**Container Runtime Team:** Caleb Boswell, Jeen Shaji, Jonathan Balliet

**Data Storage Team:** Spencer Yoder, Daniel Mills

Each iteration will last for 2 weeks.

It will include: Detailed designs, Implementation, Testing and documentation.

**Iteration 1**

* Overall goal: have a working infrastructure that supports very basic functionality of our system
* Container Runtime Team
  + Create a service which can facilitate a single GET REST call to the database
  + Create model classes for database objects
  + Create unit tests for all classes
* Data Storage Team
  + Create, configure, and populate a simple SEPostgres database
  + Create a simple user data file
  + Database should be able to handle the one API call implemented by the container runtime team

**Iteration 2 (Expected to encompass spring break)**

* Overall goal: complete and test the system based on the infrastructure laid out in iteration 1
* Teams may change for this iteration, especially if the database is fully configured
* Container Runtime Team
  + Design and implement all remaining API calls of POST, PUT and GET Reports
  + Test API calls with enforced SELinux labels for security with database
* Data Storage Team
  + Finalize the database
  + Database should be able to handle all new API calls implemented by the container runtime team.
  + Test data corner cases (related data is properly deleted, class invariants are properly handled, etc.)
  + Implement logging (tentative)

**Iteration 3**

* Overall Goal: Work on Coverage Testing
  + Increase coverage on unit testing
  + Confirm black box test results
* Dockerize the running service in a container
  + Adjust code/tests based on results
* System tests to ensure single running container instance is isolated from host and other containers and security is maintained
* Extra goal: Simple, functional Front End
  + Decision: command-line or web app frontend
* Stretch goal: encrypt/decrypt data at REST

**Iteration 4**

* Catch Up/ Begin Stretch Goal
* Overall goal: Container Runtime completion
  + Orchestration of multiple running containers
  + Testing of whole system and multiple services running at the same time

**Iteration 5**

* Overall goal: Finish preparing project and presentation for Posters and Pies.

**Iteration 6**

* Overall goal: Finish final project adjustments and compiling project report.

**Task Planning Session**

* Feb
  + 14
  + 15 - 16
  + 18
    - Design and code review w/ Dr. King
  + 20
  + 21
  + 22 -23
  + 27
    - EC Fidelity Lecture
    - OPR 2 - Spencer
    - Reschedule the meeting
  + 28
    - EC CDC Talk
  + 29
    - Peer evals/logs due
* Mar
  + 1
    - Peer evals/logs due
  + 5
    - Skyward federal meeting
  + 6
    - Final IPR due
  + 7-8
    - Spring Break
    - No senior design work
* Progress
  + Iterations are broken up into
    - Requirements
    - Design
    - Implementation
    - Testing
* Iteration 1
  + Req
    - The user is properly authenticated when receiving a data item from the database