50.017 Final Project Guidelines

Form a team of 3 people at maximum. You can choose to do the project alone as well.

The project is comprised of 3 components:

1. 2% proposal, **due on Week 6, Thursday 6PM**

2. 10% presentation + video (signup sheet provided on Week 13)

3. 3% final report, **due on Week 13, Friday 12AM (midnight)**

No late submission is allowed.

Proposal:

You can propose your project based on anything in the syllabus. You can quickly read up first on the topics of week 8-13 so that **you can pick any or a combination of these topics**. You can **extend** any class assignments to implement your project, or create a new one by yourself. A good starting point is to look at short research papers, and try to implement their methods.

You can use any graphics libraries and language of your choice to aid you in **displaying** your project to the screen**, the only requirement is that you need to implement your MAIN algorithm from scratch. This is similar to how you have been doing the class assignments.** For example, using unity particle system engine, ray casting library, or rigid body collision as the highlight of your project is not allowed. You can instead, try to implement a new physically based method for other particle systems: fluid, sand, etc by yourself.

Final Report:

You are required to submit a 4-page (maximum) report at the end of week 13, explaining the algorithm that you have implemented, references used in your project, known bugs, obstacles that you meet during making the project, learning points, etc. You are free to write whatever you need to explain your project, as long as it does not exceed the maximum page.

Presentation and Video:

Finally, you are required to make a 1-2 minute video about your project and present it to the class. Attendance is mandatory. **If you are not present to watch others presenting their projects, then you will not be allowed to present your project either (or if you have presented and left then your grades will be annulled), in that case you lose 10% of the presentation component.**

You can take a look at some of the projects made by your seniors for inspiration:
https://www.youtube.com/watch?v=E-_WkDBUopU
https://youtu.be/gq1194HM_N0
https://www.youtube.com/watch?v=5RdkqQL0vPY
https://www.youtube.com/watch?v=BWMgqO-WRJs