Centurion University
Shaping Lives... Empowering Communities...

School: ..... Campus: .....

Academic Year: ..... Subject Name: ..... Subject Code: .....

Semester: ..... Program: ..... Branch: ..... Specialization: .....

Date: .....

Applied and Action Learning

(Learning by Doing and Discovery)

Name of the Experiement : Web2 vs Web3 – Debate and Redesign

Objective/Aim:

To study and understand the differences, advantages, and disadvantages between Web2 and Web3, and explore the evolution of the internet.

Apparatus/Software Used:

- Laptop/PC
- PowerPoint/Word for documentation
- Internet for research

Theory/Concept:

Web2: (Read + Write)

- The current version of the internet (2004–present).
- Enables user-generated content on centralized platforms (e.g., Facebook, YouTube).
- Companies own and control user data.
- Accessible and stable.

Web3: (Read + Write + Own)

- The next generation internet built on blockchain (2014–future).
- Allows decentralization and user ownership of data and digital assets.
- Uses smart contracts, NFTs, and crypto wallets.
- Examples: Ethereum, IPFS.

Key Differences:

- Ownership: Web2 - centralized; Web3 - decentralized.
- Data Privacy: Higher in Web3.
- Security: Web3 uses blockchain for enhanced security.
- Censorship Resistance: Web3 is resistant to censorship.
- Complexity: Web3 has a steep learning curve compared to Web2.

Procedure:

1. Studied theoretical concepts of Web2 and Web3.
2. Created a PowerPoint presentation comparing features, advantages, and disadvantages.
3. Analysed how decentralization impacts data ownership and security.
4. Documented observations in a comparative table.
5. Discussed practical scenarios where Web3 can improve current Web2 limitations.

Observation Table:

Feature	Web2	Web3
Definition	Current version of the internet (Read + Write)	Next-gen internet (Read + Write + Own)
Control	Centralized, controlled by companies	Decentralized, controlled by users
Data Ownership	Companies own and control user data	Users own and control their data
Examples	Facebook, YouTube, Instagram, Google	Ethereum, IPFS, Filecoin, decentralized apps
Privacy	Lower privacy; data sold for ads	Higher privacy; data secured by blockchain
Accessibility	Easy to use, user-friendly	Requires understanding of blockchain concepts
Security	Prone to data breaches and hacking	Enhanced security using cryptography and blockchain
Censorship	Can be censored by companies or governments	Censorship-resistant due to decentralization
Scalability	Highly scalable with centralized servers	Faces scalability challenges currently
Transparency	Limited transparency; hidden algorithms	Transparent and open through blockchain
Monetization	Ad-based revenue; user data monetized	User can earn directly (crypto, tokens)
Environmental Impact	Low (in usage phase)	Higher in PoW systems (due to energy consumption)

ASSESSMENT

Rubrics	Full Mark	Marks Obtained	Remarks
Concept	10		
Planning and Execution/ Practical Simulation/ Programming	10		
Result and Interpretation	10		
Record of Applied and Action Learning	10		
Viva	10		
Total	**50**		

Signature of the Student:

Name :

Regn. No. :

Signature of the Faculty: