GENESIS: EHR STORAGE WITH BLOCKCHAIN
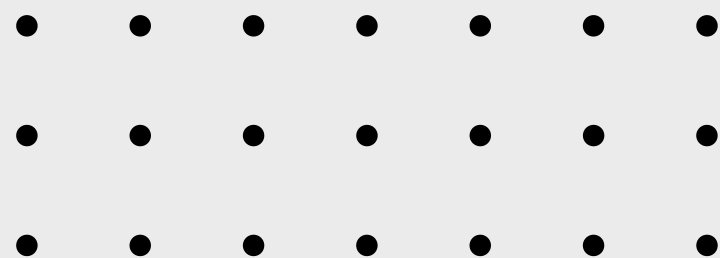
MENTOR: MS. LALITHA S D ASSISTANT PROFESSOR

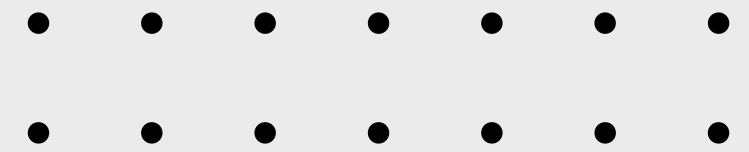**TEAM MEMBERS:**
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PROJECT PHASE 1

PROBLEM STATEMENT

- The existing healthcare industry faces critical challenges in the management of Electronic Health Records (EHR).
- Security breaches and data leaks are frequent occurrences, leading to severe privacy concerns for patients.
- EHR systems often lack granular access control, making it difficult to manage who can view, modify, or share health records.
- Scalability is a persistent issue with traditional EHR systems, as they struggle to handle the growing volume of healthcare data efficiently.
- The need for data interoperability and seamless sharing between healthcare providers and institutions remains unmet.

ABSTRACT

- **Our project presents a groundbreaking solution to address the critical issues in Electronic Health Record (EHR) management.**

- **By leveraging blockchain technology, we offer a secure, scalable, and privacy-centric EHR management system.**

- **This project combines Ethereum's robust blockchain infrastructure with the flexibility of smart contracts, IPFS for efficient off-chain data storage, and user-friendly MetaMask integration.**

ABSTRACT

- **The primary objective is to revolutionize EHR management, providing granular access control, robust security, and regulatory compliance.**

- **Through our system, healthcare data can be managed with a heightened focus on user privacy, data security, and efficient data sharing.**

- **This presentation will outline the key components of our solution and highlight the benefits it offers to the healthcare industry.**
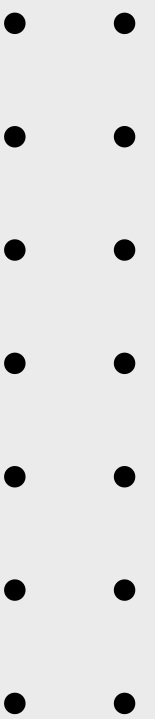
TECH STACK

- **IDE: Visual Studio Code, Remix**
- **Languages: Javascript, Solidity**
- **Frameworks: ReactJS, ExpressJS,**
- **Communication Protocol: REST(HTTPS)**
- **Blockchain Provider: Ethereum (Ganarche)**
- **Deployment Platform: Web Application**
- **Third Party Integrations: Truffle, IPFS**
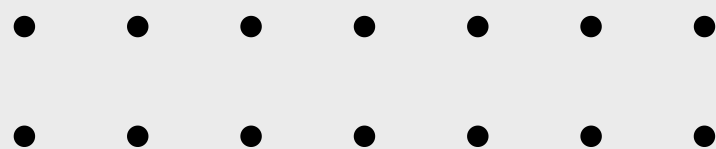
REFERENCES

- **Kshetri, N. "Blockchain for Electronic Health Records: A Survey" in International Journal of Medical Informatics, Volume 134, 2020.**
- **Hass, L. "The Role of Blockchain Technology in Medical Data Privacy" in Computer Science Journal of Moldova, Volume 28(2), 2020.**

THANK YOU!