**CE4002 – BIM** Fall 2016

## For Groups 4-6

# Homework 2 – Topics to be covered in the presentation on <u>December 06<sup>th</sup></u>, <u>2016</u>

## **Group 4**

- Give a brief overview of your STRUCTURAL modeling trials and show a screenshot of your model. What are the types of components you could model, any differences in the process than Architectural modeling, any difficulties you had while modeling and using the tool, any different features? Please show whatever you have tried.
- What are the **advantages** of automated clash detection of BIM when compared to the traditional method of comparing paper or CAD documents?
- What are the **limitations** you could see in automated clash detection?
- What are the settings and tools you can change/choose **during a clash test** (like choosing specific elements, visibility/hiding, clearance, etc.)?
- How about the settings and tools you can use **during reviewing and reporting** the clashes (such as display settings, redlining, etc.)?

#### **Group 5**

- Give a brief overview of your PLUMBING modeling trials and show a screenshot of your model. What are the types of components you could model, any differences in the process than Architectural modeling, any difficulties you had while modeling and using the tool, any different features? Please show whatever you have tried.
- The number of interferences reported when the entire project is checked is too much and it becomes overwhelming to identify the real issues. How can you refine the clash tests to get manageable results (give examples from Navisworks features that we used and may have not used in class look for other settings)?
- Considering there will be several different audiences (owner, structural eng., etc.) for the composite model, each with their unique set of concerns, would it be useful to have several different NWF files of the same combined model?
- What might an NWF file to be shared with the project owner should contain as compared to the one that will be created for MEP subcontractors? (Think about content, viewpoints, actions, etc.)
- Can you save clash tests and reuse them later?

### Group 6

- Give a brief overview of your HVAC (duct) modeling trials and show a screenshot of your model. What are the types of components you could model, any differences in the process than Arch modeling, any difficulties you had while modeling and using the tool, any different features? Please show whatever you have tried.
- Do you think Navisworks will provide enough support in identifying and reporting clashes throughout the design process, considering there will be multiple revisions of the models? Will it be possible to automatically track resolved issues (clashes)?
- Do you have any suggestions for **improving** the capabilities of **this tool**?
- What should be the level of detail in the models for automated clash detection to resolve all design issues that can be encountered during the construction? Would you consider modeling additional items like 'access spaces' or do you think that will make the clash detection more difficult and complicated?

#### **Please:**

- Keep the presentations within 15-20 minutes.
- Be specific.
- Provide your team's own views on the discussion topics. But be ready to explain and backup your points based on your own understanding.
- Minimize repetition amongst presenting groups by looking at the topics assigned to other groups presenting and <u>not repeating</u> those points in your presentation. (i.e. Do not present other groups' topics.)