Final Projects Ideas and Guidelines

Lecture #2: A Word on Final Projects

Joseph J. LaViola Jr.

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Project Goals

- Apply knowledge from class lectures and discussions
- Developing a significant piece of software
- Begin master's thesis or PhD dissertation research
- Publish papers

Project Guidelines

- 6 weeks to do the project
  - scope should fall within timeframe
  - milestones should sync up with project status report days
- Should have some form of evaluation
- Solid code design for reuse
- Research component

Project Proposal

- Must get proposal approved by professor
- Proposal should include
  - introduction to problem
  - related work
  - what you are going to do
  - what are the novel components
  - how you are going to do it (i.e., strategy)
  - measure of success

Project Ideas – Wacom Graphire Improvement
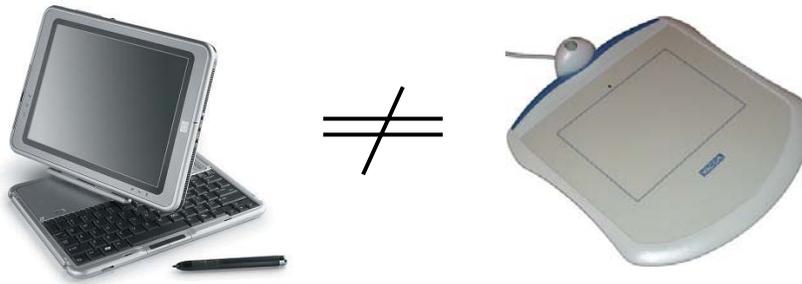
Develop UI techniques for enriching experience with Wacom Tablet

Project Ideas – Mathematica 6

```
Column[{Slider[], Slider2D[], ColorSlider[], InputField[], Checkbox[],
    SetterBar[4, Range[10]], CheckboxBar[{1, 3}, Range[4]],
    RadioButtonBar[2, Range[5]], PopupMenu[a, {a, b, c}], Animator[],
    Manipulator[], ProgressIndicator[.6], Button["button"]}]
```
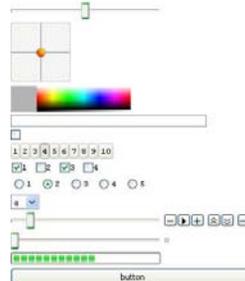
Sketching Interface to Mathematica

Project Ideas -- IPhone

- Create a cool touch-based app for the IPhone
- IPhone SDK

Project Ideas – Education Tools

- Set Theory tool
  - proof assistant
  - Visualization
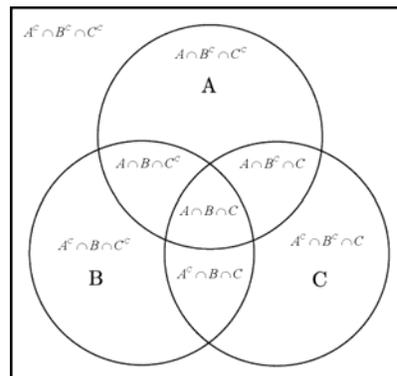
Project Ideas – Circuit Tool

- Sketch out circuit diagrams
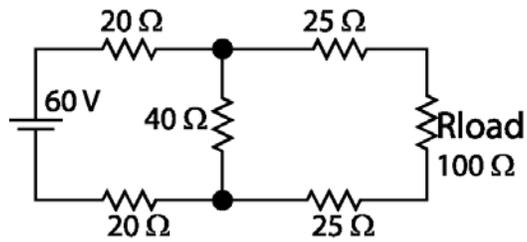
Project Ideas – Paper Projects

- Implement a paper and make improvements
  - Sketch
  - Teddy
  - Ladder
  - etc…