Integration of Hyperledger Iroha into Hyperledger Explorer tool

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Introduction

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- **Mentor(s):** Ales Zivkovic
- **Hyperledger project:** Hyperledger Explorer, Hyperledger Iroha
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 › Project Description:
   › Add support for collecting and viewing Hyperledger Iroha peers, blocks, transactions, roles, domains, and accounts to Hyperledger Explorer.
   › Used technologies include NodeJS, TypeScript, GraphQL, ReactJS.
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Project Screenshots:
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Project Objectives:

- Obj 1: Develop data collection and storage service.
- Obj 2: Design data service GraphQL API.
- Obj 3: Connect Hyperledger Explorer frontend to data service.
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Project Deliverables:

- Deliverable 1: Data service is implemented and tested.
- Deliverable 2: Data service GraphQL API is implemented, tested, and documented.
- Deliverable 3: Hyperledger Explorer frontend is using GraphQL API of data service.
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› **Project Execution & Accomplishments:**
› We implemented and tested an integration of Hyperledger Iroha into Hyperledger Explorer. We could see Iroha peers, blocks, transactions, roles, domains, and accounts in web interface.
› Sometimes it was difficult to understand what Hyperledger Explorer code does because it was written by different people with different experience and programming styles.
› Also, we found and fixed some ambiguous statements in Hyperledger Iroha documentation.
Recommendations for future work:

Based on our experience, code of Hyperledger Explorer has low maintainability and needs refactoring.

There is inconsistency in UI design. A style guideline should be chosen and followed.