

**Software Development for VCU Jazz Ensemble Personnel Placement
and Parallel Needs of Schools and the Private Sector (v 1.1, 9/22/10)**

submitted by Prof. Antonio J. García

Associate Professor of Music

Virginia Commonwealth University

© 2007 Antonio J. García

Flow-Chart for the Proposed Software Program Titled “TBA”

Goal: To automate the majority of the process of placing individuals of varying schedules, qualifications, and experience-levels into groups of like schedules and experience-levels but varying qualifications, compatible with the limitations of available supervisors and spaces.

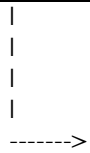
Or, phrased as the need for VCU Jazz Studies: To automate the majority of the process of placing students of varying schedules, instruments, and experience-levels into groups of like schedules and experience-levels but varying instruments, compatible with the limitations of available faculty and spaces.

The program has to accept options of seeking a mix of rehearsal slots of two hours straight one day a week or two one-hour slots per week. “TBA” has to reveal the maximum variations of slots in which the ensembles might meet.

ONLINE	DESKTOP
<p>1) Students access a web page where they enter “X” (conflict) or “?” (possible conflict) into each slot of a schedule grid that appears to them visually like the attached PDF. These marks represent class or work obligations. They type in their ID data, coding themselves as “Student,” and click on a box to accept any terms that appear.</p>	

|
v

2) Ensemble faculty access the same web page and complete the same information, coding their entry as "Faculty."



3) The student data is sorted by "TBA" and routed to my desktop such that I can then retrieve, edit, and organize it offline via various parameters, each printable:



(a) I can print out the actual schedule grid of each student in that one-page grid format. I can also edit the database with any updates that students contact me with in the interim before I finalize matters.



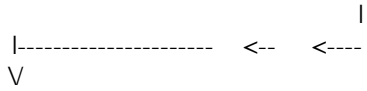
(b) I can access an on-screen left-column alpha-listing of all students' last names, then a column for first names, with the third column indicating the student's instrument:

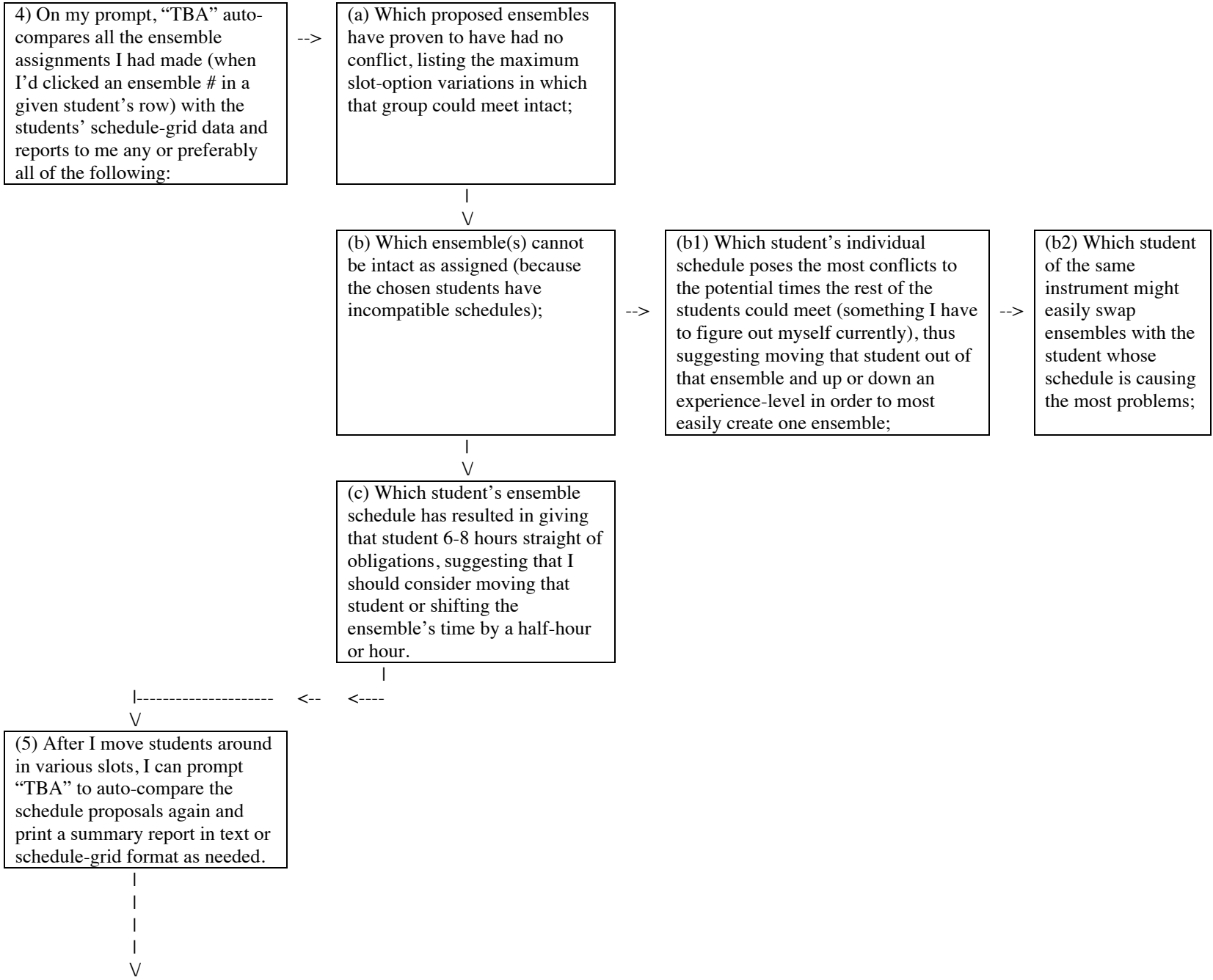


(c) I can also re-sort the data's appearance to be listed in columns by ensemble-number rather than by student alpha, thus giving me an easy "look" at each ensemble's proposed membership—or re-organized by instrument, giving me a glance at how many bassists' schedules I've received, for example.



(b1) Succeeding columns are labeled 1-7 (the maximum number of ensembles I typically place, though we could show more columns). By clicking in the row of a given student's name, I indicate which ensemble I want to place that student in (1 being most-experienced, 7 being least, for example) based on my notes from their auditions.





(6) On my prompt, I can tell “TBA” to “lock” a given, promising time-slot for a given ensemble so that any students newly moved into that ensemble will have to have an opening compatible with the locked slot.



(7) I prompt “TBA” to compare those possible ensemble slot-plans with the schedule grids of the instructors. The report is printable.



(The easiest reporting format would likely be similar to 3.b and 3.b1 above: faculty names in the left column, ensemble numbers 1-7 in the successive columns to the right, in which “TBA” reports the time-slots that agree with the given faculty member and that numbered ensemble.)



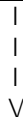
(8) On my prompt, I can tell “TBA” to “lock” a given, promising time-slot for a given ensemble paired with a faculty member.

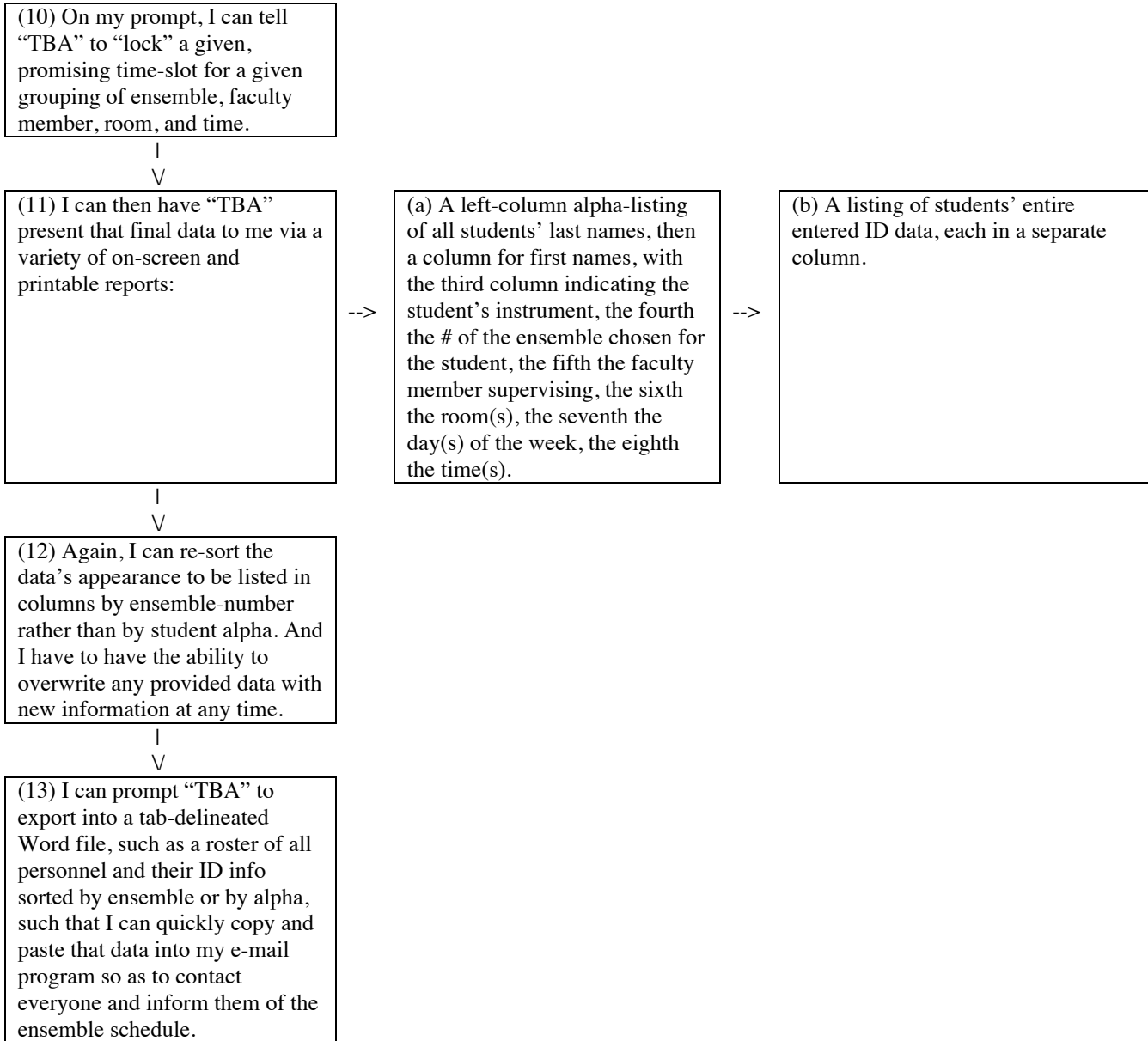


(9) I enter into “TBA” the available rehearsal rooms and times. I prompt “TBA” to compare that with the data above and report to me which faculty members are available to supervise which ensembles, in what time slots, and in what room—with no conflicts. The report is printable.



(The easiest reporting format would again likely be similar to 3.b and 3.b1 above: faculty names in the left column, ensemble numbers 1-7 in the successive columns to the right, in which “TBA” reports the time-slots that agree with the given faculty member, the numbered ensemble, and the room.)





If “TBA” could accomplish Steps 1-6, that would save me an estimated six hours of work on the night I address scheduling. Adding Step 13 alone would save me a couple more hours. Steps 7-12 would save me another hour or two. Altogether, “TBA” would save me 9-10 hours of labor across one exhausting night of every semester—well worth investigating an automated program.