

Excel Solver (Add-in)

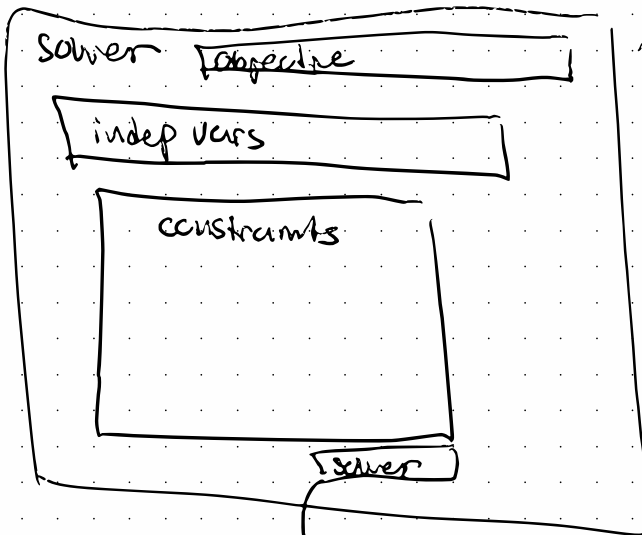
- ↳ solve linear (and non linear) optimization problems
- ↳ allows for restrictions

→ for installation: google it :)

Basic steps:

1. identify target to optimize
2. identify variable cells
3. identify constraints

• see example 1 in xlsx file



Will then try
to find optimal
solution

Simplex for Linear
GRG Solver for Nonlinear

pydata: 'Optimizing Like Everyday problems solved w/
Linear Programming in Python'

Notes from pydata talk

2 Linear programming in python

Excel

3 components:

- Objective func. (cost func.) $\begin{matrix} \swarrow \text{Max} \\ \searrow \text{Min} \end{matrix}$
- Decision var (indep. var)
- constraints

Python

↳ Additionally, mixed solver & modeling frameworks

Solvers

- GLPK
- COIN
- etc.

Modeling FW

- SciPy
- PyOMO
- PuLP

good part of linear problems

↳ easy to constrain

↳ easy to find examples for

↳ easy to perform, v. lightweight.