

Nouns and Verbs + Brainstorming

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Exercise

Write down 4 DSLs. (Think **narrow**—avoid general-purpose.)

Nouns and Verbs

Tasks and processes usually comprise **nouns** and **verbs**.

Let's start with some examples.

add_expr = (mul_expr add_op)* mul_expr

mul_expr = (number mul_op)* number

add_op = ("+" / "-") ws

mul_op = ("*" / "/") ws

number = ~r "[0-9]+" ws

ws = ~"\s+"

eol = ~r "\$"

emptyline = ws+

Try to come up with as many nouns as you can! Some syntaxes to consider:

- `=5.5`
- `=B4`
- `= 'Accounts' !B4`
- `=SUM(A4:A10)`
- `=SUM(A4:A10)`
- `=IFNA(VLOOKUP(G3, B4:D8, 3, FALSE), "NOT FOUND")`
- `=DCOUNT(A2:F20, "price", {"Ticker"; "Google"})`

Making a calendar

Common tasks:

- Creating events.
- Creating regular events.
- Finding a common time.
- Sharing an agenda.
- Deciding what time to go into work.

Nouns and Verbs activity

Instructions:

1. Pair up.
2. Choose three of your DSLs.
3. Come up with nouns and verbs for each.

Brainstorming Feedback

Discussion questions for generating feedback:

- What tasks should be easy in this DSL?
- What tasks should be hard (or impossible)?
- What might the nouns and verbs be?
- What might the results of executing a program be?
- Is there a large set of potential programs?
- Does this remind you of other problems?
- Other languages?

Aim for 3–5 paragraphs.