



BurstIQ, Inc.  
3513 Brighton Blvd., Suite 620  
Denver, CO 80216  
www.burstiq.com

## Company Background

At BurstIQ, we believe that the health industry is at a tipping point. Technologies now exist that will break down these silos and enable health data to be connected on a global scale. The company was founded in 2015 with one mission: to enable a predictive, preventative and personal era of health. We believe that each person deserves to live their healthiest, happiest life, and that data will democratize health on a both a global and an individual level. The BurstIQ platform connects any data from any source in a global network of businesses, researchers and people, through a full end-to-end blockchain enablement system, with blockchain-based big data management, consent and data sharing, cognitive computing, monetization and global data exchange.

## Project Description

### Problem

When a cancer patient dies or their regimen changes, thousands of dollars' worth of life-saving medicine are often left in the hands of patients and family members whose only legal recourse is to flush them down the toilet or throw them in the trash. *The cost of wasted prescription medication is estimated to range from \$2.4 to \$5.4 billion annually while an estimated 10 million prescriptions could be recycled in the United States every year.* About 58 million Americans reported not being able to afford a medication they needed, while 34 million Americans say they know someone who *died after they skipped medical treatment due to their inability to pay.* *The mortality rate for many vulnerable patients can be significantly reduced by simply leveraging the 10 million medications that can be reclaimed and redistributed annually instead of destroying them via environmentally harmful methods.*

### Solution

While pharmacists have created a patchwork of FDA requirements and state-level statutes for reusing medication, there is need for a platform combining blockchain technology and traditional software into a system prototype that incentivizes the donation and disposal of surplus medication.

Features of the prototype:

- Work with our established charity pharmacy partner, RemediChain, using system analysis and design methods to document user stories and features.
- Build on the BurstIQ Platform, a cryptographically-protected blockchain-based database that will serve as a single source of truth for surplus medication.
- Create a blockchain-based credential for donors, surplus medications, and recipients.
- Create an immutable chain of custody for drug donations where drugs are tracked by individual through shipping to pharmacy to recipient.



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- Make specific data publicly searchable while keeping individuals' identities and monetization private.
- For each function: diagram the processes, flows, and measure the total time it takes to complete each function.

Phase 1 of this project was completed Summer 2021. The following objectives were completed:

- Comprehensive User Interface
- Login Functionality
- Donation and Request Form integrated into the website
- Account Page that leads to the forms and displays donated assets

Phase 2 - Fall 2021

Primary objectives

- Need to redesign the datamodel and data ownership based on long-term goals
- Wire the UI up to the testnet server for saving and querying data

Secondary objectives

- Recipient role - functionality to request medication
- Pharmacist role - functionality to review and change status of requested medication to approve and transfer to recipient
- Pharmacist role - functionality to review and change status of donated medication to approved and make visible in inventory

## Student Requirements

### Team Size

4-5 students

### Location

M - BurstIQ office in RiNo for in person support

T-F – Remote with access to BurstIQ team via slack or zoom

### Skills

Entry level, basic understanding of the following:

- UI: javascript, REST, web development
- Backend: java, node.js, or other server languages
- Data science: databases, SQL



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## Student Benefits

Students will get experience working with a growing, start-up company based in Denver. BurstIQ is in growth mode, and we are looking for highly motivated, tenacious students that take initiative to solve problems. Post-project opportunities may be available for the right students to join our growing team.