

Iteration #1	Feature
Date of milestone	Nov 9 2024
Features in scope	Connection Pooling Implementation, Domain adding API, Domain DNS verification, ETCD Service Discovery, Client-side key Decryption, mTLS Security Certificates for inter-service authentication, Inbox creation, Persistent Queue System for Domain verification, Registration and Login, Database setup, Integrity checks, Service side load balancer, Session Managment & Authentication
Features implemented	Connection Pooling Implementation, ETCD Service Discovery, Client-side key Decryption, mTLS Security Certificates for inter-service authentication, Persistent Queue System for Domain verification, Registration and Login, Database setup, Integrity checks, Session Managment & Authentication
Features in deficit this Iteration	Service side load balancer, Domain DNS verification, Inbox creation
Iteration Comments & Summary	I'm happy with the progress so far, I've been picking up Go, gRPC, and ETCD along the way, and I've now (hopefully) solidified the project structure and API layout. All the foundational planning is in place, so Iteration 2 will be focused solely on implementing features. My only concern is the UI, which I'll begin in Iteration 3, alongside testing. This will hopefully let me prioritize core functionality first, ensuring that I have something to show for my work, and that the backend is feature-complete before diving into the UI and testing phases as things are 100% bound to change in iteration 2.

Iteration #2	Feature
Date of milestone	Dec 1 2024
Features in scope	Polish connection Pooling Implementation, Domain Management API, Polish ETCD Service Discovery, DKIM Key Generation and Validation, Persistent Queue System for Domain Verification (rewrite), Introduce Logging System, Rethink Error Handling, Fix Non-mTLS Mode for Development Flexibility, Setup front end environment, Setup NGINX reverse proxy
Features implemented	Polish connection Pooling Implementation, Domain Management API, Polish ETCD Service Discovery, DKIM Key Generation and Validation, Persistent Queue System for Domain Verification (rewrite), Introduce Logging System, Rethink Error Handling, Fix Non-mTLS Mode for Development Flexibility, Setup front end environment, Setup NGINX reverse proxy, Registration + Login + Recovery front end page, Settings page, Inbox page
Features in deficit this Iteration	
Iteration Comments & Summary	I'm happy with this iteration, it went really well. As mentioned in Iteration 1, there was some refactoring as I began to understand the system's needs better, but this was expected and helped solidify the overall design. It was also a very productive iteration, I managed to accomplish more than planned, including starting on the frontend UI, which was (way) ahead of schedule. The progress on the connection pooling, domain management API, and ETCD service discovery went smoothly, and I'm pleased with the improvements in logging and error handling. Overall, I'm very happy with this iteration. The next iteration will be quite lean with features as I've got one massive feature in the works, the Inbox system which will be used for everything to do with sending and receiving emails.

Iteration #3	Feature
Date of milestone	
Features in scope	Inbox System (Building ontop of the Domain system in last iteration), Inbox Management (CRUD), Inbox Cryptography, Email Address Management, Alias System.
Features implemented	
Features in deficit this Iteration	
Iteration Comments & Summary	

Iteration #4	Feature
Date of milestone	
Features in scope	
Features implemented	
Features in deficit this Iteration	
Iteration Comments & Summary	

Iteration #5	Feature
Date of milestone	
Features in scope	
Features implemented	
Features in deficit this Iteration	
Iteration Comments & Summary	

Iteration #6	Feature
Date of milestone	
Features in scope	
Features implemented	
Features in deficit this Iteration	
Iteration Comments & Summary	