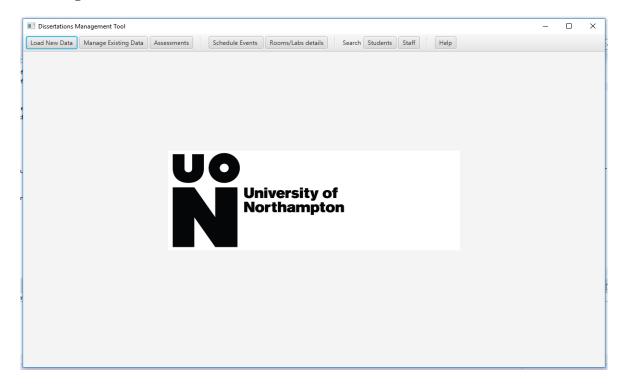
Dissertation Module Management Tool

User Guide

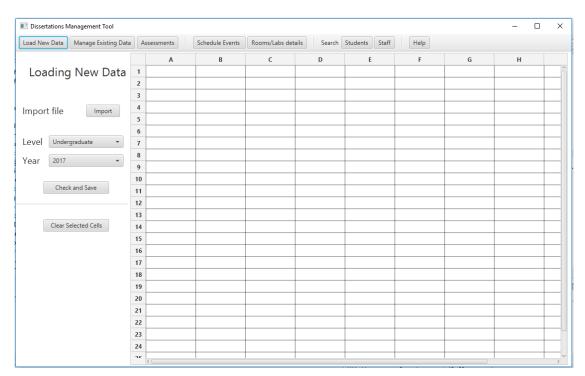
@ Hussein Ajam

1. Home Page

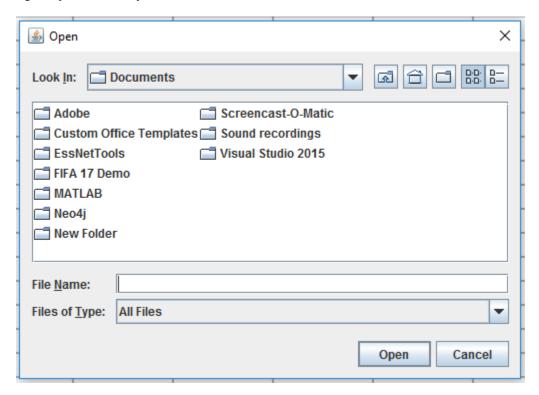


Once you run the software, this page will show up. On top of this panel is the menu, this menu is visible from anywhere in the software, you can move to different places without going back to the Home Page. In fact, there is no button guide you to the Home Page because it is pretty much empty as you see.

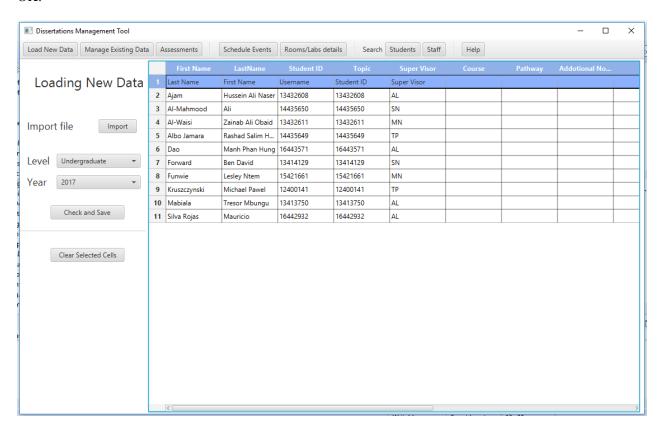
2. Load New Data



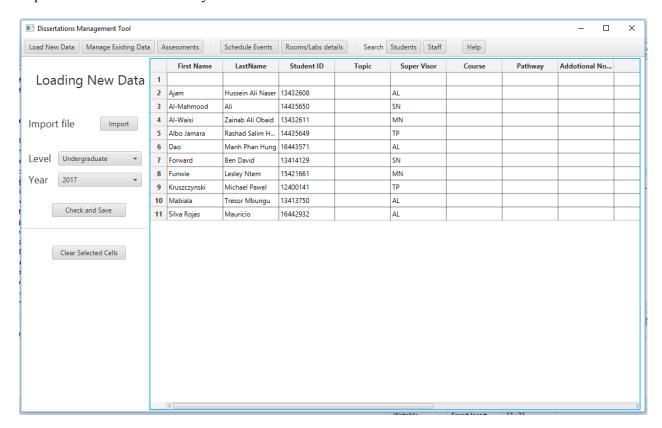
This panel gives you the ability to load students' data from external excel files.



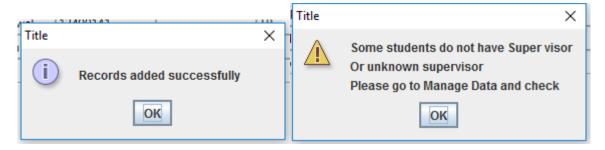
once you hit import a file selector window with show up, choose any excel file from your disk and click OK.



Now the file is loaded into the software, as showed above, the software is equipped with a spreadsheet as well, this could play a role of the middle check. Instead of loading data directly to the system, you can check it, delete any redundant data came with the file like the example above where the headers names are imported and we do not actually need them so select the row and click Clear Selected Sells



The spreadsheet is sharing most of the normal spreadsheet characteristics: select, copy, paste. After refining the data is time to save them, select the level of study for this group of students, year and click "Check and Save"

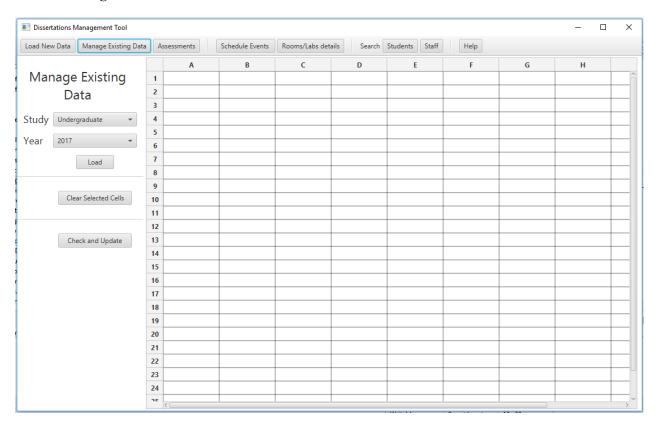


These two message boxes showed up, the first one is clear but the second one tells you that the supervisor's name or (abbreviating name) is not stored in the system (we will check staff management later in the software). The details will be saved but the software is trained to store only clear information, so all these supervisor details will get ignored because otherwise the system will crash or lead to misleading data. The most important column is the ID, you can leave all left columns empty and the records will be added as long as they have a valid id.

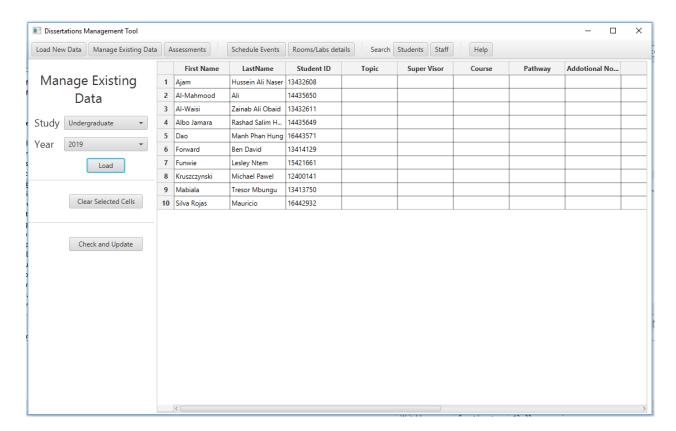
The loading process is designed to be flexible and easy in some ways for instance, if you some rows empty

the software will just skip them and keep going, if you leave redundant data under no column name, they will be skipped automatically.

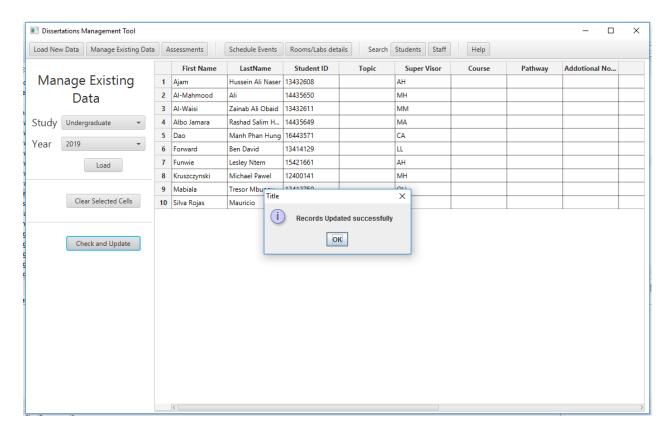
3. Manage Data.



In this page you can view/update data you already loaded and stored in the software before, the way to find these data is like always by selecting the study level and year if you have loaded data to that level and year before you will see them here:

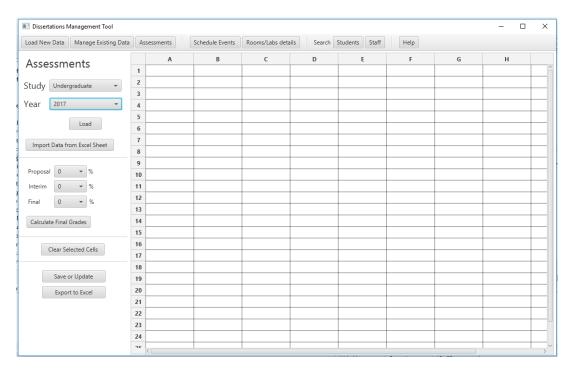


In the example above I loaded the file of undergraduate 2019, It is the one we imported before, you may notice that the SuperVisor field is empty, as we discussed before because the name was entered before were unknown. This time will update this fields with known staff names and click save:

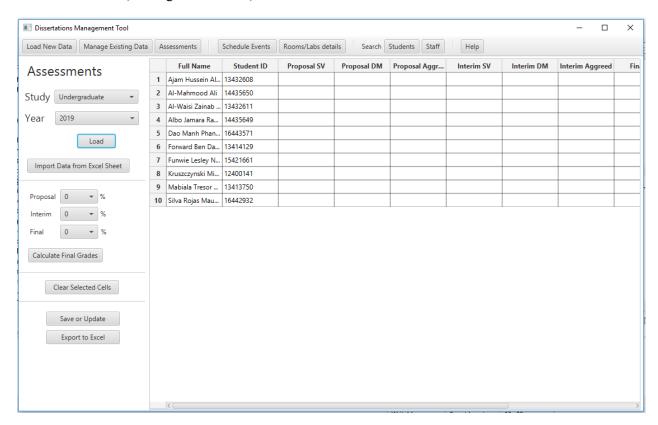


After filling the columns and click "Check and Update", this message showed up to indicate the update been successful.

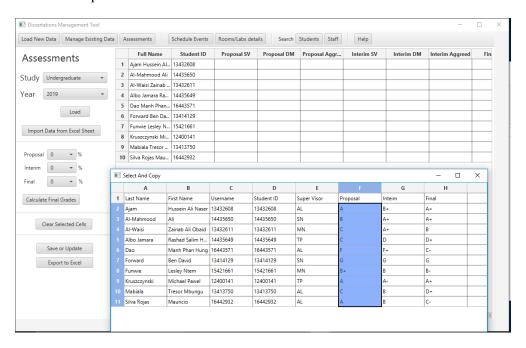
4. Assessments.



This page let the users add, save and calculate assessments grades in any percentage. In this example, I will load the same file (Undergraduate 2019). And click load:

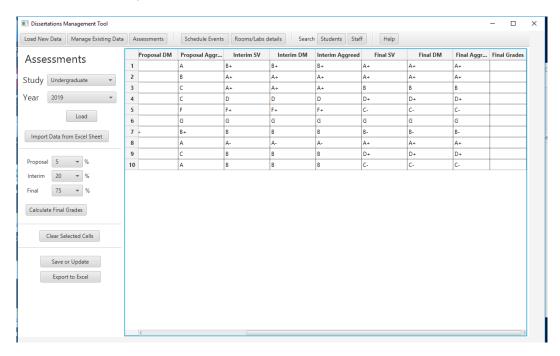


Now the field is empty, you have got the choice to add them manually or chooses to copy data from external excel file like this example:

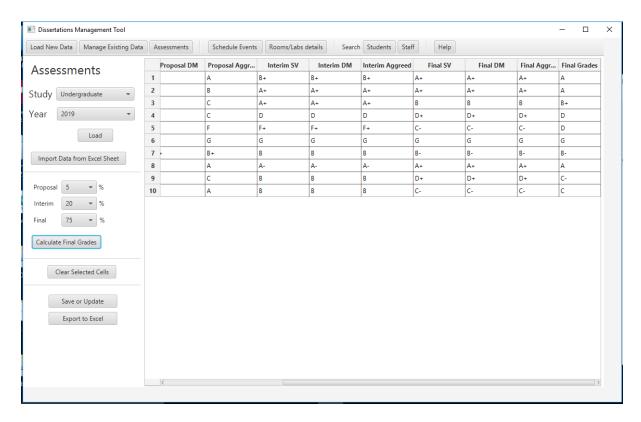


Importing file is the same process, like we discussed before, after selecting the file, it will be shown on an

internal independent spreadsheet like the example above, it has the name of "Select and Copy", simply select fields and copy and then paste them in the main sheet, keep doing the same process until finish populate the amount to data you want to load:

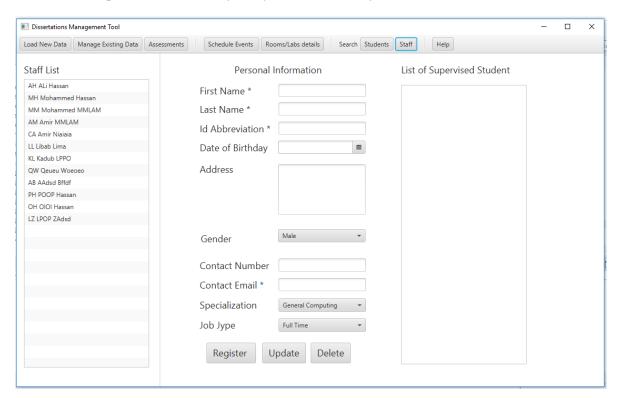


Click save and these data will be saved and associated with each student, next time you came to this page and choose (Undergraduate, 2019) and click load, you will see all these grades stored internally in the software. The grades are divided into 3 fields (Proposal, Interim, and Final) each one has three fields as well (Supervisor, Double Marker and final agreed grade).we use the agreed grade field to accomplish any calculation. If you want to calculate final grades, go and select the right percentage for each exam from the right panel. For example, MSc students do not have proposal assessment, you can simply leave it with 0 % and it will not be counted. All calculation and conversion are based on the regulation of the university of Northampton. [1]. Calculation for undergraduate students is different that the postgraduates, all based on the university handbook

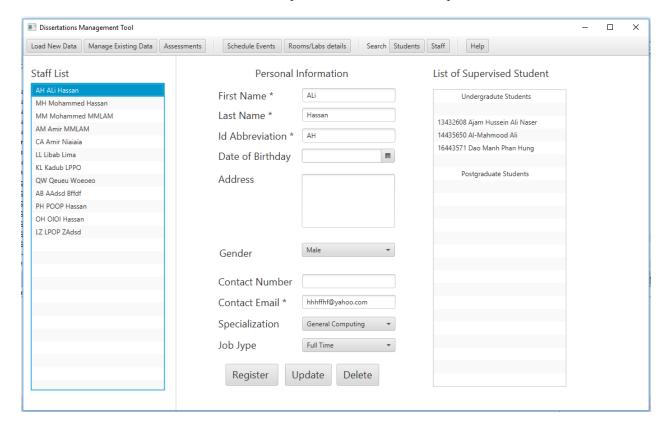


5. Staff

Staff panel is about anything related to staff, see all registered staff, delete staff, update their details and see lists of students supervised the current year by each staff, finally add new staff.

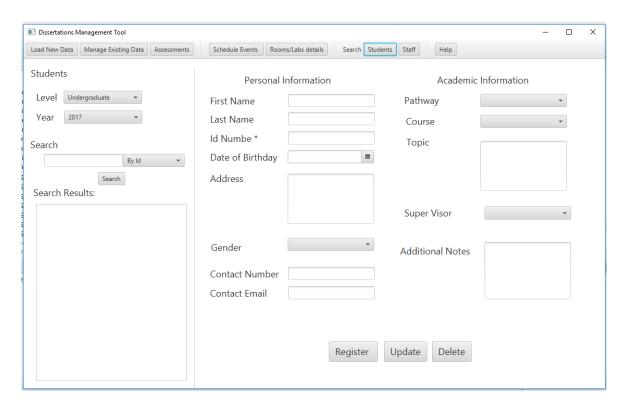


Select staff member from the left list and this picture bellow will show up:

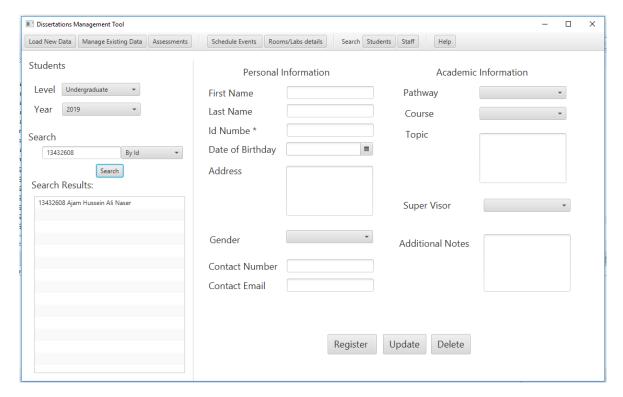


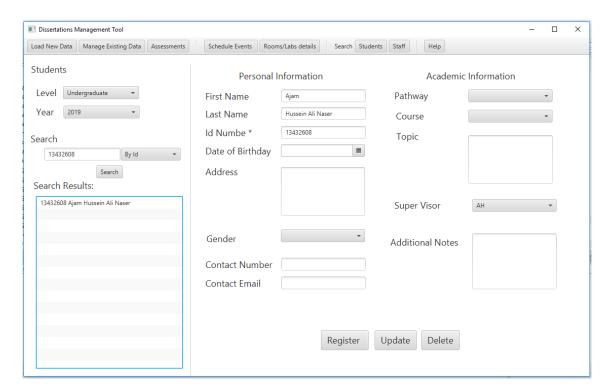
6. Students

In this panel, you can access each student individually, add extra details for them, update details, delete and add new students:



In order to find a student, you got to search for them, We supply different search criteria (by id, by the first name and by the last name). before searching any student, you go to have the student level and year selected as well. Once you click search, you will see all match results below, click on and see full data:

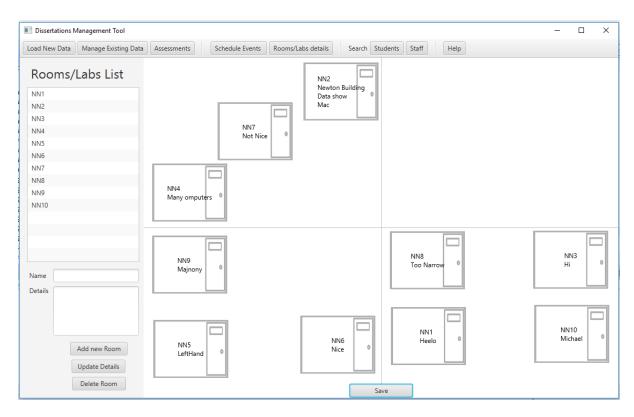




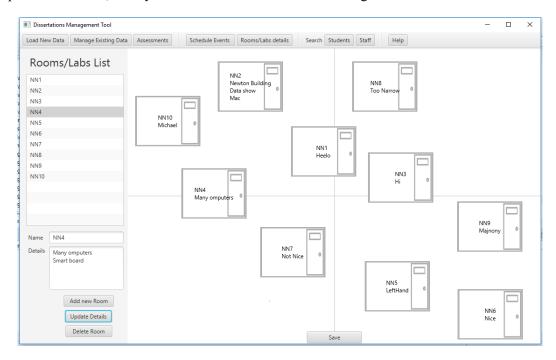
The picture above is showing the results after I taped on my name on the Search Results, You can update, add any personal information, Additional note for your preference and change Supervisor, select course and pathway finally type the topic of that student dissertation.

7. Rooms/Lbs details

In this panel, you have the full access to add, update and delete rooms

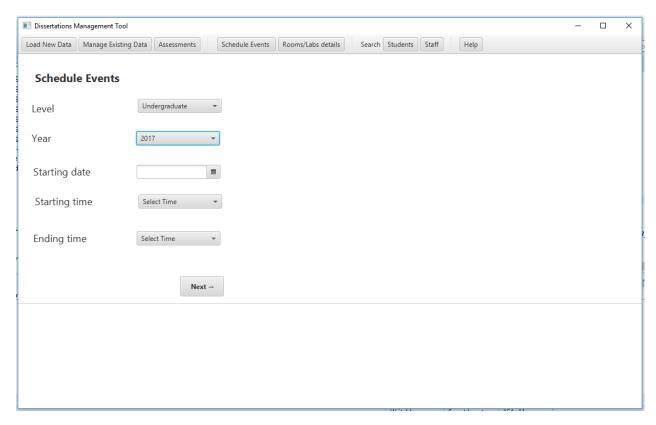


On the left panel, you see all rooms listed, click on any one and see the rom name and details, update this detail or delete room or add new room. On the right-hand side is the graphical representation for rooms. You can move these boxes and place them anywhere on the canvas drawing the map you like to identify rooms path or locations, once you finish click save and that drawing is saved.

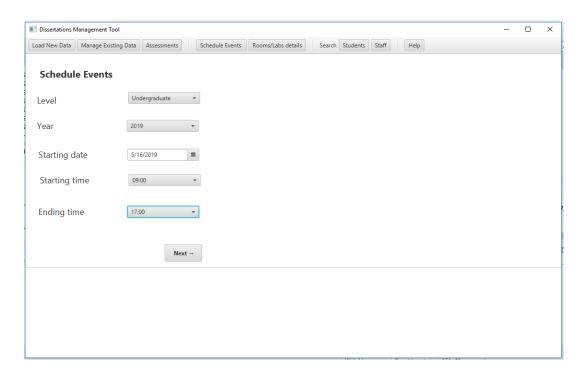


8. Schedule Events.

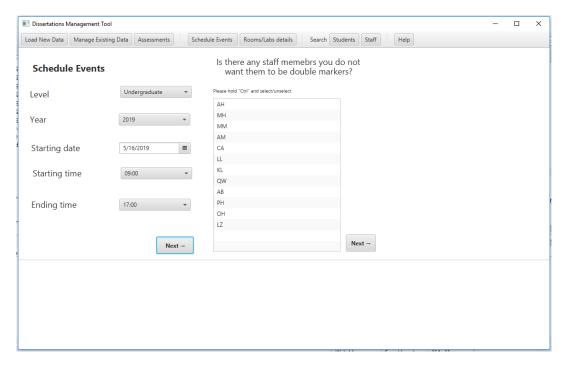
He most important and the core part of the software, everything above was to pave the way for this service, in this guide I will run two tests on the same group of students we loaded and updated above.



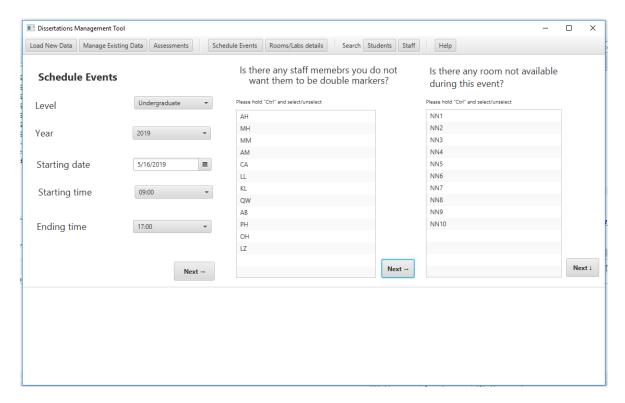
The picture above is the first thing to see when click on "Schedule Event", select level and year to identify the group of students you want to schedule events for. Starting date is the first day of the event. Starting and Ending time gives the ability to select timescale for the event from what time to what time, all allocations will be between starting and ending time.



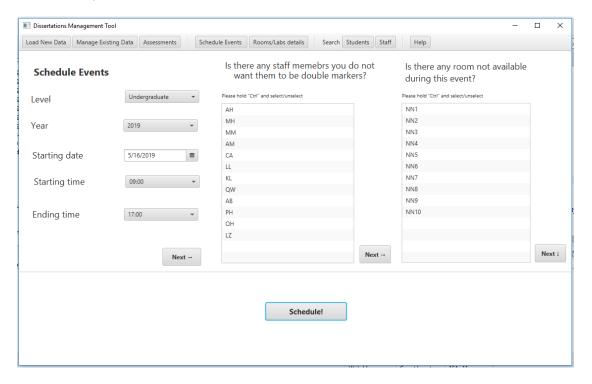
After input information click next:



This list will show up, here you can optionally exclude some staff from the duty of double marking, the reason why I did this way (exclude not include) because I believe that most of the staff are usually available for double marking as the client told us before. In this example, I will not select anybody which means all of them are available. Click next:

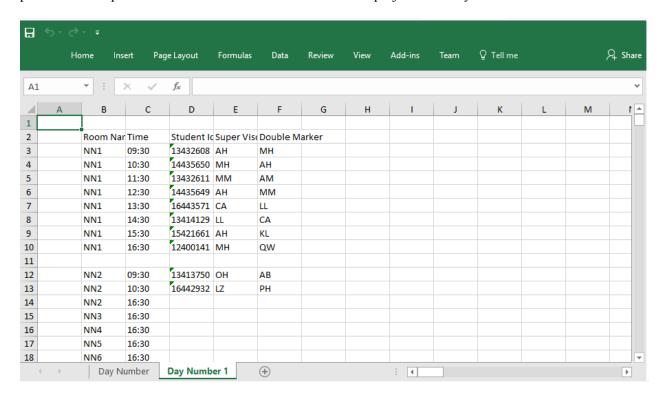


After clicking next, the picture above will show up, this time you can exclude specific rooms from this event, I did it exclude for the same reasons as before. Usually most of the room available. In this example, I will not select anyone which means all rooms are available for the event. Click next



Finally, click Schedule.

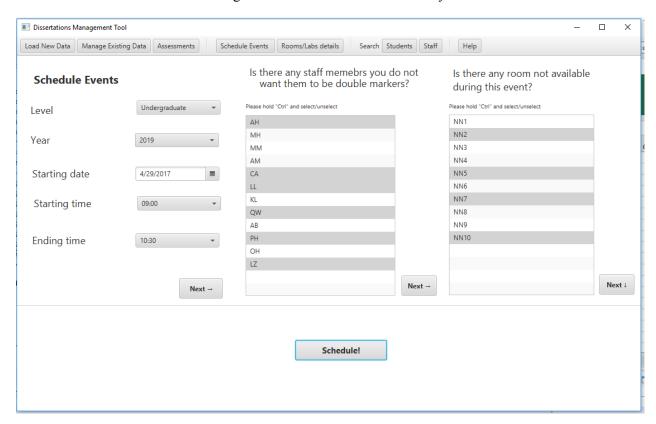
You may have noticed that here is nothing to let the user select number of days, well a number of days will be obtained by the software automatically based on the number of students. A number of available double markers, the number of available rooms and final the timescale. In the previous example, we only need one day to finish Viva for 10 students with all day open from 9 to 5 pm. the generated schedule will be directly parsed to new spreadsheet.xlsx. You can find this file in the project directory:



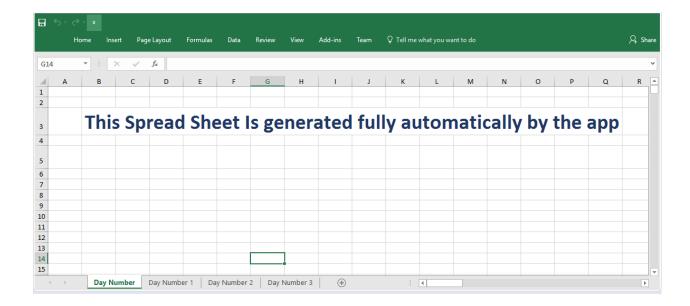
Our scheduling algorithm make sure that

- 1. No clash in times between rooms.
- 2. No clash in times between staff and Vivas.
- 3. Do not waste the staff time, as you see in the example above the staff does not wait for preparation, instead, go from one to one immediately/
- 4. Add 30-minute break for a staff after continues 5 or 5 students
- 5. Do not waste students time as well by making them finish as early as possible between the selected time scale.
- 6. Distribute double marking duties fairly between staff, and part-time job staff get 50% number f students to double marking.
- 7. Consider staff workload by minimize their presents for instance if a staff have 3 students and finish 3 of them today, he will have the higher priority to finish the next day, not the day after.

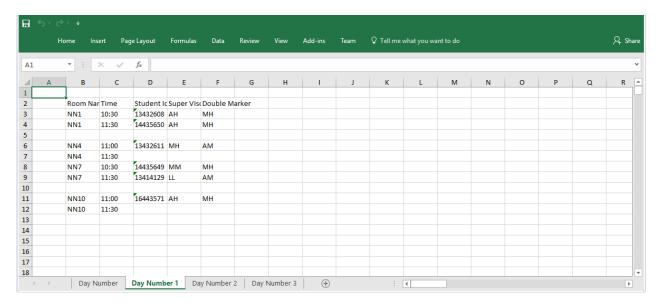
Now, will run the second test. But before that, you need to go and take out the last generated excel file from the project's home directory because it might cause some conflict if you choose the same day for presentation again. In this second example, I will purposely select narrower timescale and less number staff, room available. This will force the algorithm to create more than one day for the event:

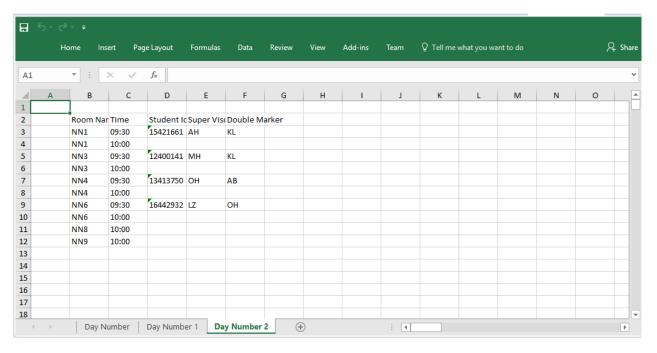


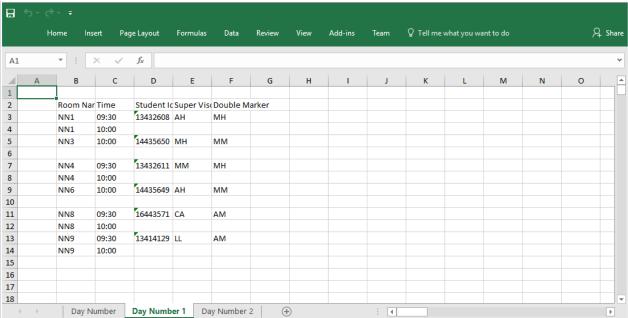
Vivas will be only between 09:00 am and 10:30, not all staff available for double marking, not all rooms are available as showing above, the results after click generate are below:



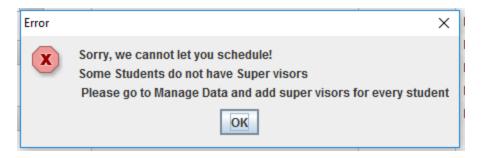
The algorithm decided to take 3 days to fill all students in, bearing in mind that this is the minimum available days possible because we wrote the algorithm to eliminate time waste, each day is stored in different sheet In the same file:







Finally, when try to schedule event for a group of students and all or any of them do not have a registered supervisor, the final "Schedule" button will stay invisible to not let the user finish, and this error message gets displayed, for the purpose of demonstration, I purposely added student to group (undergraduate 2020) without assigning supervisors for some them, and here is the error message:



9. Help:

When clicking this button, will open a pdf guide file which is the same one you are reading right now.