

# Student Teaching Staff Web Application

Mina Bektor, Jacob Burns, Ethan Knorring, Ryan Addeche  
Advisors: Professor Matthew Ahrens, Professor Yu-Shan Sun

## Abstract

This project improves the workflow of the course staff placement process for the CS department. We've developed a central web app where TAs/PLAs and professors can submit their preferences regarding course assignment. Using the collected preference data and a participatory design UX, our webapp streamlines assigning student staff to courses via automatic and manual algorithms.

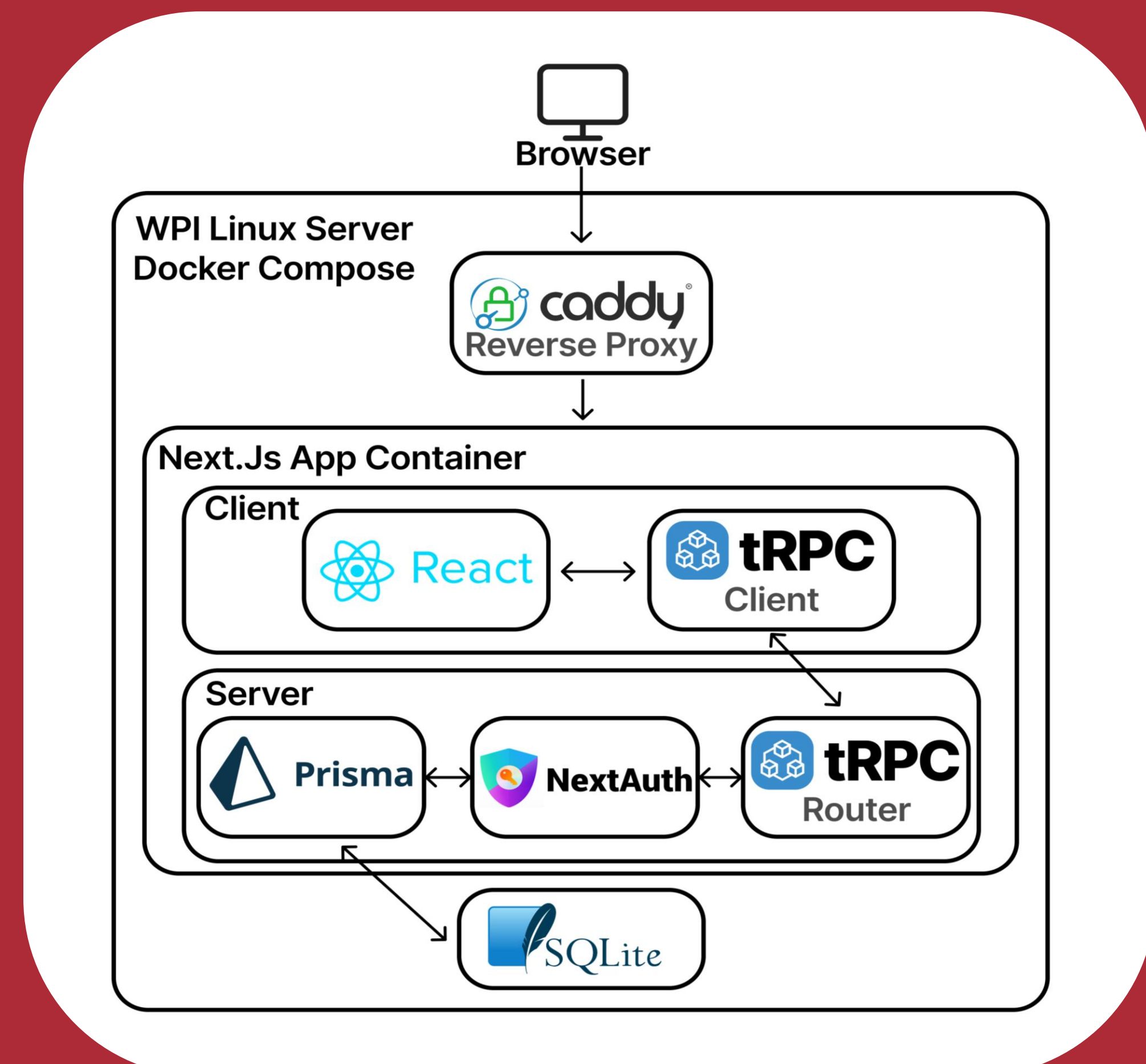
## Problem

- Previously, the coordinator assigned staff manually (3-day, error-prone process)
- The old professor/staff workflow had users fill out preferences in a shared excel spreadsheet

## Objectives

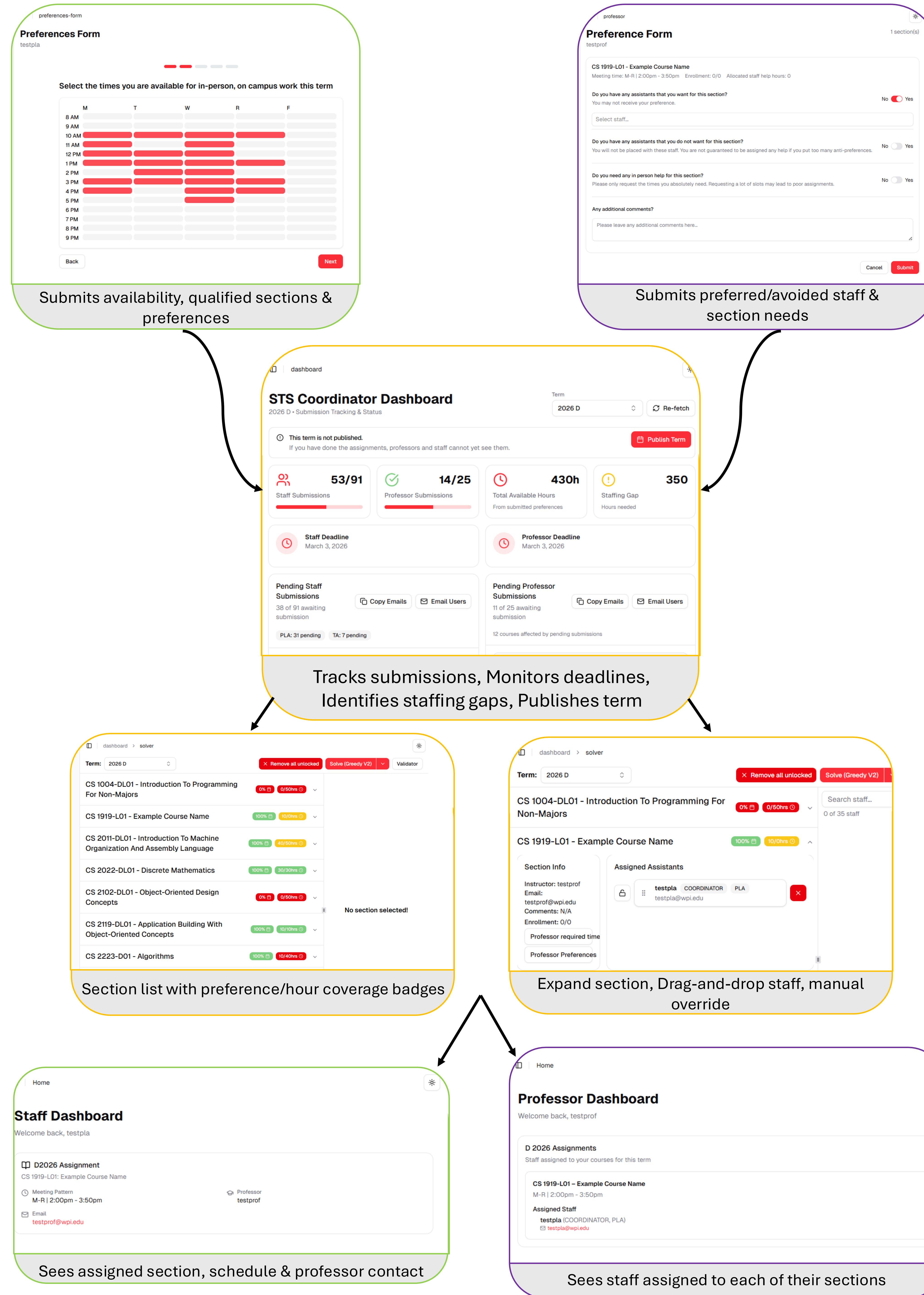
- Create an algorithm that can automatically assign TAs/PLAs to courses
- Ability for TAs/PLAs to provide preferences and qualifications for individual course sections
- Give professors the ability to request that assigned staff be available in person at specified times

## Software Architecture Diagram



# Streamlining STS Coordination: Faster Workflows and Improved Efficiency for Faculty and Assistants

## Staff Assignment Tool – System Workflow

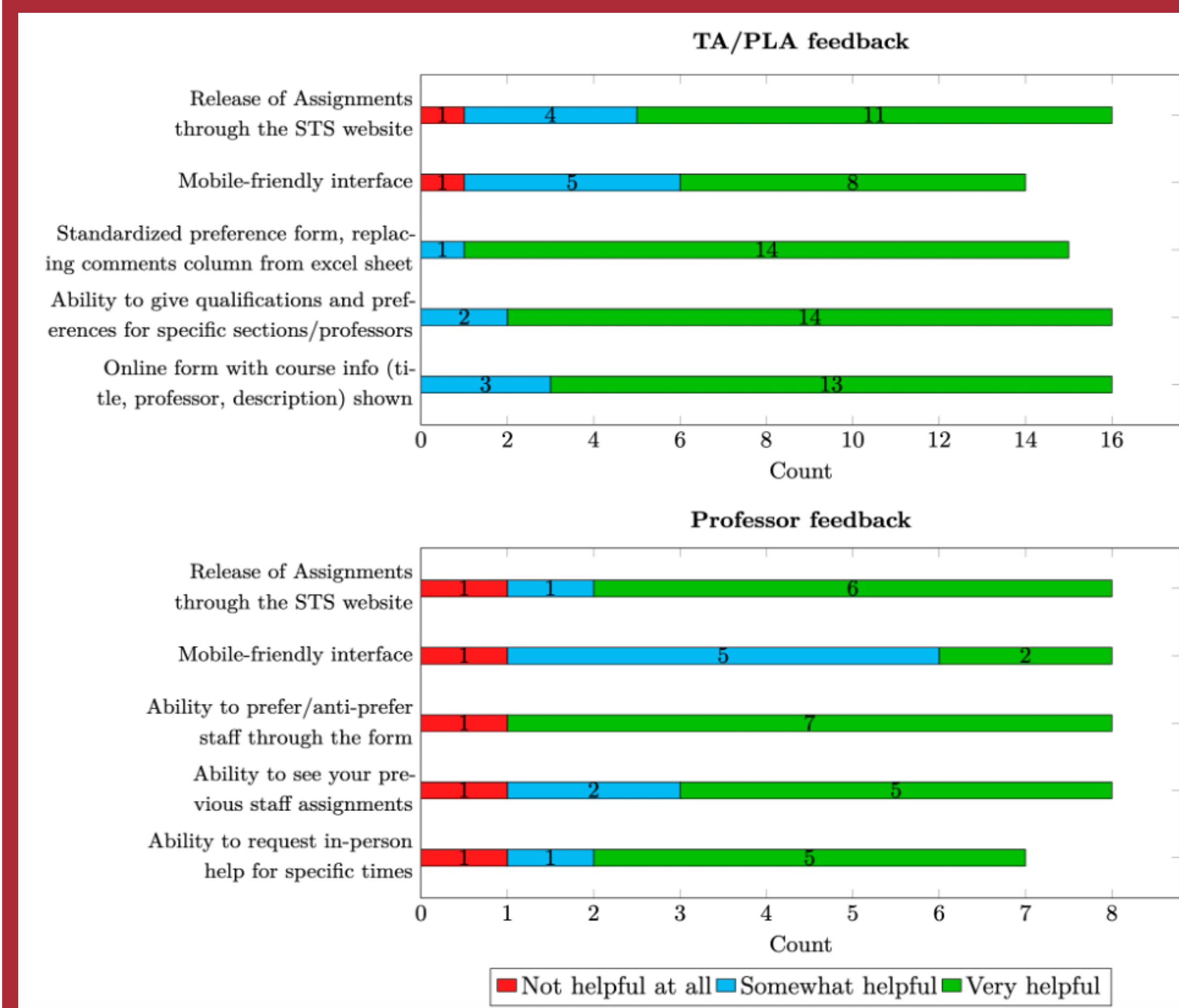


## User Feedback

"It provides a very streamlined, handy, and intuitive way to indicate *staff preferences*. It's clear a lot of thought was put into both the performance and the design of this site." - WPI Professor

"The application was super easy to use! I like the interface a lot and found it much faster than doing the spreadsheet." - WPI PLA/TA

## Results



## Discussion

- Coordinator workflow reduced from 8+ hours to under 2 hours
- STS web app provides streamlined workflow for TAs/PLAs and Professors

## Future Work

- Features supporting course staff workflows throughout the term – office hour scheduling, grading tasks, etc.
- Persistence of preferences across terms will make filling out forms a quicker process