2025

Venue: WEBINAR HALL

**Organizer:** Department of computer science

**Time:**10.00 AM TO 4.00 PM

No of Participants: 109

Participants: II BSC COMP(A), II BSC COMP(B), II BSC AI.

Nature of the Program: A 3-day workshop

Resource Persons: 1. Naga Malleswari Chennamsetti Full Stack Developer, Monad Health

Secretary, Swecha AP,

**2. Niharika Malleboyina** - Full Stack Developer, Monad Health Executive Committee, Swecha AP,

3. Mukesh Sai Charan Valisetty,

Visual, Exhibition & Event Designer at Bluesway, Volunteer, Swecha AP,

- 4. Haseena Shaik, Intern at SwechaAP
- 5. **D N Durga Prasad**, Manager SwechaAP

#### INTRODUCTION

A three-day workshop on Community-Centric Innovation and Design Thinking was organized to cultivate a culture of creativity, innovation, and human-centred problem solving. The program aimed at equipping participants with knowledge and practical skills to identify community-based challenges and develop innovative solutions using design thinking principles.

The workshop brought together students, faculty, and innovators to collaborate and apply structured innovation methodologies. The sessions were interactive and practice-oriented, ensuring participants could experience the design thinking process first-hand.

#### **OBJECTIVES OF THE WORKSHOP**

To cultivate creative and analytical skills among participants for approaching problems from multiple perspectives. To provide hands-on learning experiences through interactive sessions, group discussions, and case studies. To encourage teamwork and collaborative problemsolving, enabling participants to brainstorm and co-create innovative ideas. To build an innovation-oriented mindset, equipping participants to apply design thinking in academic,

research, and entrepreneurial domains. To develop participants' creativity, critical thinking, and problem-solving abilities.

#### DESCRIPTION OF THE PROGRAM

## **Design Thinking and Innovation**

Design Thinking **is** a human-centred approach to problem-solving that encourages creative, iterative solutions to complex problems. It's widely used across industries in product innovation manufacture & service. The methodology focuses on understanding the needs of the people for whom you are designing and creating solutions that align with both user desires and technical feasibility. Design Thinking integrates the logical with the creative, combining empathy with experimentation to find breakthrough solutions that are both user friendly & economical.

## Core Principles of Design Thinking:

- 1. **Empathy:** Understanding the user's needs, challenges, and experiences is the foundation of design thinking. Empathy is about putting yourself in the user's shoes to uncover both articulated and latent needs.
- 2. **Define:** The insights gained during the empathy phase are synthesized to define the problem clearly. It's not just about solving an issue but finding the right problem to solve.
- 3. **Ideation:** This phase encourages creative brainstorming, where wild ideas are welcomed, and the focus is on quantity over quality. The goal is to think broadly and explore a wide array of potential solutions.
- 4. **Prototyping:** Prototypes are physical or digital models of the solution that allow testing, experimentation, and iteration.
- 5. **Testing:** The prototypes are tested with real users to understand their response and gather feedback, which leads to changes that are advantageous eventually **Innovation** refers to the process of creating new or improved products, services, or ideas that deliver value. While innovation can be driven by technology, market demands, or creative thinking, design thinking provides the framework to turn these innovative ideas into practical solutions by keeping the end user at the heart of the process.

#### **PHOTOS**





#### STUDENT ACTIVITY THROUGH STUDENT

TOPIC:PHYSICALLY/VISUALLY IMPAIRED LEARNERS.

Student Name: Joshna Jarajapu (team 11)

In the afternoon session, the student were split into 11 teams, each assigned a chart, sticky notes, and sketch pens. The task was to choose a topic from a provided list, and my team and I decided to focus on "Visually/Physically Impaired Learners" under the overarching theme of "Open Knowledge." After selecting our topic, we were instructed to brainstorm and write down the various problem scenarios related to our theme on the sticky notes. Each scenario was then pasted on the chart, which allowed us to visualize and organize the different challenges that visually and physically impaired learners face in accessing and engaging with open knowledge. We are instructed to pick out the main problem from the listed problem scenarios. It was a collaborative and thought-provoking exercise promoting teamwork and brining out our creativity.

In the morning session on the second day, we were tasked with identifying the key **stakeholders** involved in our selected topic, "Visually Impaired Learners." We wrote down the different stakeholders on our chart, which helped us map out the various groups and individuals who are affected by or involved in supporting visually impaired learners-such as parents, society, etc.

In addition, we were instructed to develop a **user persona** for a specific individual— in our case, a visually impaired learner named Suresh. This exercise pushed us to step into the shoes of the user, considering their needs and stress points while including their demographics and behaviour. Writing the persona allowed us to create a more empathetic and detailed picture of the user's experience, which was essential in understanding how to design solutions that truly address their needs.

In the afternoon session, we were guided through the process of creating an **Empathy Map** for our user persona, **Suresh**, a visually impaired learner. The Empathy Map was divided into key sections: **Think and Feel**, **Hear**, **See**, **Say and Do**, as well as **Pains** and **Gains**. This exercise helped us get a deeper understanding of Suresh's emotions, experiences, and challenges from multiple perspectives. Once we had mapped out the empathy map, we were instructed to move to the next phase: **Defining the Problem Statement**. Using the framework of the **5W's** (Who, What, When, Where, Why), we crafted a concise yet comprehensive problem statement. This step was crucial in narrowing down the key issue we wanted to address and ensuring that our solution would be focused, relevant, and impactful.

On the morning of the third day, my team and I engaged in a collaborative **brainstorming session** as part of the **Ideate phase**. Building on the problem statement we had defined earlier, we focused on generating a wide range of possible solutions to address the core challenges faced by visually impaired learners like our user persona, Suresh. practical solutions aimed at improving accessibility, engagement, and learning outcomes for visually impaired students. All our ideas were written down and organized on the chart, allowing us to visualize and evaluate them more effectively. We picked out the main idea we deemed creative and reasonable. On

the afternoon session of the very day, we are instructed to prepare a wireframe on the main idea we chose with the help of our source persons



## **CONCLUSION**

The three-day workshop on Community-Centric Innovation and Design Thinking was highly successful in creating awareness and instilling innovative thinking among participants. The interactive sessions, group activities, and prototype development exercises enabled participants to gain practical exposure.