

**Name:** Ruchik Chaudhari

**Project Title:** User Account & Authentication (UAA) Username Clear

**Company Name:** T-Mobile

**Industry Sponsor:** Josh Ng

**497 Instructor:** Monika Sobolewska

I am having an amazing experience as a TechX intern at T-Mobile. The TechX program is a 9-month part-time internship. I am currently working with a platform team at T-Mobile. The first few months have been focused on learning the tools, technologies, and concepts they use, as all the cloud computing concepts and tools are very new to me. My team has assigned a small project to me which gives me exposure to the team structure, the concept of containers (packaging all the code and its dependencies), YAML files, CI/CD (Continuous Integration and Continuous Delivery), and Concourse (container-based CI/CD tool). T-Mobile has its own T-Mobile Kubernetes platform with thousands of clusters, where a cluster is a set of nodes (a virtual/physical machine) that runs containerized applications. A user needs to often log into a cluster for various reasons. Every cluster has a UAA (User Account & Authentication) endpoint, which stores the usernames and passwords. Not letting the user log in when there is a username case mismatch is expected but all the subsequent logins will still fail even if a user uses the right username in those new attempts. My first project for this internship is to build a Concourse pipeline that spins up a container with a Linux platform. This container then will get all the dependencies needed to execute my scripts using a Docker image. Then it will pull the code from GitHub and run the scripts which clear all the usernames with any capital letters in them to avoid the issue of case mismatch and subsequent login failures. This pipeline will be scheduled to run after every 30 minutes. As of now, most of the work is done and I am confident, I should be able to finish my first project by the end of the quarter.

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