University ChatBot

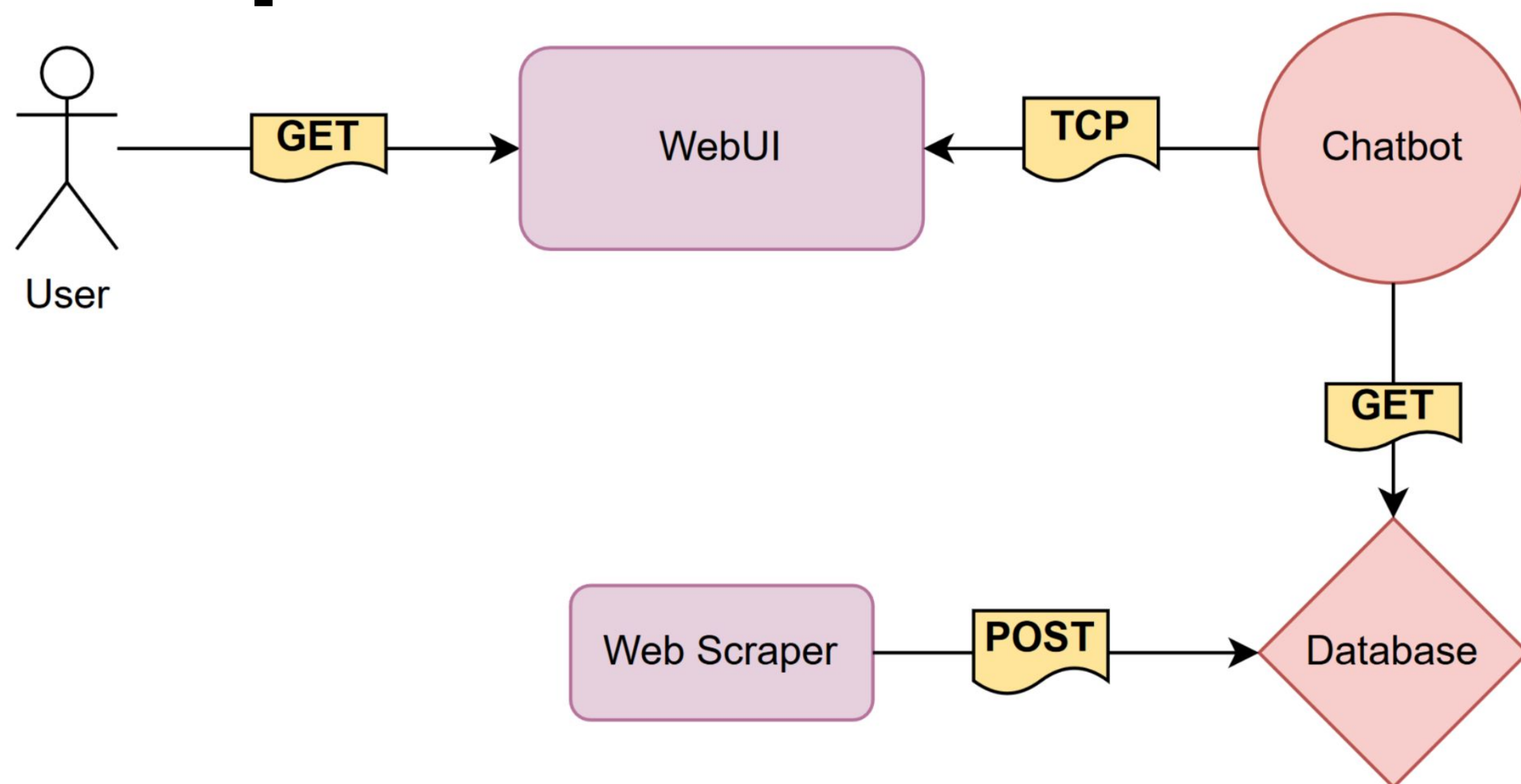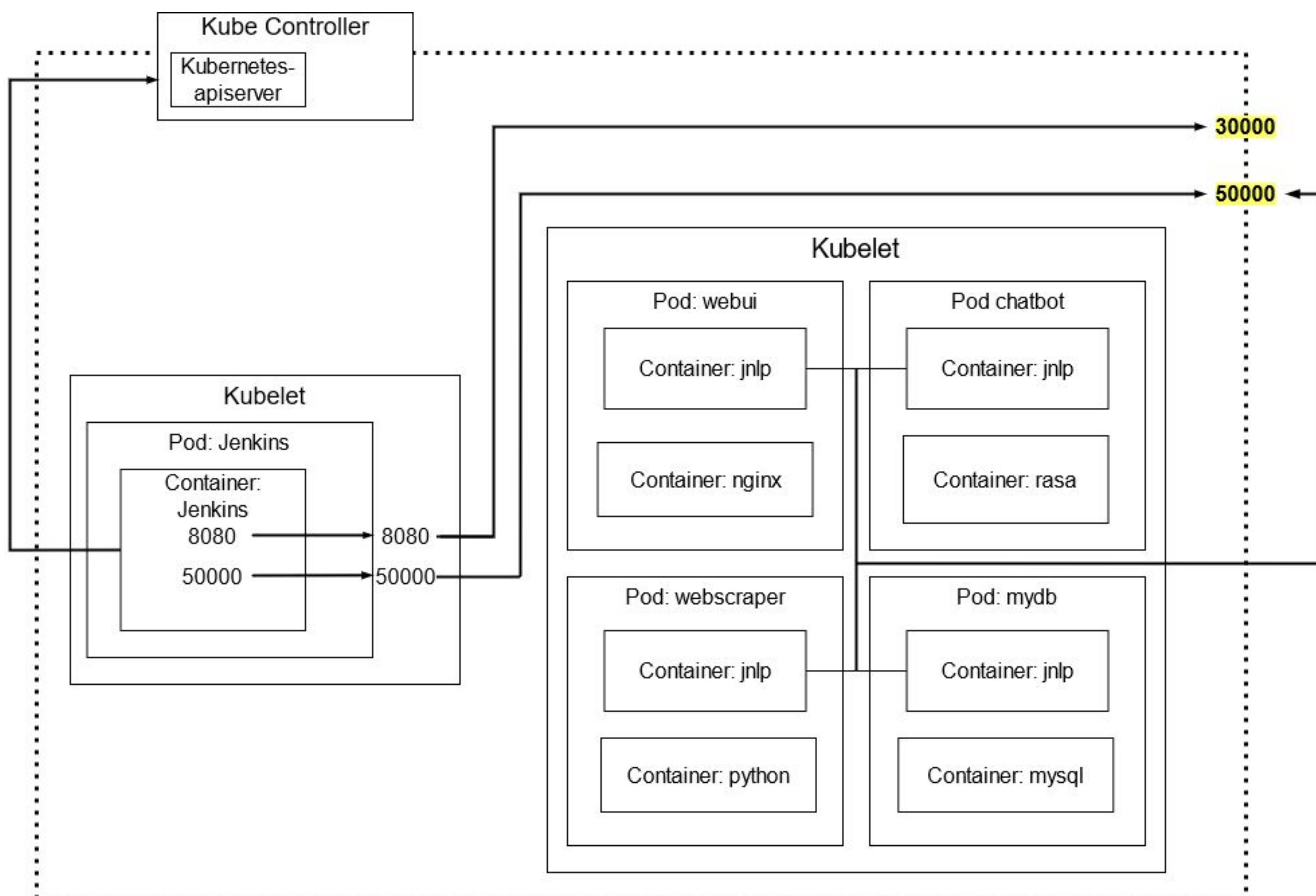Nicholas Hines, Jared Miller, Brian Montecinos-Velazquez, Dominic Pisano, Tyler Profitt

Summary

- Provides an interface to make specific queries about campus events
- Development with cloud-infrastructure, containerization, CI/CD pipline
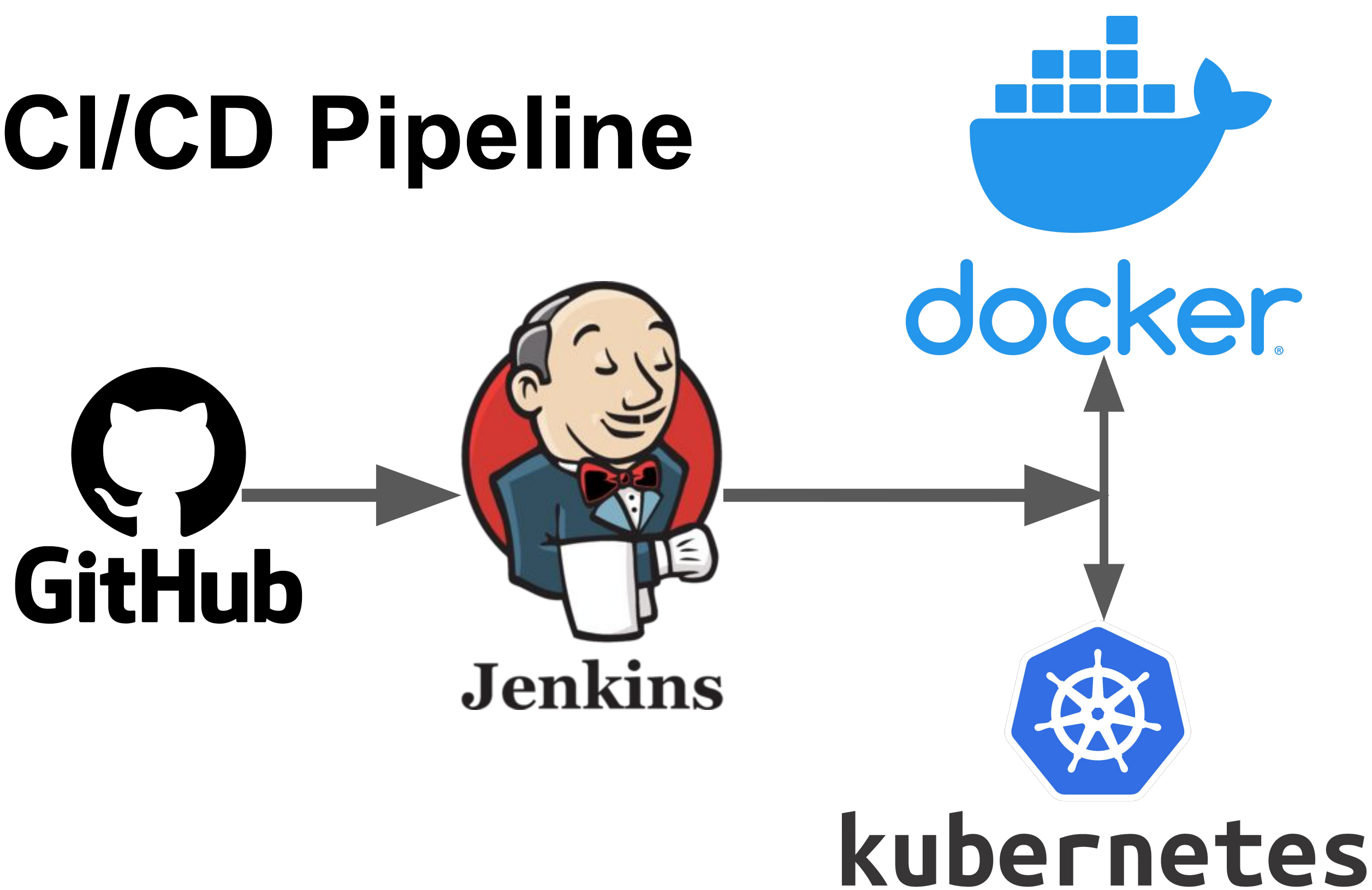- Used Docker, Docker-Compose, Kubernetes, and Jenkins

Components

Kubernetes Cluster

CI/CD Pipeline

Description

WebUI

- Themed after wcupa.edu
- Designed to mimic standard messaging application
- Hosted by nginx container

ChatBot

- Reads and responds to text
- Queries database according to user input
- Uses Rasa framework for natural language processing
- Isolated as Kubernetes pod

WebScraper

- Gathers event data from university website
- Inputs into database
- Written in Python using: Beautiful Soup 4, Pandas, and SqlAlchemy.

Database

- MySql server hosted on pod
- Stores all university- related data from webscraper

https://github.com/bmv0161/csc468-final