

## Oral Pres 2 Coding Presentation Rubric

### General

- Within time limits
- Tell a good story
- Clear speaking, audible in back of the room
- Each student speaks approx. equal time
- Slide numbers on slides
- Consistent color coding
- Citations used as needed
- Large, clear images with sparse wording
- Good color schemes (avoid dark blue on black or yellow on white)
- Look at everyone, not just the instructor
- Font size 18-point or larger everywhere
- Obviously practiced multiple times
- Slides have lots of images (not endless text)!

### Explain the task you were given

- Briefly tell us about the simulation you are supposed to make
- It may help to run your sim once or twice early in the talk to help people understand

### Explain Theory

- FBDs and force equations shown somewhere in presentation (gotta do *some* physics for this class)
- Probably should solve equations for  $\vec{a}$ ...if you think it helps, could solve for other things as well
- Be vigilant about proper use of vectors versus magnitudes in your slides and speaking
- Mention something about the challenge associated with magnitudes in FBDs and vector forces in code

### Code is easy to read and well-explained

- Clear variable names
- Consistent use of spacing & occasional line breaks to reduce headaches
- In presentation, code snippets are 18-point font or larger.
- Line numbers included on code snippets in presentation.
- When appropriate, include a shot of visuals next to code snippets to make it easy for us to follow along
- TIP: It may help to make a second copy of your code used solely for making nice snippets of code for your slides. Then you can move stuff around however you want.
- As you talk about variables, emphasize which parameters are vectors versus scalars to add clarity

### Include at least one slide dedicated to helping us understand your conditional statements

- This is probably the trickiest part of the code, you should probably spend a slide or two on it...right?

### Explanation of Euler-Cromer Method for animation

- Include comparison of ECM pseudo code (or normal math equations) to your actual code
- Use animations or some system to present ECM without overwhelming us (one step of method at a time)

### Simulation produces clear visuals

- FBDs are shown in simulation with labeled force arrows.
- FBD can be drawn somewhere other than object if that helps us see the arrows.
- Screen must give notify users with some kind of text output if  $\vec{a} = 0$ .
- In print statements, use digits to reduce sig figs (see [documentation on print statements](#)).
- Ideally, numerical values are included in the labels. For dialing in sig figs in a label, see [this code I wrote](#).

### Show us the sim running under multiple cases

- Get through several interesting check cases...pick and choose as there probably isn't time for every case.

### Wrap it up

- Remind us of the goals you had when making your simulation and that you achieved them