What is a DSL?

Today’s themes: tradeoffs and gray areas
Today’s class: discussion questions

1. Mini-groups of three
   • Discussion questions on handouts
   • Take notes
   • Take the full time

2. Highlight the insights / questions

3. Full-class discussion
   • We’ll revisit the questions, see where we (dis)agree

4. Info: critiques & schedule
What is a programming language?
DSL case studies
What is a DSL?
Highlight the insights / questions
Discussion Rules

• Everyone should participate equally
• Give your attention to the person who is speaking
• Yes, and... (build on discussion)
• Prof. Ben usually takes notes and talks last
• ...
What is a programming language?
What is a DSL?
What is a *Domain-Specific Language (DSL)*?

We should have good answers for all these questions:

- Can it satisfy our definition of a programming language?
- What does a program in this language look like?
- What happens when a program runs?
- What should be easy in this language?
- What should be difficult?
- What should be impossible?
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The evolution of a DSL?

general-purpose
library
discover nouns & verbs

API
add fluency

internal
remove host flavor

domain-specific

external
tools & environments

features

general-purpose?
Schedule

subject to change :)
Critiques

• Give yourself a budget of ~60 minutes

• Quality, not necessarily quantity
  Engage. Be intentional and specific. Small bite, long chew!

• Some useful critique prompts
  • Prompts from the assignment
  • If someone asks a question, attempt an answer
  • If someone asks for feedback, give it
  • “I hadn’t thought of that! Can I steal it?”
  • “You could also…”
  • “I found…”
  • “I could use this for …”
Projects

• It’s never too early to start

• Will start putting up materials for generating

• Soon, I'll describe the milestones, deliverables, etc.

• For now: play, percolate, talk to one another and me

• Look for something in every DSL class, every other class, your hobbies, your work…

• Possible outcomes
  • Make life easier for a group of people
  • Change the way someone sees the world
  • Reveal the way the world actually is
Before Wednesday

• Assignment 1
  critique due Tuesday

• Write up today’s class
  And everyone can / should contribute.

• Restore furniture

• Sign up to be scribe for a class

• Bring your computer on Wednesday (if you want)
  It should have Python on it • We’ll also have computers here