# HW 7

Team Bingo

April 2020

## 1  Concurrency

As Professor Stoller has mentioned, the project has relatively few concurrency issues. There might be small race conditions between an administrator and a student such as marking a decision as questionable, but these are minor. In addition users can only edit their own profile. The only shared data that is accessible by two or more students is High School. When a hs is not in the system, it has to be scraped. This can happen in two cases, when a user is searching for similar high schools, or when he or she updates his or her profile.

The way we handle this is by using atomic transactions in get-similar-hs and post-student-profile in views.py. We choose the appropriate transaction boundaries and make sure the transaction is atomic, thus preventing any concurrency issues.

## 2  Implementation Status Report

See gradingsheet.xlsx

## 3  Installation Manual

See README in source code directory

## 4  Test Report

### 4.1  Unit Tests

Series of tests for backend functions login, register, and search. A set of unit tests to test scraping college rankings, data, scorecard, and niche.com.

### 4.2  Integration Tests

Use a web browser automation tool, selenium, to test integration of frontend and backend. We test search, login, and register.

# 5  Contribution

Omar - backend Olesia, Jafree, Bing: design, frontend, presentation

# 6  Data

See backend/data.

# 7  Design

See backend/design for diagrams and attached documents