



DEDOC

APPLYING FEDERATED LEARNING WITH SMART CONTRACTS IN HEALTHCARE



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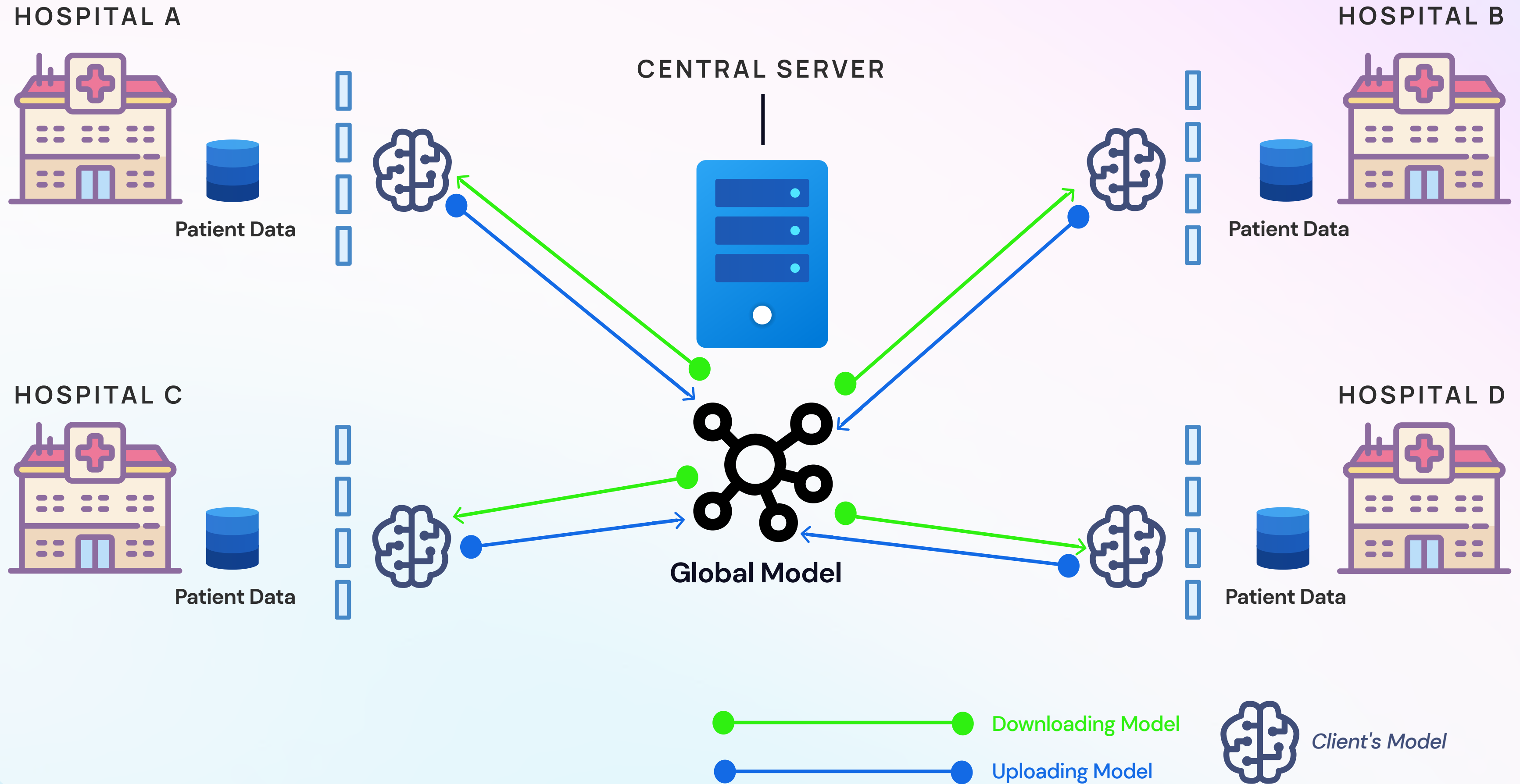
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RECAP

- **Provide a Coordination Platform for Healthcare Sector**
- **Allow Model Sharing between hospitals through Federated Learning**
- **Develop a Secure mechanism , upholding security and privacy of all participants**
- **Use Smart Contracts as a Protocol Enforcing Entity to maintain Integrity and Trust between all Hospitals**
- **Achieve Interoperability between Blockchain and AI**

WORKFLOW OF FL IN HOSPITALS



Project Deliverables

FYP-I

- SRS Document
- Prototype(Wireframes)
- SDS Document
- Front-End Codebase(30%)
- Blockchain Boilerplate code(30%)

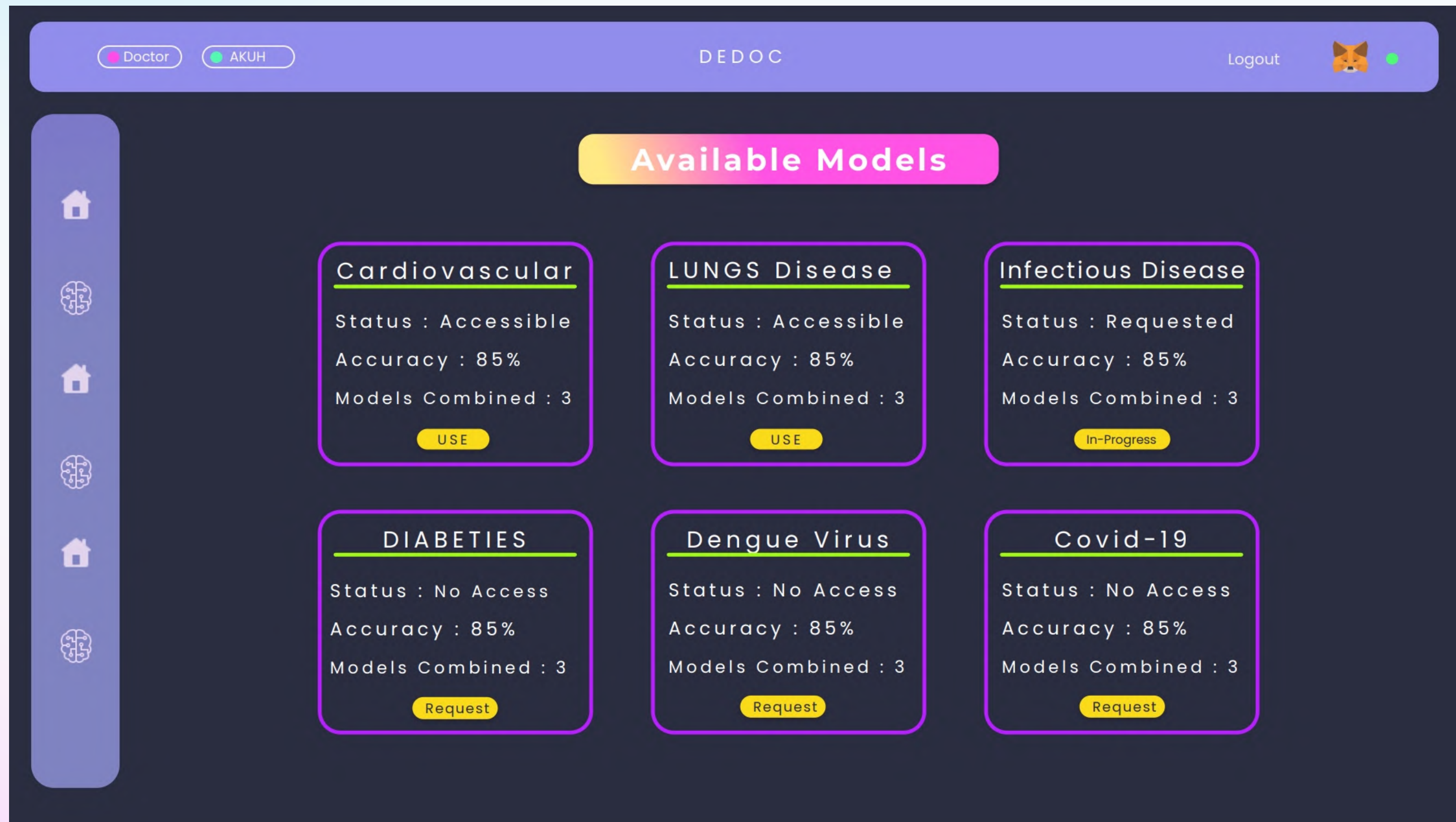
SRS & SDS

Prototypes

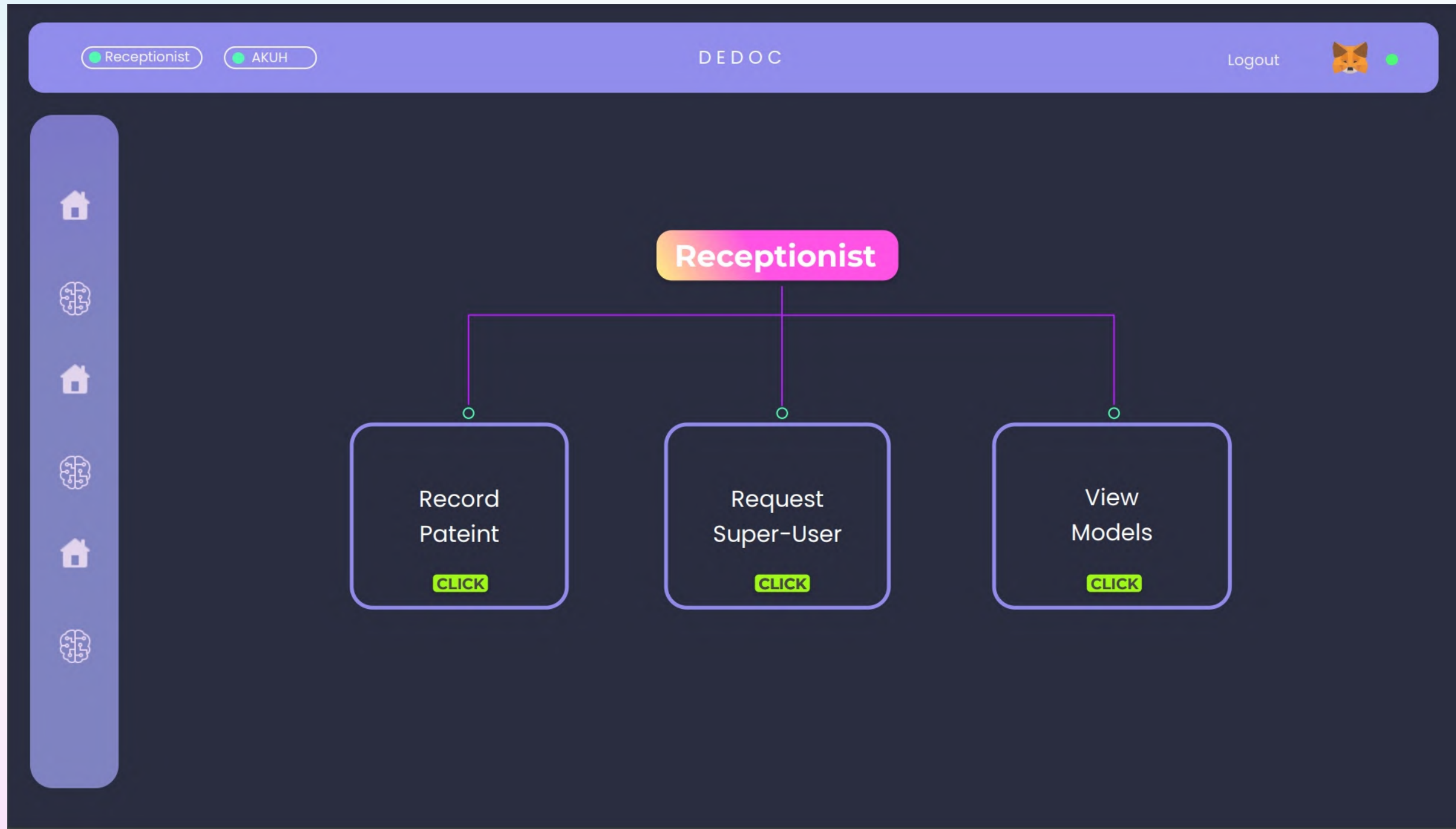
Frontend & Smart Contracts



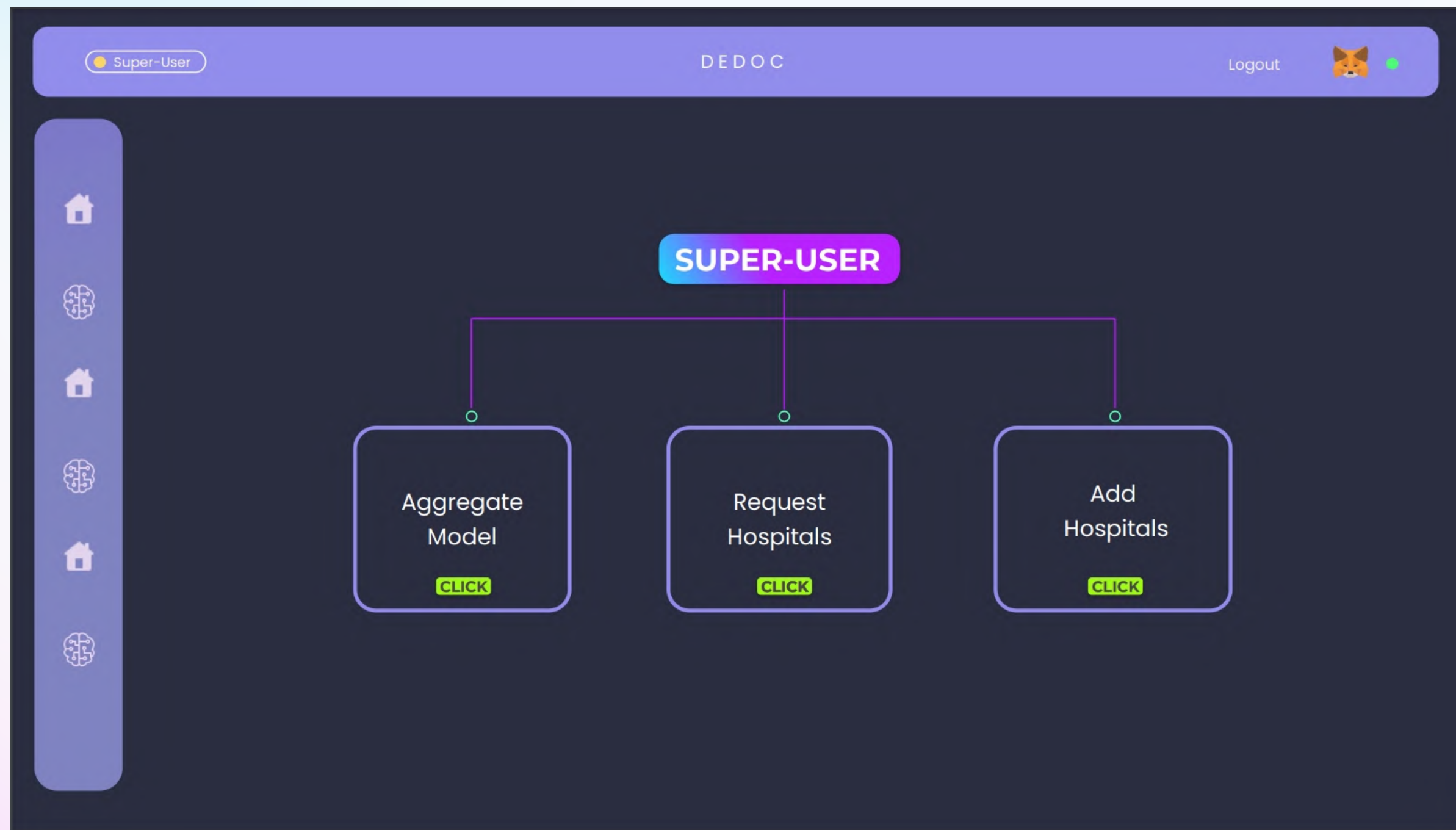
Frontend & Smart Contracts



Frontend & Smart Contracts



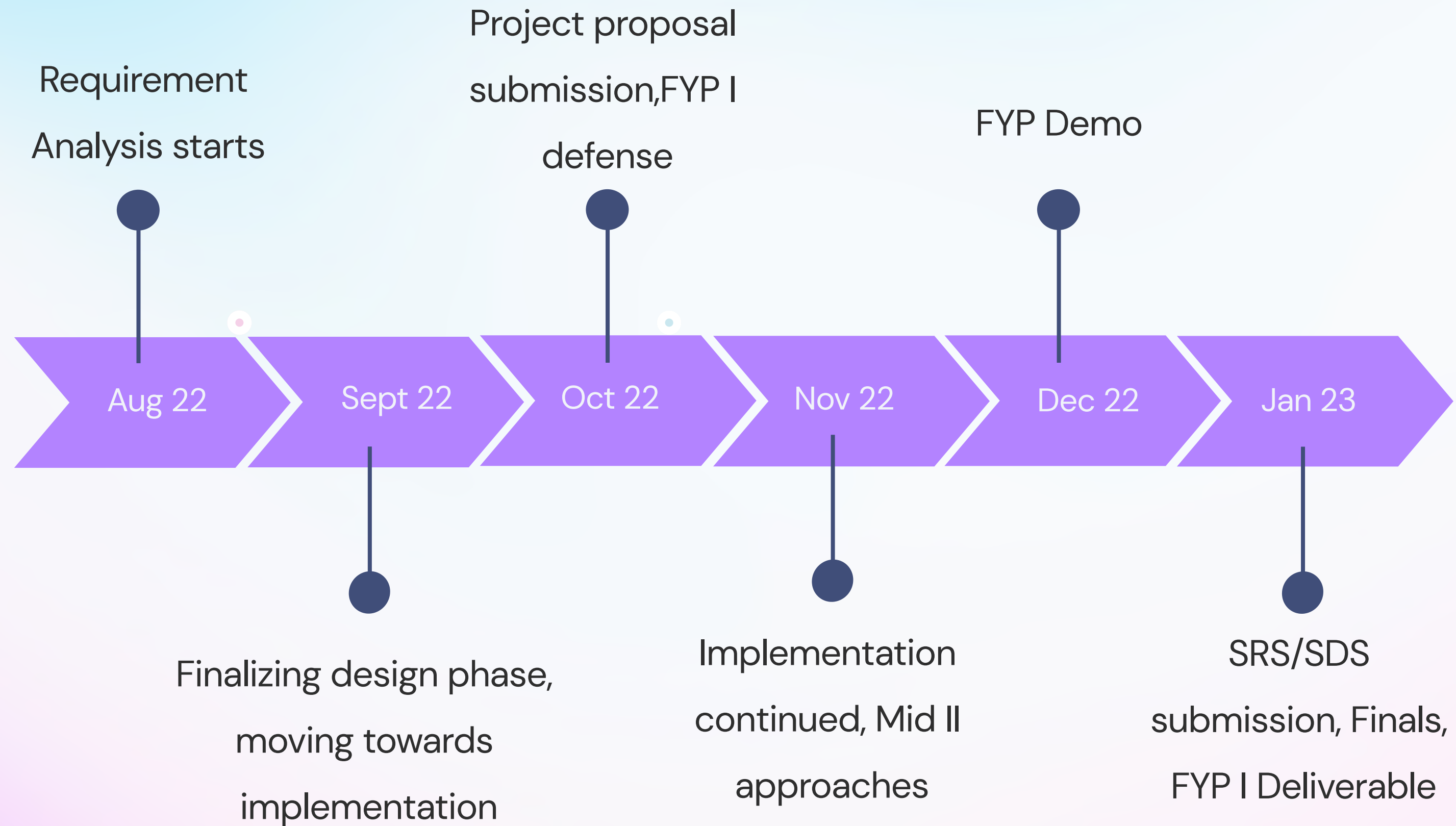
Frontend & Smart Contracts



Future Work

FYP-II Deliverables

- Federated Learning Model
- Valid Data Set
- Selenium Test Cases
- Completed Front-End Codebase
- Completed Smart Contract
- Fully Integrated Working System (Front End + Smart Contract + FL Model)



Thank you