

Blue Haired Gals with Pronouns: Talia Hsia, Ziyang Jian, Jasmine Yuen
Softdev pd 2
ourTalos
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Time spent: 1 hours

PROBLEM DOMAIN:

- * A high school of approx. 3300 students, with almost 200 faculty, and about 10 floors of classrooms, labs, etc.
- * Students with ranked preferences of course they would like to take.
- * Courses: some have prerequisites, some do not.
- * Faculty with expertise areas and licenses allowing them to lead certain courses but not others. Contract limiting how many courses per day they can teach.
- * Availability constraints on rooms and other resources due to time of day, etc.

FIRST STEP:

- Assign classes/course codes to each teacher
- METHOD:
 - Create a SQLITE database with all this information
 - For the sake of simplicity, each teacher will only be able to take on at most 3 classes.
 - Uses licenses to cross-check eligibility to teach certain classes
 - For every license, parse through the teachers and if they have an expertise and a license in that area, then assign them to that course
 - If that teacher's course count attribute is 3 or more, do not proceed
 - For that teacher, increase the course count attribute by 1

SECOND STEP:

- Create a db that stores students name, grade, OSIS#, and other sensitive information
- Create a form that allows students to rank their favorite classes where they are allowed to using information of classes from the teachers db and then store that information into a class selection db
- METHOD:
 - Students will be a class

- For each graduating class of students, assign each one of them the default classes for that year (core classes)
- If there are no default classes, refer to the top choices the student has selected for their class selections

THIRD STEP

- Pair students up with teachers and the periods that are available to teach
 - Once a placement is conceived, create a new db that inserts students and teachers information together
- Assign teachers to random classrooms on the floor of subject they're teaching
- Finalize pairings and double-check before sending results out to the student body

COMPONENT MAP

