Steps

In the revit file, shared parameter file is created with the name 4D\_Task\_ID. Also, the type and discipline of it are chosen as “text” and “common” respectively. Required elements are assigned to the parameters. Then, a schedule is created with the help of MS Project. In this schedule, the beams and the columns of each level is divided into 3 consturction phases. The start date of the the constructions of walls, windows and floor decks of a level is planned right after the finish date of the beams and columns of this level. The construction of stars and railings will be started after all level is completed. Lastly, roof construction will be performed. For all task , only one team is avaliable so the predecessor are arranged according to these. Also, the working hours are planned as 8 am-12 am and 13 pm-18pm. Construction will be continued in 6 days a week. The task IDs in the created schedule is assigned to the parameters in the revit file. Final revit file and schedule is exported to the naviswork. Sets are created for each Task ID. Rules are assigned for the timeliner and simulation run is started.

Discussions

1. Main concern to scheduling are the avaliable team number and the construction phases. The number of team for each activity is one. Also, the construction phases of columns and beams are three for each level. Moreover, the construction of walls, windows and doors is performed for each level at once. The schedule is created according to these limitations. SON KISMININ CEVABINI BULAMADIM
2. The more detailed schedule may provides more realistic results in real construction.
3. If there will be any change in the schedule, firstly, the MS Project file should be updated. The predecessors can be change and the times for some activities can be constrained. In these case, new arrangement should be done. In the end, this step of 4D modelling can not be easy. However, when the new schedule is exported to naviswork, the new arrangements may not be required. The new simulations can be run only.
4. The simulation part of 4D is the most impressive part. On the other hand, the creating sets for each Task ID is a time consuming part.