1. Start from the posted Schedule Planner file
2. Olli will send production data in an Excel spreadsheet:
    a. Activity starting date
    b. Activity finish date or % complete on Friday of the week
    c. Any days when activity was suspended because of weather etc.
    d. Responses of subcontractors to your control actions
    e. Subcontractors will inform you two weeks before they are able to mobilize
3. Update the schedule and decide control actions
    a. Control chart
    b. Resource calendar
4. Discuss control actions and desired start dates on the forum
    a. Control actions must be spelled out in the body of the e-mail (subs will not look at the schedule)
    b. Maximum of three control actions a week (limited superintendent time)
    c. Possible actions:
        i. Require additional resources (indicate task and how many resources)
        ii. Demobilize resources (indicate task)
        iii. Instruct subcontractor to change sequence (E.g. $4^{th}$ floor to $6^{th}$ floor or one task of a contractor to another)
        iv. Saturday work
        v. Force subcontractor to mobilize early
        vi. Increase productivity of an operation – takes three control actions but provides a lasting 20% benefit (= if you use this, you cannot do other control actions)
    d. For example: “Add 4 resources to Overhead MEP crew. Split the stud crew to floors 2 and 3”
    e. Confirming start dates of subcontractors are not control actions. List the desired start dates for each task at the bottom of your forum post for all contractors who have not mobilized yet.
5. 3 and 4 will repeat until the project is finished – around 30-40 “turns” to complete but the simulation will take 23 turns (3 in tutorial and 2 per working day for two weeks) - approximately 8.00 – 8.30 and 16-16.30, exceptions will be announced.
6. Results will be evaluated based on accuracy of monitoring data (50%)
7. 50% of evaluation is based on the report (around 5 pages):
    a. How did you decide what to do? Were the team’s control actions correct in your opinion? (for each control action)
    b. What behaviors did the subcontractors exhibit?
    c. Who was the most problematic subcontractor?
    d. Who was the bottleneck subcontractor?
    e. What did you learn?
    f. How would the game be different if:
        i. Subcontractors participated in planning and committed to the plan?
        ii. Controlling was real-time rather than weekly?

iii. You had used the other location-based method (LBMS or takt)?

**Frequently asked questions:**

**Q: Do the contractors have maximum resource availability?**

The contractors do have maximum resource availability, but they will not be transparent about it. Note that the Drywall contractor has several tasks and their people can work in any one of those tasks.

**Q: How often the game will be updated?**

New progress data will become available twice a day, around 8:00 and 16:00.

**Q: Do I have to update progress twice a day?**

No, the groups are big and you do not need to participate in control action discussion every time. However, you should try to be "up-to-date" and participate in discussion several times over the simulation. Each participation will give a participation point (not for just "I agree", please include some analysis or new thoughts).

**Q: Is this a personal assignment or a group assignment?**

This is a personal assignment. Control actions are discussed in the group but all software use and final report will be done individually. Control actions are done in the group only because it would be too time consuming to create personalized progress data for each student in the course.

**Q: How are the control actions selected?**

Based on the debate, the teacher will select the control actions which seem to get most support from group members. You can debate in your personal report in the end, whether the selected control action made sense or not. Remember that the maximum number of control actions per week is three. IF there are more than 3 control actions debated, the teacher will pick the three that got most support.