Content Distribution Network with Web Application Firewall Sprint #2

(CDN with WAF)

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Overview

Key takeaway of our project:

- Build content distribution network which helps improve efficiency of web access by the use of cache servers.
- **CDN**: distribute service among large number of servers. reducing bandwidth costs
- **Varnish:** web application accelerator also known as a caching HTTP reverse proxy.
  - You install it in front of any server that speaks HTTP and configure it to cache the contents.
  - Important note: Cache is really, really fast. It typically speeds up delivery with a factor of 300 - 1000x

Goals: Combine the two. And make it accessible as a service for web owners.

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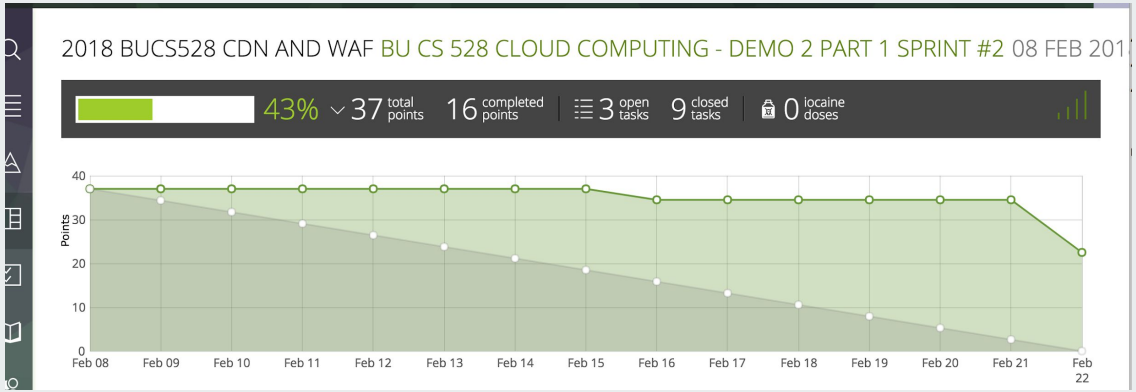
Progress in sprint 2

1. Understand the architecture of the project, merge components and set up instances in MOC
2. Flask Server with PostgresQL database integration
3. A Varnish Instance was tested as a caching server for a simple HTML website.



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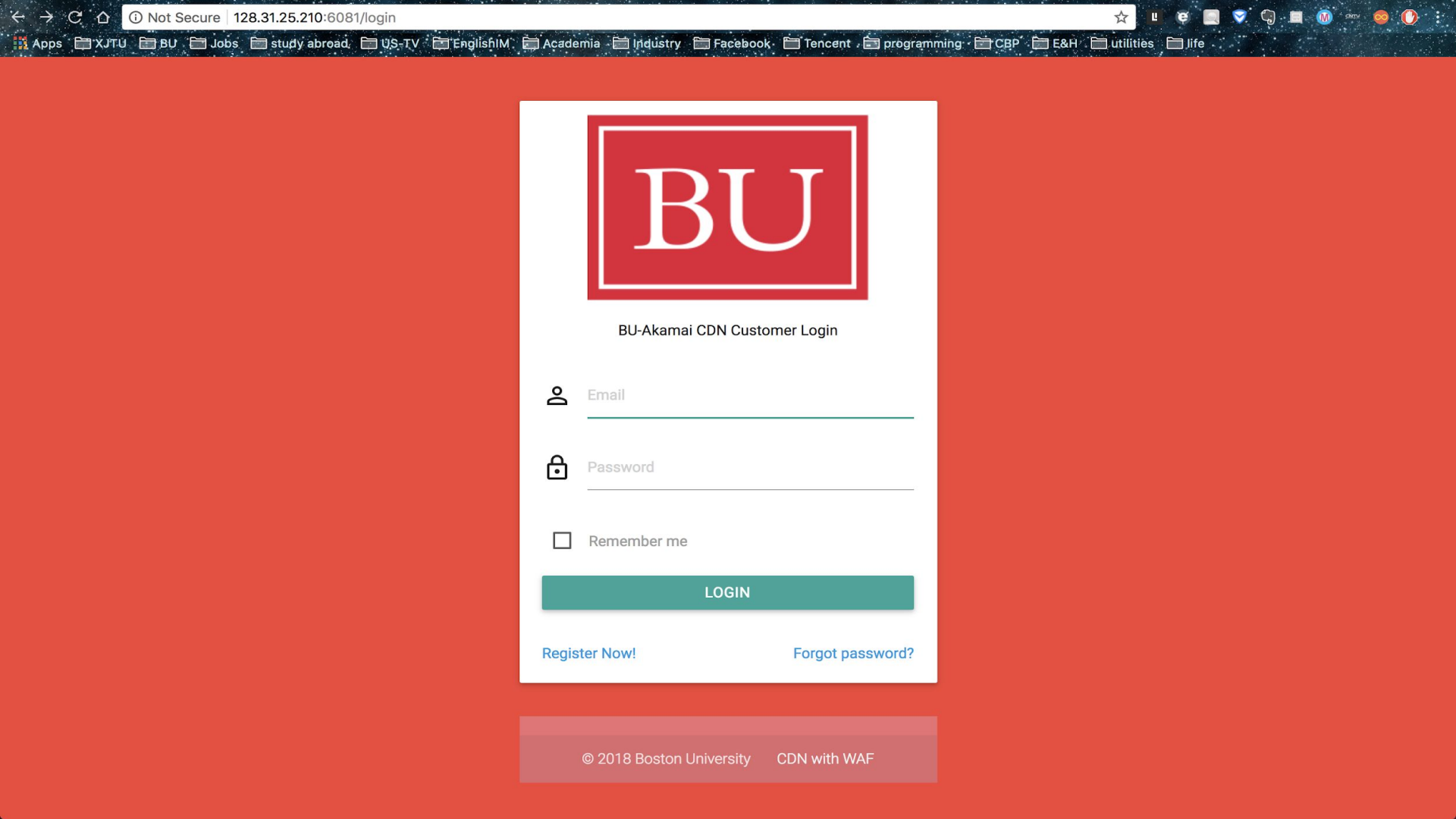
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Forgot password?
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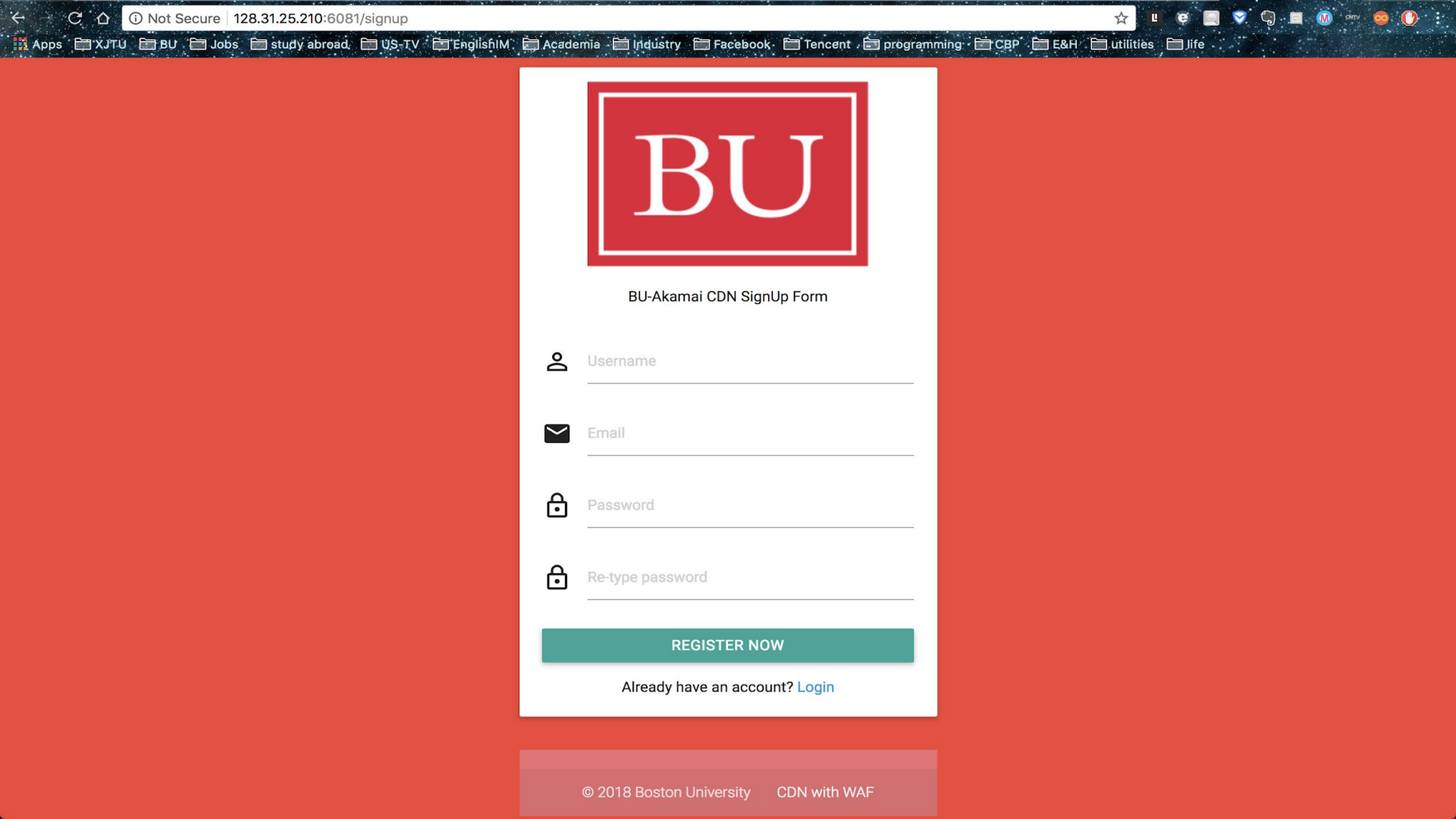
CDN with WAF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BU
BU-Akamai CDN SignUp Form
Username
Email
Password
Re-type password
REGISTER NOW
Already have an account? Login
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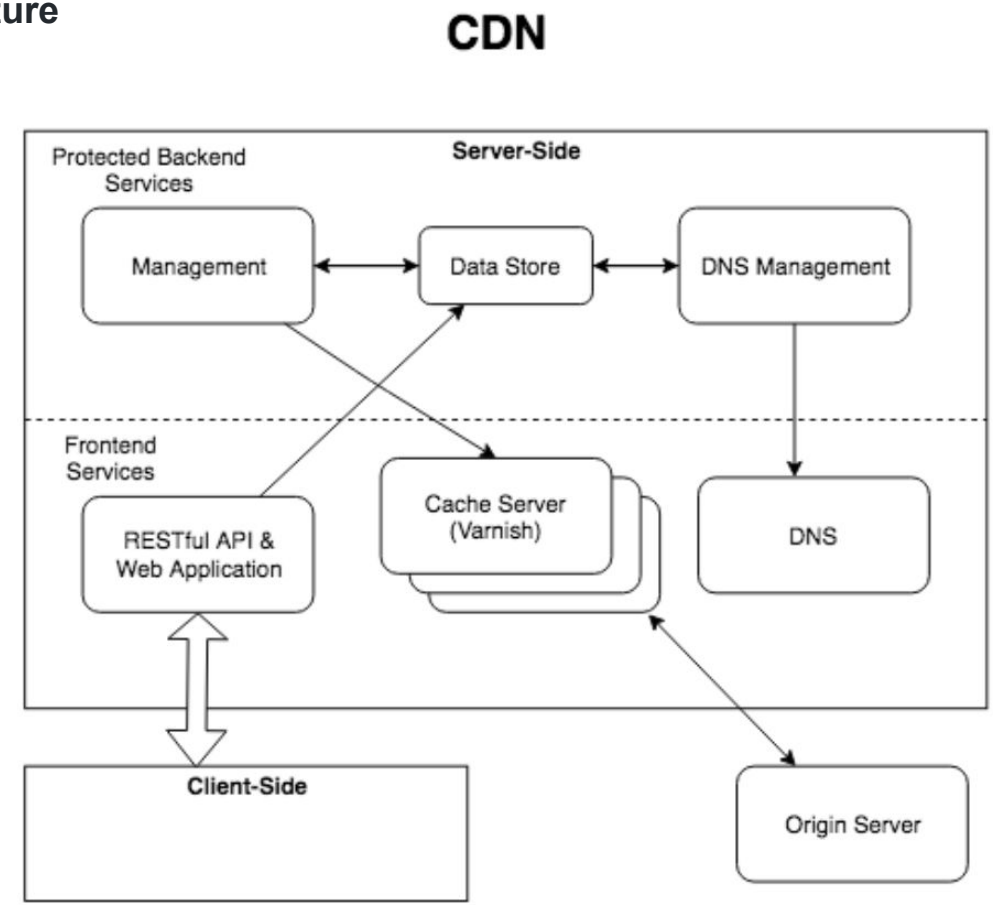
Registered Users

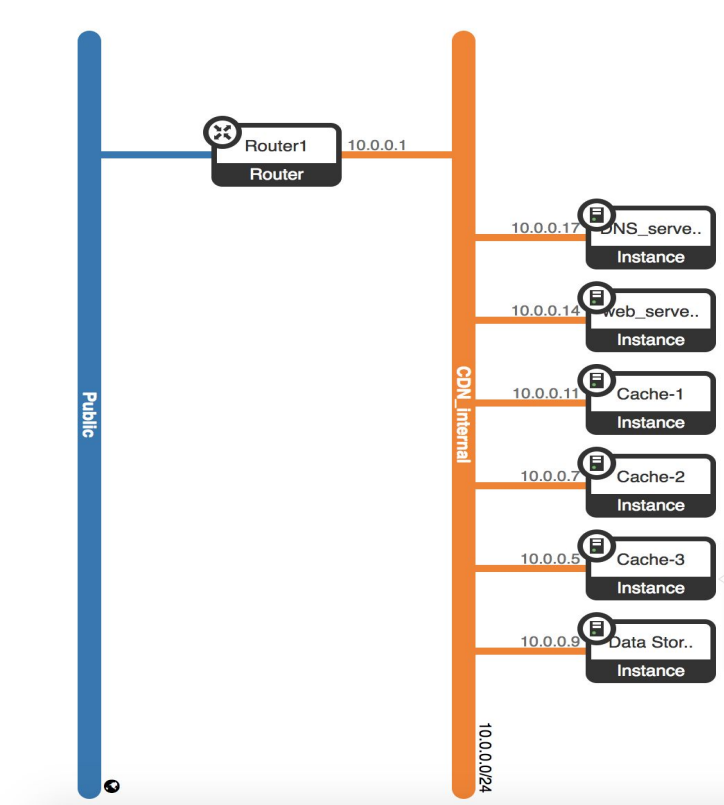
Name	Email
Jade Dhang	jadedh@bu.edu

Register!

Project Architecture



Progress in sprint 2



1 DNS server

1 web server

3 varnish cache

1 Datastore contains: management, data store and DNS management

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Future Plan

Demonstrate Web user interface to display back-end modules and processes.

- Basic user management functions without infrastructure (Deliverable 1) (already done)
- Data Store Server (Deliverable 2)
- Management and DNS Management Server (Deliverable 2)

Demonstrate client-side usage with Cache access.

- Without load balancing (Deliverable 3)
- With load balancing but without security layers (Deliverable 4)
- With security layers (Deliverable 5)

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Thank you, Questions?