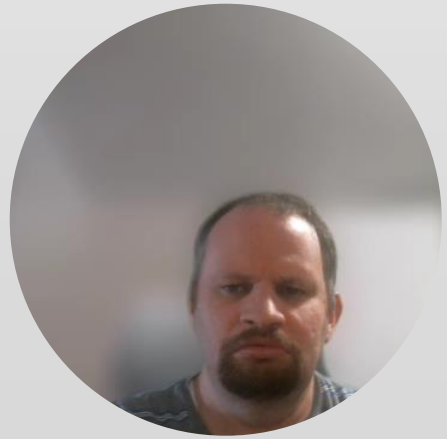
Interoperability Technology in Healthcare

Interoperability Tech and Healthcare Defined

- Exchange and Integration of healthcare data
- Secure access, sharing and use of HI
- Exchange Standards: HL7, FHIR, CDAs, CCDAs, ICD Codes
- Methods of Exchange
- Semantic Interoperability
- TEFCA and QHINS



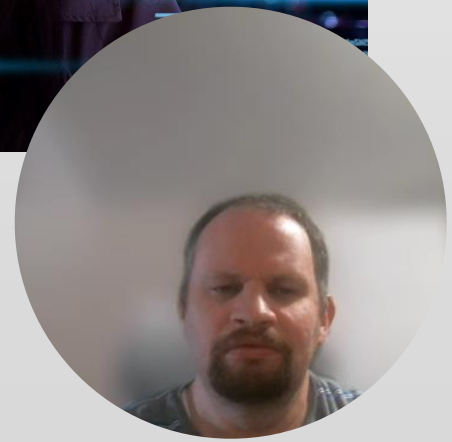
HL7 FHIR Standard

- Restful APIs
- Sandbox Environments
  - Mock Scenario Testing
  - App Development
  - Innovation
- Benefits of Sandboxes
  - Prototyping and Testing
  - Education and Training
  - Standard Compliance
  - Collab

Trends of Interoperability in Healthcare

- 21st Century Cures Act and Patient Access to APIs
- Data integration and aggregation
- IoMT
  - IEEE 11073 and IHE
- Clinical Decision Support
  - Point of Care

- Secure Data Exchange and Privacy
  - Messaging Protocols, encryption, and access controls

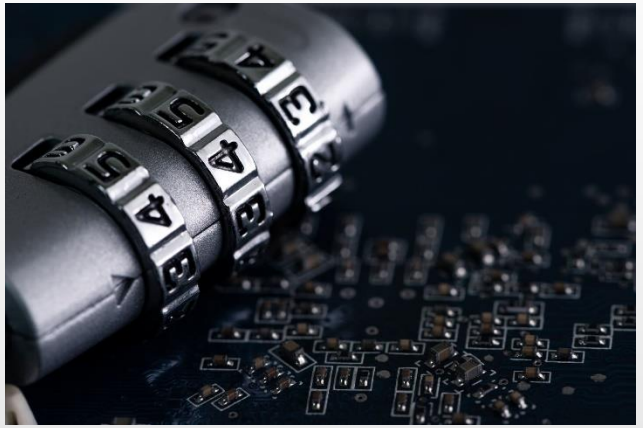


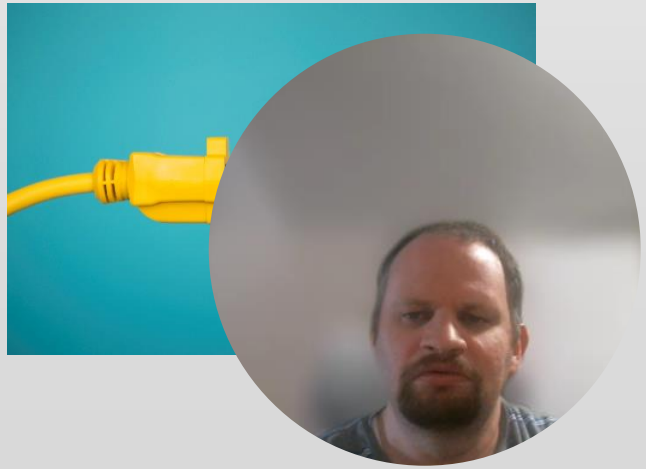
Interoperability Opportunities in Healthcare

- Improved care coordination
- Enhanced Patient Engagement
- Aggregation and Analysis of Large Datasets

Interoperability Threats in Healthcare

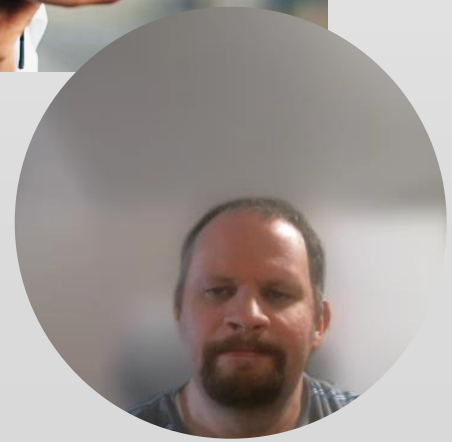
- Data Privacy and Security
- Information exchange between disparate systems
- Technical Barriers
  - Incompatible Data Standards
  - Differing System Interfaces
  - Variations in Data Capturing Practices
- Resistance to Change, Awareness, Stakeholder Buy-in





Cotiviti's Explorations

- QHINs
- Access of COBs to patients
  - Easy to understand
  - Patient Empowerment
  - Patient Centered Dashboard Design
- IoMT Technology
  - Fraud Waste and Abuse of Devices, Rx, etc.



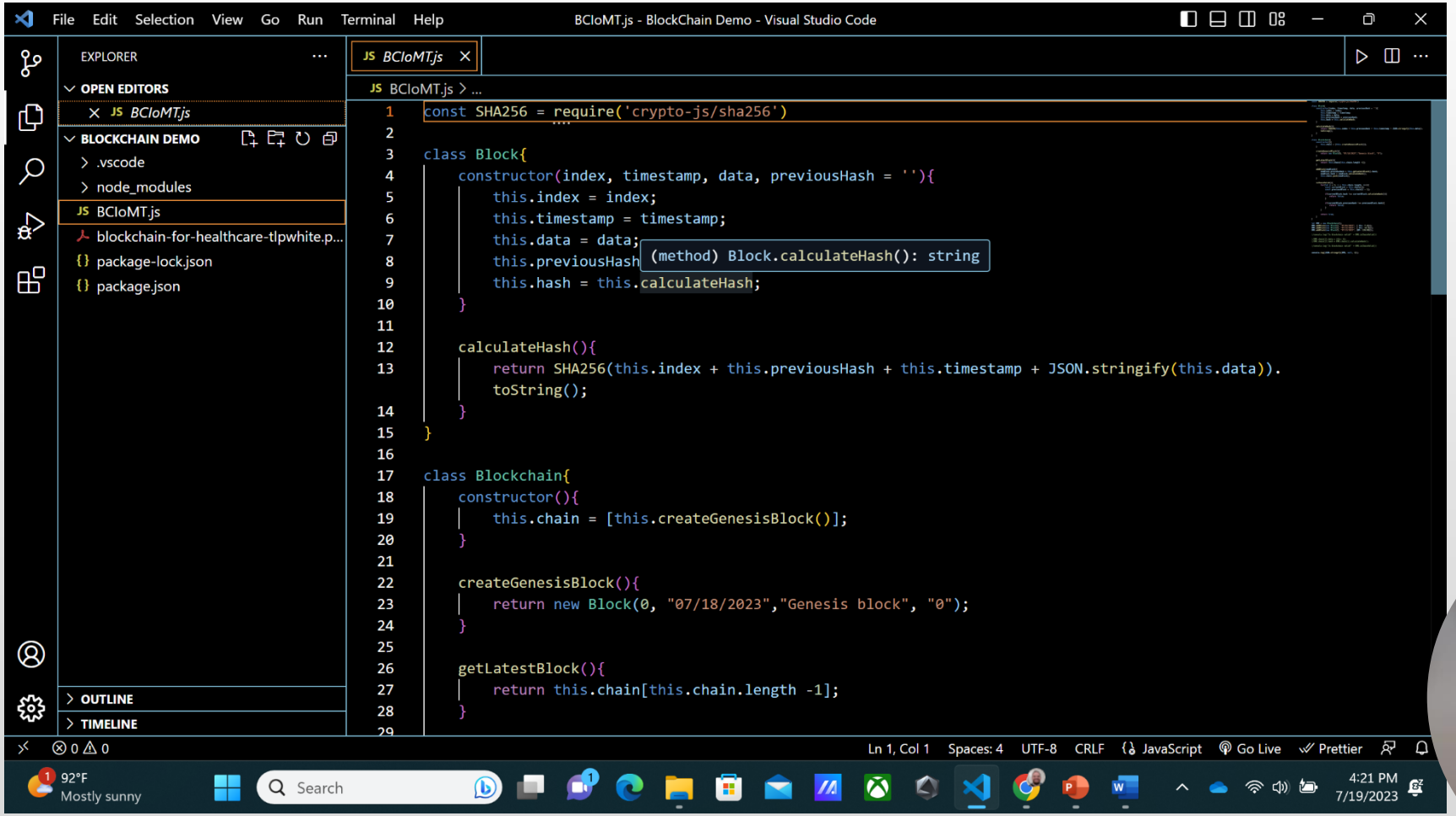
Block Chain Technology

- Originally used for bitcoin
- A perspective technology for IoMT Tracking
  - Secure
  - Collaborative
  - Way to monitor against claims to determine proper use of medical devices
    - ie. CGM, BP

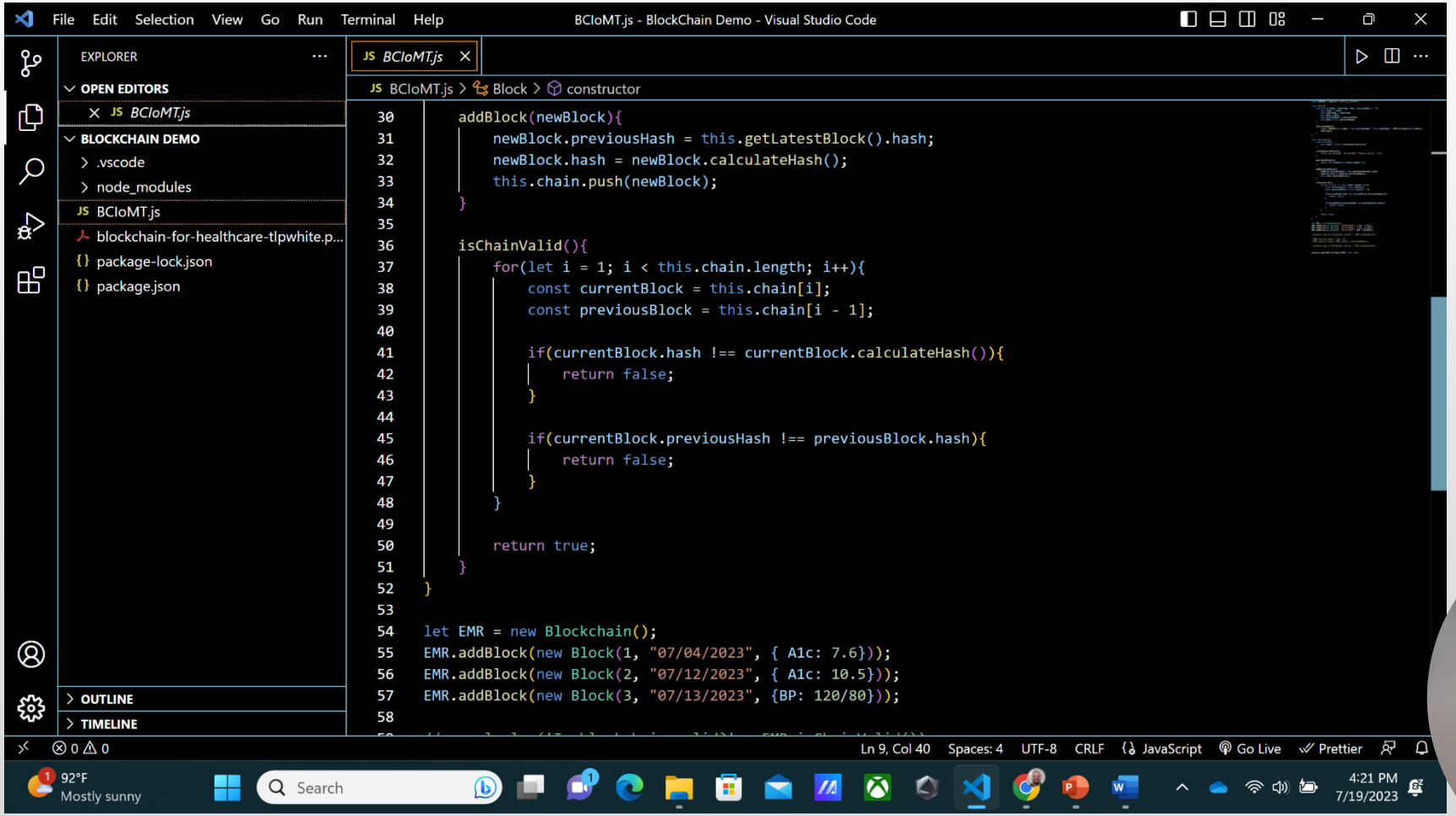
https://www.youtube.com/watch?v=SSo_EIwHSd4

https://www.youtube.com/watch?v=zVqczFZr124&list=PLU5Yn2kbD2-__keY75aBKkH5FmRRn_fE9&index=1&t=60

Block Chain Demo Code



Block Chain Demo Code



Block Chain Demo Code