

# The Classroom Scheduler

## + TEAM

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## + DESCRIPTION

A scheduling program for schools to easily assign classes to appropriately sized classrooms at times that do not conflict with the needs and special requirements of other classes.

## + PLATFORM/ENVIRONMENT

- Windows - Since it's a java program it should be rather portable, but since most of the business world uses Windows, it will be the main targeted platform.

## + PROGRAMMING LANGUAGES

LANGUAGE	MICHAEL	CHRISTOPHER	JING	STEPHEN
Java	Expert	Intermediate	Intermediate	Intermediate/ Beginner
MySQL	Intermediate	Beginner	Beginner	Intermediate
JFC/Swing	Good	Beginner		

## + FUNCTIONALITY

- Administrators can upload classroom data (capacity)
- Administrators can upload class data (Important: Instructor, Seats Requested, Credit Hours)
- Administrators can add / remove classes or classrooms
- Program optimizes classroom schedules based with the goal of minimizing wasted seats (empty seats in scheduled classes)

## + [OPTIONAL] STRETCH FUNCTIONALITY

- Enable time/day restrictions for special courses (I.E. Computer Graphics instructor only available to teach at night)
- Program minimizes "Class Interference" (Two courses being Mutually Exclusive, I.E. CourseA has only 1 class, CourseB has only 1 class, they both get scheduled in the same time/day slot so students cannot enroll in both).
- Program runs with time complexity  $O(1)$  (Can you say \$\$\$\$?)