Brada

A student-teacher forum.

Goals

-Create a virtual gathering place where students and teachers can engage with each other.

-Facilitate three types of communication:

1. Private student and teacher conversations
2. Private discussion spaces for the teaching staff.
3. Class discussions which are open to all teachers and all students.

Overview

Three types of users: Admins, Students, Staff

Admins:

-Create new organization/class.

-Add a group of students to the class

-Add a group of staff to the class.

Overview (cont.)

Staff:

-Hold virtual live lectures directly from Brada

-Broadcast messages to the entire class.

-Meet privately with any student.

-Hold staff meetings.

Overview (cont.)

Students

-Join virtual classes

-Ask questions or make announcements for the entire class.

-Meet privately with the teaching staff (virtual office hours)

Technologies

-Python3 (Backend/Server-side)

-Sqlite (relational database)

-Flask (Web framework)

-Jinja (User Interface)

-Bootstrap (Frontend framework)

-Webex API (Web conferencing capabilities)

Demo

-https://vimeo.com/521125095

Felipe Gonzalez - registrar coordinator at the University at Buffalo

    -Creates three classes (CSE 489, MTH 306, POL 101)

    -Add relevant students and staff to each course.

Cade Leuker - Teacher of Math and Computer Science at University at Buffalo

    -Make announcements to both classes.

    -Send a scheduling update to other teachers in MTH 306.

    -Chat privately with struggling student.

Demo (cont.)

Raj Pali - Junior at UB enrolled in CSE 489, MTH 306, POL 101

-Ask MTH 306 class what materials are allowed on the next exam.

-Ask CSE 489 teachers for help with his code.

Summary

-The purpose of this application is to demonstrate some of the capabilities of the Webex API, including but not limited to:

      -Creating teams, adding users to those teams

      -Creating rooms

      -Space Widgets

-Future features:

      -Removing students/staff from classes

      -Adding students/staff via html form rather than just uploading a csv

      -optimize so that latency caused by API interactions is reduced

-A link to the repository can be found here: https://github.com/sachalmalick/brada/blob/main/app.py