Introduction
We created a Proof of Concept (PoC) for a web application. Our app is designed to showcase a functioning Hardware as a Service (HaaS) system, inspired by the University of Utah POWDER program.

System Requirements
We fulfilled all stakeholder requirements including SN1: Create and maintain secure user accounts and projects on the system SN2: View the status of all hardware resources in the system SN3: Request available hardware resources and datasets from published sources SN4: Once approved, checkout and manage these resources SN5: Check-in the resources and get status of all hardware resources in the system SN6: Deliver PoC within schedule constraints, with support for scalability.

System Requirements	**Stakeholder Needs Met**
SR1: PoC shall be delivered within budget and schedule constraint, with periodic updates to stakeholders	SN6
SR2: PoC App shall have a front-end web application that allows users to enter inputs and views outputs	All
SR3: PoC App shall have a mechanism for encrypting user-id and password	SN1
SR4: PoC App shall have a mechanism for creating new projects or accessing existing projects	SN1
SR5: PoC App shall have a database for maintaining user login credentials, project codes, project details, resource details	SN2, SN3, SN4, SN5
SR6: PoC App shall have a user-friendly interface for ease of use and navigation	SN2
SR7: PoC App shall be compatible with major web browsers (e.g. Chrome, Firefox, Safari, etc.)	SN6
SR8: PoC App shall provide real-time data validation and error handling to ensure data accuracy	SN4, SN3, SN5
SR10: PoC App shall have appropriate security measures in place to protect	SN6, SN1

sensitive data and prevent unauthorized access.	
SR11: PoC App shall be designed to scale and handle large amounts of data as the number of users and projects grow.	SN6
SR12: PoC App shall have an intuitive and configurable dashboards to help stakeholders monitor and track project progress, performance and resource utilization.	SN2, SN3

Installation and Setup

To set up the project, the first step is to download the source files. Once downloaded, the backend folder should be moved to the desired location within the development environment. Afterward, a new react project should be created and named “frontend.”

Once the “frontend” project is created, the next step is to delete the existing src file from the newly created “frontend” folder. The next step is to drag and drop the downloaded “src” folder from the downloaded source files into the “frontend” folder. This will replace the existing src folder in the “frontend” project with the one from the downloaded source files.

Once the source files have been added to the “frontend” project, the next step is to run the server.py file located in the backend folder. This will start the backend server and make it available to receive requests from the frontend.

Finally, the react web app can be run to test the application. This can be done by running the command to start the react development server. The web app should now be available to access and use in the web browser.