```
SetDirectory["C:\\drorbn\\AcademicPensieve\\Projects"]
```

```
C:\drorbn\AcademicPensieve\Projects
```

## Project Blurbs

```
Blurbs = {
  "3H" → "An attempt on $\\theta$ in the 3-Heisenberg formalism.",
  "AcademicPensieve" → "The assembly programs for my pensieves.",
  "Agenda" →
   "Contains Confessions, CSQG, Monoblog, Passport, TDBID, UndergraduateProjects, and WatchList.",
  "APAI" → "The paper \"A Perturbed Alexander Invariant\".",
  "ARC-2018" → "Materials for an ARC grant application, 2018.",
  "Arrow_Diagrams_and_gl(N)" →
   "An old project with Louis Leung. Also contains ArrowDiagramsAndLieBialgebras.",
  "arXiv" → "Links to arXiv papers that I've looked at, mostly briefly.",
  "BabyDoPeGDO" → "A simplified DoPeGDO engine, 1-step
     only. Includes solving for $\rho_{1,2,3}$ in the Heisenberg formalism.",
  "SolvablePBW" → "PBW generating functions for all solvable and $\\epsilon$-solvable algebras."
 }
```

## Make

```
Make::usage =
  "Make[targets, sources, Hold[action]] makes a target, or a list of targets, given sources,
    or a list of sources, in the style of the unix 'make' command.";
Make[target_String, sources_, action_Hold] := Make[Evaluate@{target}, sources, action];
Make[targets_, source_String, action__Hold] := Make[targets, Evaluate@{source}, action];
Make[targets_List, sources_List, action_Hold] := Module[{},
   If[
    (And @@ ((FileType[#] =!= None) & /@ sources)) &&
     Or[
      Or @@ ((FileType[#] === None) & /@ targets),
      Min[AbsoluteTime[FileDate[#]] & /@ targets] < Max[AbsoluteTime[FileDate[#]] & /@ sources]
     ],
    Print["Making ", targets, " ..."];
    ReleaseHold[action]
   ]
  ];
```

## WordCloud

```
sources = StringSplit[
   "WKO1/WKO1.tex WKO1/abstract.tex WKO1/intro.tex WKO1/braids.tex WKO1/knots.tex WKO1/odds.tex
     WKO2/WKO2.tex WKO2/abstract.tex WKO2/intro.tex WKO2/alg.tex WKO2/tangles.tex
     WKO2/foams.tex WKO2/odds.tex WKO3/main.tex WKO3/abstract.tex WKO4/WKO4.tex
     WKO4/abstract.tex WKO4/intro.tex WKO4/El.tex WKO4/comp.tex"];
target = "WKOWordCloud.png";
```

```
words = DeleteStopwords@Flatten[TextWords[
     StringSplit[
        StringDelete[
         StringDelete[
          ToLowerCase@ReadString[#],
          "\\begin{figure}" | "\\end{figure}"
         ],
         "\\aft" | "\\begin" | "\\caption" | "\\cite" |
          "\\em" | "\\end" | "\\equation" | "\\fig" | "\\figure" | "\\item" | "\\label" |
          "\\left" | "\\quad" | "\\ref" | "\\right" | "\\section" | "\\subsection" | "\\text"
        ],
        Except[CharacterRange["a", "z"]]
       ] & /@ sources
    ]];
```

```
MakeWC[opts___] := Module[{words, words1, dict, T, dict1},
  words = ToLowerCase@DeleteStopwords@Flatten[
      StringSplit[TextWords[ReadString[#]], "-"] & /@ sources
     ];
  dict = Complement[
    Union[ToLowerCase@DictionaryLookup[], StringSplit[
      "aarhus abelian acknowledgements adjoint adjoints albert alekseev alexander antipode anton
        archibald artin arxiv associator associators bardakov basepoint behaviour berceanu
        bialgebra bialgebras bijection borromean brendle brochier cablings centres chern chu
        claspers coadjoint cocommutative cocycle coface cofactor colour coloured colourful
        colourings colours combinatorially combinatorics componentwise conjecturally crans
        dancso det diffeomorphism drinfeld dror duflo enriquez equivariant etingof exp
        exponentiate fenn fibre flavours formulae framings functionals functor functorial
        functoriality functors furusho gluings goussarov grothendieck grouplike habiro
        halacheva harinck hatcher haviv homfly homomorphic homomorphicity homonymous
        homotopic homotopies hopf ihx injective isometries isotopies isotopy jacobian
        kamnitzer kanenobu karene kashiwara kauffman kazhdan  kishino kneissler knottings
        kohno kontsevich kricker kuperberg kurlin lescop leung lieberum linearization
        linearizations loday mccool meilhan meinrenken metrized milnor moded moding
        modulo multicategory multinary multiplicatively naot natan ohtsuki operad
        overcrossing overcrossings papadima parametrizing parentehesized parentetization
        parenthesization parenthesizations parenthetization perturbative planarity postfix
        preprint projectivization projectivizations proven quadrivalent quandle quandles
        reassociate reidemeister reutenauer rimanyi rolfsen roukema saito sanderson
        satoh sder selflinking semidirect semivirtual shima simons sinh skeleta skype
        subalgebra subalgebras subring surjection surjections surjective symmetrized tder
        teichmuller thurston torossian tr trivalence trivolution unbraided undercrossing
        undercrossings unfavourably unforbidden unignoring unipotent unital unitarity
        unitrivalent unknot unoriented usb valent vassiliev vergne verma versa vertices
        virtuals voldemort warmup watanabe wirings wirtinger wko zhang zsuzsanna zsuzsi"
     ]],
    StringSplit["ac aft begin cali dj em end equation fa ill left minus plus ref rh right rs ts tv ty"]
   ];
  dict1 = Dispatch[(# → T[#]) & /@ dict];
  words1 = Cases[words /. dict1, T[w_] :> w, {1}];
  WordCloud[words1, opts]
 ]
```

```
MakeWC[MaxItems → 256, ImageSize → {960, 540}]
```

```
Make[target, sources, Hold[Export[target, MakeWC[MaxItems → All, ImageSize → {1920, 1080}]]]]
```

# Output

```
{
 "TitleNotes" → StringJoin@Flatten@{
     "This is my projects folder.\n",
     "<p>\n",
     Riffle[
      StringJoin["<a href=", #[[1]], "/index.html>", #[[1]], "</a>: ", #[[2]], "\n"] & /@
       Sort[Blurbs],
      "<br>"
     ],
     "<p>\n"
    }
}
```

Out[•]=

```
{TitleNotes → This is my projects folder.
<p>
<a href=AcademicPensieve/index.html>AcademicPensieve</a>: The assembly programs for my pensieves.
<br><a href=Agenda/index.html>Agenda</a>: Contains
    Confessions, CSQG, Monoblog, Passprt, TDBID, UndergraduateProjects, and WatchList.
<p>
}
```