EECS498-003 - Lab 3

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Administrivia

- Problem Set 1 is due September 19
- Problem Set 2 releases on September 20, due October 1
- No class/OH on Thursday, September 18
- Midterm set for October 23, 6-8pm, DOW1014

State Machine Exercise

- ▶ Verifying robot behavior on factory floor
- ▶ Working with hazardous materials: red and blue discs
- ▶ If red and blue discs are near, the factory blows up!

State Machine Exercise

- ▶ Stacks of discs on factory floor
- ▶ Robot also holds a stack of discs
- ▶ Robot has internal counter of deliveries starting at 0
- ▶ Robot can:
    - ▶ Take from top of a stack and push to its own stack, provided that its own stack is empty or the colors of the tops match
    - ▶ Take from the top of its own stack and push it to another stack, provided that stack is empty or the colors of the tops match
    - ▶ Deliver a stack of discs out of the factory, keeping track with its counter

Your job

- Represent the factory and robot as a state machine in Jay Normal Form
- Write the safety condition: a stack cannot contain multiple colors
- Starter code at `lab03.dfy` on the course GitHub