

tyme2invoice¹

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November 1, 2017

¹ Generate pretty invoices from
Tyme 2 logs.

TODO: abstract

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```

1  <README.md 1>≡
    <!-- *- mode: markdown *- ->
    # tyme2invoice

    *Generate pretty invoices from [Tyme 2][] logs.*

    ## License

    *tyme2invoice* is licensed under [the BSD 3-clause license][BSD-3].

    <!-- Named Links ->
    [Tyme 2]: http://tyme-app.com/mac-2/
    [BSD-3]: https://tldrlegal.com/license/bsd-3-clause-license-%28revised%29

```

Code

Library

```

2  <src/Data/Tyme.hs 2>≡
    module Data.Tyme (
        module Data.Tyme.Types
    ) where

import           Data.Tyme.Types

```

Types

```

3 <src/Data/Tyme/Types.hs 3>≡
  {-# LANGUAGE DeriveGeneric    #-}
  {-# LANGUAGE OverloadedStrings #-}

module Data.Tyme.Types where

import           Data.Aeson
import           Data.Text
import           GHC.Generics

data Time =
  Time { notes      :: Text
        , rate      :: Double
        , timeEnd   :: Text - TODO: refine this type
        , category  :: Text
        , roundingMinutes :: Int
        , task      :: Text
        , roundingMethod :: Text
        , timeStart  :: Text
        , duration   :: Int
        , sum        :: Double
        , subtask    :: Text
        , project    :: Text
        }

instance ToJSON Time where
  toJSON t =
    object [ "notes" .= notes t ]

instance FromJSON Time where
  parseJSON (Object v) = Time <$>
    v .: "notes" <*>
    v .: "rate" <*>
    v .: "timeEnd" <*>
    v .: "category" <*>
    v .: "roundingMinutes" <*>
    v .: "task" <*>
    v .: "roundingMethod" <*>
    v .: "timeStart" <*>
    v .: "duration" <*>
    v .: "sum" <*>
    v .: "subtask" <*>
    v .: "project"
  - parseJSON _ = empty

```

Defines:

Time, never used.

The main executable

```
4 <app/Main.hs 4>≡
  module Main where

    main :: IO ()
    main = putStrLn "Hello, Haskell!"
```

Defines:

main, used in chunks 5 and 8.

Setup

```
5 <Setup.hs 5>≡
  - -*- mode: haskell -*-

  import           Distribution.Simple

  main :: IO ()
  main = defaultMain
```

Uses main 4.

Miscellanea

Change Log

```
6 <ChangeLog.md 6>≡
  <!-- -*- mode: markdown -*- -->
  # Revision history for tyme2invoice

  ## 0.0.0.1 - 2017-01-16

  * First version. Released on an unsuspecting world.
```

Makefile

This is pretty meta.

```

7 <Makefile 7>≡
  # -*- mode: makefile -*-

LIB_SRCS := \
    Data/Tyme.hs \
    Data/Tyme/Types.hs

APP_SRCS := Main.hs

tangle = notangle -R'$@' $1 $< >$@

.SUFFIXES: .nw .pdf .tex
.nw.tex:
    noweave -filter btdefn -n -delay -index $< >$@
.tex.pdf:
    latexmk -shell-escape -pdf $<
    latexmk -c $<

all: \
    Makefile \
    .envrc \
    .gitignore \
    README.md \
    ChangeLog.md \
    LICENSE \
    build \
    tyme2invoice.pdf

build: \
    $(addprefix src/,${LIB_SRCS}) \
    $(addprefix app/,${APP_SRCS}) \
    Setup.hs \
    package.yaml \
    shell.nix
    nix-build $(lastword $^ ) -o $@

.PHONY: clean
clean:
    find . \
        -type f \
        \! -path './.git*' \

```

```

\! -name '*.nw' \
\! -name invoice.cls \
\! -name Makefile \
-delete

```

```

Makefile: tyme2invoice.nw
    $(call tangle,-t2)

```

```

.envrc \
.gitignore \
ChangeLog.md \
README.md \
LICENSE \
package.yaml: \
tyme2invoice.nw
    $(call tangle,)

```

```

tyme2invoice.cabal: package.yaml
    nix-shell -p haskellPackages.hpack -run hpack

```

```

shell.nix: tyme2invoice.cabal
    nix-shell -p haskellPackages.cabal2nix -run 'cabal2nix -shell . >$@'

```

```

%.hs: tyme2invoice.nw
    $(call tangle,-filter btdefn)

```

package.yaml

```

8  <package.yaml 8>≡
    # -*- mode: yaml -*-
    name: tyme2invoice
    version: '0.0.0.1'
    synopsis: Generate pretty invoices from Tyme 2 logs.
    category: Data
    author: Eric Bailey
    maintainer: eric@ericb.me
    copyright: (c) 2017 Eric Bailey
    license: BSD3
    homepage: https://github.com/yurrriq/tyme2invoice
    bug-reports: https://github.com/yurrriq/tyme2invoice/issues
    extra-source-files:
    - ChangeLog.md
    - README.md
    library:
      dependencies:
      - base # >=4.9 && <4.10
      - aeson # >=0.7.0.5 && <0.12
      - optparse-applicative >=0.13.0 && <0.14
      - pandoc # >=1.17.1 && <1.18
      - text >=1.2 && <1.3
      source-dirs: src
    executable:
      main: Main.hs
      dependencies:
      - base
      - tyme2invoice
      source-dirs: app
    stability: gamma
    Uses main 4.

```

.envrc

```

9  <.envrc 9>≡
    PATH_add ./build/bin

```

.gitignore

Ignore /build (nix-build artifact).

```

10 <.gitignore 10>≡
    /build

```

11 ▷

Ignore Haskell stuff.

11 $\langle .gitignore \text{ 10} \rangle + \equiv$
Haskell

$\langle \text{ 10 } \text{ 12} \rangle$

```
dist
dist-*
cabal-dev
*.o
*.hi
*.chi
*.chs.h
*.dyn_o
*.dyn_hi
.hpc
.hsenv
.cabal-sandbox/
cabal.sandbox.config
*.prof
*.aux
*.hp
*.eventlog
.stack-work/
cabal.project.local
.HTF/
```


Ignore L^AT_EX stuff.

12 `<.gitignore 10>+≡`
`# LaTeX`

<11

Core latex/pdflatex auxiliary files:

*.aux
 *.lof
 *.log
 *.lot
 *.fls
 *.out
 *.toc
 *.fmt
 *.fot
 *.cb
 *.cb2

Intermediate documents:

*.dvi
 -converted-to.
 # these rules might exclude image files for figures etc.
 # *.ps
 # *.eps
 # *.pdf

Generated if empty string is given at "Please type another file name for output:"
 .pdf

Bibliography auxiliary files (bibtex/biblatex/biber):

*.bbl
 *.bcf
 *.blg
 *-blx.aux
 *-blx.bib
 *.brf
 *.run.xml

Build tool auxiliary files:

*.fdb_latexmk
 *.synctex
 *.synctex(busy)
 *.synctex.gz
 *.synctex.gz(busy)
 *.pdfsync

Auxiliary and intermediate files from other packages:

algorithms
 *.alg
 *.loa

achemso

```

acs-*.bib

# amsthm
*.thm

# beamer
*.nav
*.pre
*.snm
*.vrb

# changes
*.soc

# cprotect
*.cpt

# elsarticle (documentclass of Elsevier journals)
*.spl

# endnotes
*.ent

# fixme
*.lox

# feynmf/feynmp
*.mf
*.mp
*.t[1-9]
*.t[1-9][0-9]
*.tfm
*.[1-9]
*.[1-9][0-9]

#(r)(e)ledmac/(r)(e)ledpar
*.end
*.?end
*.[1-9]
*.[1-9][0-9]
*.[1-9][0-9][0-9]
*.[1-9]R
*.[1-9][0-9]R
*.[1-9][0-9][0-9]R
*.eledsec[1-9]
*.eledsec[1-9]R
*.eledsec[1-9][0-9]
*.eledsec[1-9][0-9]R
*.eledsec[1-9][0-9][0-9]
*.eledsec[1-9][0-9][0-9]R

```

```
# glossaries
*.acn
*.acr
*.glg
*.glo
*.gls
*.glsdefs

# gnuplottex
*-gnuplottex-*

# gregoriotex
*.gaux
*.gtex

# hyperref
*.brf

# knitr
*-concordance.tex
# TODO Comment the next line if you want to keep your tikz graphics files
*.tikz
*-tikzDictionary

# listings
*.lol

# makeidx
*.idx
*.ilg
*.ind
*.ist

# minitoc
*.maf
*.mlf
*.mlt
*.mtc[0-9]*

# minted
_minted*
*.pyg

# morewrites
*.mw

# mylatexformat
*.fmt

# nomenc1
*.nlo
```

```
# pax
*.pax

# sagemath
*.sagemath.sage
*.sagemath.py
*.sagemath.scm

# scrwfile
*.wrt

# sympy
*.sout
*.sympy
sympy-plots-for-*.tex/

# pdfcomment
*.upa
*.upb

# pythontex
*.pytxcode
pythontex-files-*/

# thmtools
*.loe

# TikZ & PGF
*.dpth
*.md5
*.auxlock

# todonotes
*.tdo

# easy-todo
*.lod

# xindy
*.xdy

# xypic precompiled matrices
*.xyc

# endfloat
*.ttt
*.fff

# Latexian
TSWLatexianTemp*
```

```
## Editors:
# WinEdt
*.bak
*.sav

# Texpad
.texpadtmp

# Kile
*.backup

# KBibTeX
*~[0-9]*

# auto folder when using emacs and auctex
/auto/*

# expex forward references with \gathertags
*-tags.tex
```

License

13 \langle LICENSE 13 $\rangle \equiv$
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Chunks

⟨*.envrc* 9⟩
⟨*.gitignore* 10⟩
⟨*app/Main.hs* 4⟩
⟨*ChangeLog.md* 6⟩
⟨*LICENSE* 13⟩
⟨*Makefile* 7⟩
⟨*package.yaml* 8⟩
⟨*README.md* 1⟩
⟨*Setup.hs* 5⟩
⟨*src/Data/Tyme.hs* 2⟩
⟨*src/Data/Tyme/Types.hs* 3⟩

Index

main: 4, 5, 8

Time: 3