



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)



**Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai
Accredited by NAAC-UGC with 'A++' Grade (Cycle III) &
Accredited by NBA (B.E - CSE, EEE, ECE, Mech & B.Tech.IT)
COIMBATORE-641 035, TAMIL NADU**

DEPARTMENT OF COMPUTER APPLICATIONS

23CAT605 – WEB STACK DEVELOPMENT

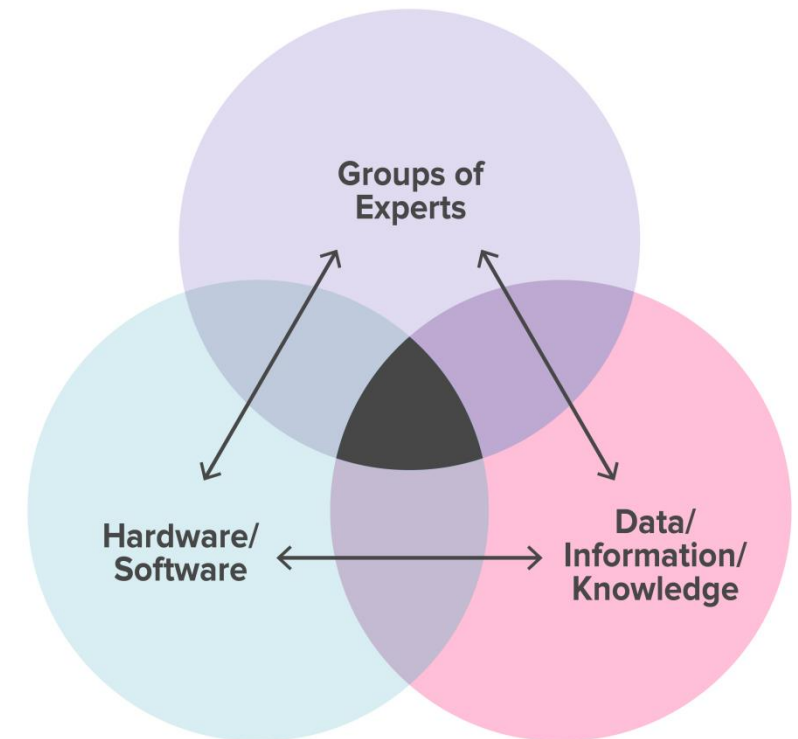
UNIT – I: OVERVIEW OF WEB TECHNOLOGIES & HTML 5

TOPIC: COLLECTIVE INTELLIGENCE



Collective intelligence in web technology refers to the **ability** to harness the combined knowledge, skills, and insights of a large group of people through web-based platforms and applications. It leverages the power of the internet and web technologies to **facilitate collaboration, knowledge sharing, and problem-solving** on a massive scale.

Collective Intelligence





Principles Of Collective Intelligence

- 1. Diversity of expertise:** A group with a wide range of skills and perspectives can often solve problems more effectively than a homogeneous group.
- 2. Decentralization:** Decision-making and problem-solving are distributed among group members, rather than being centralized in a single leader.
- 3. Aggregation of information:** Collective intelligence relies on the ability to aggregate and synthesize information from various sources, often facilitated by technology.





Mechanisms of Functioning

- 1. Collaboration and communication:** Effective communication and collaboration strategies are essential for collective intelligence.
- 2. Coordination:** Coordinating the efforts and contributions of group members is crucial for effective collective intelligence.
- 3. Technology Facilitation:** In many cases, technology (like AI, internet platforms) plays a key role in enabling and enhancing collective intelligence by facilitating information sharing and decision-making.





1. **AI and collective Intelligence:** The integration of AI systems in collaborative human endeavors is a growing area of interest.
2. **Global challenges:** Collective intelligence is increasingly seen as a vital tool in addressing global challenges like climate change, public health crises, and social inequalities.

Examples of collective intelligence

- In organizations, collective intelligence is used for **brainstorming, strategic planning, and problem-solving.**
- **Scientific collaborations, often spanning various countries** and disciplines, are examples of collective intelligence in action.
- Projects like **Wikipedia or open-source software development** demonstrate collective intelligence in the digital realm.



Types of Collective Intelligence



- 1. Human-based collective intelligence**
- 2. Computer-based collective intelligence**
- 3. Hybrid systems**
- 4. Natural collective intelligence**