Convoys in Atomic and Molecular Trajectories

DESIGN DOCUMENT

Team Number: 19
Client: N/A
Advisers: Goce Trajcevski
Team Members/Roles: Ayden Albertsen
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Executive Summary

Development Standards & Practices Used

List all standard circuit, hardware, software practices used in this project. List all the Engineering standards that apply to this project that were considered.

Summary of Requirements

- front-end UI that will enable:
  - (i) users to select dataset;
  - (ii) users to enter parameters;
  - (iii) selection of algorithms;
  - (iv) presentation of the results to the end-user;
- back-end that will store the molecular simulation datasets;
- "middleware" that will connect the front-end and back-end;

Applicable Courses from Iowa State University Curriculum

List all Iowa State University courses whose contents were applicable to your project.

- S E 309
- COM S 363
- COM S 327
- COM S 311
- COS S 319

New Skills/Knowledge acquired that was not taught in courses

List all new skills/knowledge that your team acquired which was not part of your Iowa State curriculum in order to complete this project.

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1 Team

1.1 Team Members

Ayden Albertsen

Benjamin Hall

Ben McClannahan

TJ Thielen

1.2 Required Skill Sets for Your Project

Frontend development, Backend development, Database management, Visualization

1.3 Skill Sets covered by the Team

Frontend development – Ayden Albertsen, TJ Thielen, Benjamin Hall

Backend development – Ayden Albertsen, TJ Thielen, Benjamin Hall

Database management – Ayden Albertsen

Visualization – Benjamin Hall

1.4 Project Management Style Adopted by the team

Given the team's experience working on Agile teams, it makes the most sense to implement this management style on our project.

1.5 Initial Project Management Roles

Client/Advisor Contact and communication – Ayden Albertsen

Git Management Leader – Benjamin Hall