



SCHEDULING THE FRINGE FESTIVAL

Dillon Montag

PROJECT DESCRIPTION

- Scheduling both the tech and performance schedule for the Westmont Fringe Festival
- Constraints:
 - Number of days in the festival
 - Time in each day
 - # of times each piece is performed
 - No piece can be performed twice in a day
 - Participants can only be in 1 place at a time
 - Participants need a certain amount of time between pieces
 - No location can run two pieces simultaneously
- Goal: To schedule the Westmont Fringe Festival and explore generalizations of the program



GOALS

- Create something useful for the Theatre Department
 - Saves time
- Learn more about greedy algorithms/dynamic programming
- Work with stakeholders to design an application
- Connect Computer Science and Theatre



IMPLEMENTATION

- Primary Concern: Crafting an algorithm that works effectively
 - Scheduling only algorithm?
 - Muti-resource allocation (people and locations)
- Tentative idea: Main page, Show page, Participants page
 - Way of organizing constraints
- Different constraints for tech and performances schedules → different interfaces



IMPLEMENTATION

- Iterations on GUI after meetings with stakeholders
- Construct the GUI on top of the algorithm – want an effective algorithm and basic GUI in place before this year's festival
- JavaFX



“EXTRA” FEATURES

- “Spicing” up the GUI with CSS
- Feature to print schedules for each person
- Feature to control proposals between the curators and the directors
- Web-based Application

