## Lab 3 – Common Issues

- worksheet
  - hand in the worksheet!
  - be specific enough in answering “what changes?”
    - “position” is too vague – is x, y, or both?
    - “x position” is OK only if there is only one possible thing – x position of cloud, diameter of center circle, etc
  - when it says to “determine positions and sizes in terms of the animation variables”...
    - ...label the values that your animation variables refer to
      - especially which specific point is “the position”
    - ...fully label the pictures with all of information you need to draw those shapes
      - position, size for `rect`, `ellipse`
      - position, size, start and end angles for `arc`
      - don’t only figure it out in your head as you are writing the code



## Lab 3 – Common Issues

- specific exercises
  - #1 – the cloud should be light gray, not white
  - #3 – need to match update amounts for angle and x to make the wheel properly roll
    - there’s a formula for this – see the worksheet



## Lab 3 – Common Issues

- animation variables
  - naming variables
    - variable names should be descriptive of what the variables are for
      - e.g. x, y for position, w, h for size (or radius, diameter for circles), r, g, b for color elements
      - do not use x, y for size because that mixes up positions and dimensions
        - use “x”, “y” only for positions
        - “width” and “height” are the terms for dimensions
      - include additional descriptors to clarify e.g. cloudX, carX to distinguish between the positions of different things
    - variable names should start with lowercase letters
  - identifying variables
    - strive for a minimal set of variables
      - if multiple things move or change in lockstep with one another, you only need one variable with expressions for the rest



## Lab 3 – Common Issues

- auto format!
  - Edit → Auto Format (shortcut: ctrl-T)
- include your name and a description of the sketch in all sketches

## Lab 3

- written feedback is on the papers handed back
  - sketches (code)
  - worksheet – things circled are missing or incorrect
  - presentation meeting exercise
- grades and outcomes posted on Canvas
  - Grades → Assignments tab to see "meets specifications" scores
    - score for the lab is based on all lab exercises
    - there are minimum thresholds for labs (average over all labs) and the project for C-/B-/A- final grades
  - Grades → Learning Mastery tab to see where you stand on learning outcomes
    - "presentation" outcomes are assessed based on the presentation meeting and presentation exercise (#4)
    - proficiency in core concepts and programming elements requires –
      - at least one "proficient" or better in that outcome for a presentation, *and*
      - at least one "proficient" or better in that outcome on an exam
    - there are minimum proficiency thresholds for C-/B-/A- final grades
    - "practice" outcomes are those reflected in a lab or project but not covered by a presentation – assessed based on the lab worksheet and all exercises (#1-4)
      - weighted average favoring most recent assignments
      - does not count directly towards your final grade but gives you an idea of where you stand on that topic



## Lab 3 – Revise and Resubmit

- you may revise and resubmit lab exercises once each
  - you can resubmit any or all of the exercises *as long as you handed in something for that exercise by the original deadline*
    - four extension tokens allow resubmit without an initial handin
      - one token covers all of the non-presentation exercises in one lab
      - one token covers the presentation exercise in one lab
      - one token covers the final project
  - extra credit is not eligible for resubmit
- you are encouraged to come to office hours to go over things you are planning to resubmit
- to get credit for a resubmit –
  - name resubmits with the form *name*`_resub`
    - i.e. `lab3a_resub`, `lab3b_resub`, `lab3c_resub`, `lab3d_resub`
    - do not overwrite/replace your original handin!
  - also hand in the worksheet
  - for presentation exercises and presentation outcomes, a redo presentation meeting must also be scheduled



## Lab 3 – Revise and Resubmit

Deadlines –

- **lab 3 resubmit is due Nov 7**
  - (normally three weeks after an assignment is handed back; the longer time is due to fall break)
- **redo presentation meeting must be scheduled by Nov 7 and occur by Nov 14**
  - can be done during office hours, but still must be scheduled (no drop-ins for presentation meetings)
- earlier handins are encouraged!



## Lab 3 – Revise and Resubmit

Why (and what to) revise and resubmit?

- to learn and to indirectly improve your grade
  - practice is important for mastery and builds a stronger foundation for later material
  - it is important to practice solving the whole problem and not just most of a problem – practice success!
- to directly improve your grade
  - to achieve minimum thresholds for "meets specifications" scores
    → revise and resubmit lab exercises (#1-4) – address the written comments on your code
  - to achieve proficiency for presentation outcomes
    → revise and resubmit the presentation exercise (#4) – address the written comments on your code
    → complete a redo presentation meeting