
Reporti: TI-Inspired \LaTeX Template.

*Rhyloo - jorge2@uma.es**LaTeX Template***ABSTRACT**

This document pretend to be the documentation of Reporti: A Texas-Instruments inspired LaTeX template.

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1. Motivation

At college I read lot of documents about electronics. One of my favorites was *Op Amps for everyone* from Texas Instruments (TI). If you take a moment to analyse the documents in the `TI_Examples` folder from this repository, you will agree with me that they are really well done, with great content and a nice design. So, after some time, I found free time to write a \LaTeX template. To be honest with you, I don't use \LaTeX where I work, and I am not sure if it's used anywhere else, but maybe I or future generations will have to write good nice reports or notes for some crazy school project. :D

So, here is the first version of Reporti, a Texas Instruments-inspired \LaTeX template for you all.

Warning

I had the great idea of use the template for self documentation and I like to write in org-mode because my website run under it. So I can leverage this file for my website.

To sum-up this README file has the full package inside thanks to org-babel, it works like jupyter notebooks but for any language (LaTeX, C, HTML and obviously python too).

So sorry if it is a mesh on github, I recommend you read README.pdf

2. How to use

If you are planning to use this template with \LaTeX with linux download `reporti.cls` and put it in the path

```
find -L /home -samefile ../../Reporti/reporti.cls #
```

```
home/rhyloo/Documents/ $\text{\LaTeX}$ /Reporti/reporti.cls /home/rhyloo/texmf/tex/latex/local/reporti.cls /home/rhyloo.emacs.d/reporti.cls  
/home/rhyloo/snap/languagetool/45/Documents/ $\text{\LaTeX}$ /Reporti/reporti.cls /home/rhyloo/snap/languagetool/current/Doc-  
uments/ $\text{\LaTeX}$ /Reporti/reporti.cls
```

3. Features

3.1. Cover page

Just trying to keep it simple. A .cls file based on report class.

About features, the cover can be customize with the next commands: Check

```
\documentclass[draft]{reporti} %
\cover[width=1.35\textwidth][continue]
\type{Name of doc type}
\code{Project Number/Code} % For more info. Look for naming conventions
\titulo{Project title}
\autor{Author}
\subtitulo{Subtitle}
\resumen{Summary}
\notes{Some notes in Cover}
\contact{Contact footnote}
```

Code 3-1: Control commands for the template

3.2. Table

Table 3-1: Changelog

Version	Description	Author
v0.0	Initial release	Rhyloo

3.3. Images



Figure 3-1: Rhyloo Solutions's logo

4. About images

The file `Logo-EII-horizontal.pdf` doesn't have any type of LICENSE on the [web](#). As master's student I can use, maybe you don't, be careful with it.

I am really interested in naming conventions applied to projects. I think is the first part of a good story, I define two names the first is common use and the second is like a code, i.e Fat-Man is the bomb, but if I said Fat-Man-DOC-123HAJK123

Do you have one for owns?? Explain in comments and discuss the best :D

Examples:

- Texas Instruments have names like: TAS5518-5261K2EVM. According to Deepseek
 - TAS: Indicates a Texas Instruments Audio Solution
 - 5518: The specific model number of the IC.
 - 5261: A code unique to the EVM design
 - K2: Likely denotes a revision or variant of the EVM
 - EVM: Standard suffix for Evaluation Module

IMO is the first part of a good story like "MarkII" or "Apollo"

5. About document class

```
\NeedsTeXFormat{LaTeX2e}
\ProvidesClass{reporti}[Template LaTeX based on Texas Instruments note application documentation.]
\LoadClass[10pt, a4paper, twoside]{article}

\DeclareOption{draft}{
  \PassOptionsToPackage{draft}{graphicx}
  \AtEndOfClass{\usepackage{draftwatermark}\SetWatermarkText{DRAFT}}
}

\newcommand{\@mylang}{english}
% Language options
\DeclareOption{spanish}{\renewcommand{\@mylang}{spanish}}
\DeclareOption{english}{\renewcommand{\@mylang}{english}}

\DeclareOption*{\PassOptionsToClass{\CurrentOption}{article}}
\ProcessOptions\relax
```

5.1. Packages

I added package geometry becuase I need to config headheight, and page geometry:

```
\RequirePackage{geometry}           % Configuración de márgenes
\setlength{\headheight}{50pt} % 32.05278pt mínimo requerido + margen de seguridad
\geometry{top=3cm, bottom=2.5cm, left=1.83cm, right=1.83cm, footskip=1.2cm}
```

Encabezados/pies de página. I defined two styles.

1. `mainstyle`: Used for full document elaboration
2. `tocstyle`: Used by tocs.

```
\RequirePackage{fancyhdr}
\fancypagestyle{mainstyle}{
  \fancyhf{}
  \renewcommand{\headrulewidth}{2pt}
  \renewcommand{\footrulewidth}{1.5pt}
  \ifdefvoid{\@logo}{}{%
    \fancyhead[RE,LO]{\includegraphics[height=2em]{\@logo}\par
      \href{www.rhyloo.com}{www.rhyloo.com}\par\par}
  }
  \fancyhead[LE,RO]{\nouppercase{\rightmark}}
  \fancyfoot[LE]{\fontsize{8}{35}\selectfont \thepage \hspace{0.8cm} \itshape\@title}}
  \ifdefvoid{\@contact}{\fancyfoot[RE,LO]{\fontsize{8}{35}\selectfont \ifdefvoid{\@projectcode}{}{\@projectcode}
    \fancyfoot[RE,LO]{\fontsize{8}{35}\selectfont \ifdefvoid{\@projectcode}{}{\@projectcode}\\\itshape\@projectcode}}
```

```

}
\fancyfoot[R0]{\fontsize{8}{35}\selectfont \itshape\@title \hspace{0.8cm} \thepage}}
}

\fancypagestyle{tocstyle}{
\fancyhf{}
\renewcommand{\headrulewidth}{2pt}
\renewcommand{\footrulewidth}{1.5pt}
\ifdefvoid{\@logo}{\%
\fancyhead[RE,L0]{\includegraphics[height=2em]{\@logo}\par
\href{www.rhyloo.com}{www.rhyloo.com}\par\par}
}
\fancyhead[LE,R0]{}
\fancyfoot[LE]{\fontsize{8}{35}\selectfont \thepage \hspace{0.8cm} \itshape\@title}}
\ifdefvoid{\@contact}{\fancyfoot[RE,L0]{\fontsize{8}{35}\selectfont \ifdefvoid{\@projectcode}{\@projectcode}{\@projectcode}\itshape\@contact}}
\ifdefvoid{\@projectcode}{\fancyfoot[RE,L0]{\fontsize{8}{35}\selectfont \ifdefvoid{\@projectcode}{\@projectcode}\itshape\@projectcode}}
\ifdefvoid{\@projectcode}{\fancyfoot[RE,L0]{\fontsize{8}{35}\selectfont \ifdefvoid{\@projectcode}{\@projectcode}\itshape\@projectcode}}
}
\fancyfoot[R0]{\fontsize{8}{35}\selectfont \itshape\@title \hspace{0.8cm} \thepage}}
}

\RequirePackage{xparse} % Para comandos avanzados

\RequirePackage{xcolor} % Manejo de colores
\RequirePackage{titlesec} % Estilos de secciones
\RequirePackage{graphicx} % Manejo de imágenes

% Default: English

\RequirePackage[\@mylang]{babel}

\RequirePackage{hyperref} % Hipervínculos
\hypersetup{
colorlinks = true,
linkcolor = blue!70!black,
urlcolor = blue!70!black,
citecolor = green!60!black
}

\RequirePackage{fontspec} % Fuentes modernas
\setmainfont{FreeSans}

\RequirePackage[export]{adjustbox}

```

```

\RequirePackage{datetime2}      % Manejo de fechas profesional

\RequirePackage{etoolbox}       % Utilidades de macros
\RequirePackage{tabularx}
\RequirePackage{float}
\RequirePackage{booktabs}
\RequirePackage{multirow}
\RequirePackage{tocloft}
\RequirePackage[tableposition=above]{caption}
\RequirePackage[figure,table,listing]{totalcount}
\RequirePackage{xstring} % Add near the top of the file
\RequirePackage{underscore}
\RequirePackage{longtable}
\RequirePackage{wrapfig}
\RequirePackage{rotating}
\RequirePackage[normalem]{ulem}
\RequirePackage{amsmath}
\RequirePackage{amssymb}
\RequirePackage{capt-of}

\RequirePackage[newfloat,outputdir=./build]{minted}
\usemintedstyle{emacs}
%% \newlistof{listing}{lol}{\hfill\bfseries\normalsize List of codes\hfill}
\RequirePackage{caption}

%% \newenvironment{code}{\captionsetup{type=listing}}{}
% Configure the listing environment

%% \captionsetup[listing]{
%%   name=Código, % Sets the caption name to "Código"
%%   %% listname=Lista de códigos % Name of the list of listings
%% }

\newcommand{\test}{Code}

\SetupFloatingEnvironment{listing}{%
  name={\test}}
\renewcommand{\thelisting}{\arabic{section}-\arabic{listing}}
%% \renewcommand{\cftlistingpresnum}{Code~}

%% \setlength{\cftlistingnumwidth}{5em}

% define a command that only prints the list if there is at least one listing
\newcommand{\maybeListOfListings}{%
  % \c@listing is the internal counter for float "listing"
  \ifnumcomp{\value{listing}}{>}{0}{%
    \listoflistings
  }
}

```

```

} {%
    No work!
}%
}

\RequirePackage[most]{tcolorbox}
% Configuración de datetime2 para español
\DTMsetup{useregional=numeric}

\graphicspath{{figures/}{figures/logo/}}

```

5.2. Document Commands

```

\newcommand{\@metadata}{} % Registro de metadatos

\NewDocumentCommand{\autor}{m}{%
    \def\@autor{#1}%
    \listadd{\@metadata}{Autor: #1}%
}

\NewDocumentCommand{\fecha}{0{\DTMtoday}}{%
    \def\@fecha{#1}%
    \listadd{\@metadata}{Fecha: #1}%
}

\NewDocumentCommand{\summary}{m}{%
    \def\@summary{#1}%
    \ifx\@summary\@empty\else
        \gappto\@afterabstract{\@printsummary}%
    \fi
}

\NewDocumentCommand{\subtitle}{m}{%
    \def\@subtitle{#1}%
    \listadd{\@metadata}{Subtítulo: #1}% % Opcional: para mostrar en metadata
}

\NewDocumentCommand{\type}{m}{%
    \def\@type{#1}%
    \listadd{\@metadata}{Type: #1}% % Opcional: para mostrar en metadata
}

\NewDocumentCommand{\projectcode}{m}{%
    \def\@projectcode{#1}%
    \listadd{\@metadata}{Projectcode: #1}% % Opcional: para mostrar en metadata
}

\NewDocumentCommand{\notes}{m}{%
    \def\@notes{#1}%
    \listadd{\@metadata}{Notes: #1}% % Opcional: para mostrar en metadata
}

\NewDocumentCommand{\contact}{m}{%

```

}

```
\renewcommand{\sectionmark}[1]{\markright{#1}}
```

```
% --- Redefinir marcas para ignorar subsecciones ---
```

```
\renewcommand{\sectionmark}[1]{\markright{#1}} % Actualiza solo \rightmark
```

```
\renewcommand{\subsectionmark}[1]{\} % Subsecciones no modifican los headers
```

`\pagestyle{mainstyle}`

```
\fancypagestyle{titlepagestyle}{
```

```
\renewcommand{\headrulewidth}{0pt}
```

```
\renewcommand{\footrulewidth}{1.5pt}
```

`\fancyhf{}`

```
\fancyfoot[LE]{\fontsize{8}{35}\selectfont \thepage \hspace{0.8cm} \itshape \@title}}
```

```
\ifvoid{\@contact}{ \fancyfoot[RE,LO]{\fontsize{8}{35}\selectfont \ifvoid{\@projectcode}{-}{\p
```

`\fancyfoot[RE,LO]{\fontsize{8}{35}\selectfont \ifdefined\@projectcode{\@projectcode}\\itshape\@c`

```
\fancyfoot[RO]{\fontsize{35}\selectfont \itshape\@title \hspace{0.8cm} \normalfont\thepage}}
```

}

% =====

% 4. Estilos de Títulos

% =====

```
\setlength{\voffset}{10pt} % Ajusta según necesidad para evitar warnings
```

```
\setlength{\headsep}{5pt} % Ajusta según necesidad para evitar warnings
```

```
% Definir formato de títulos
```

`\titleformat{\section}`

```
{\large\bfseries} % Formato del texto
```

```
{\thesection.\hspace{2em}} % Etiqueta: Número + 4em de espacio
```

```
{0pt} % Separación entre etiqueta y título
```

```
{ } % Código antes del título
```

`\titleformat{\subsection}`

$$\{\backslash large\itshape\bfseries\}$$

```

{\thesubsection.\hspace{1.25em}} % 3em de espacio
{0pt}
{}

\titleformat{\subsubsection}
{\bfseries}
{\hspace{3.5em}} % 2em de espacio
{0pt}
{}

% Ajustar espaciado vertical (opcional)
\titlespacing{\section}{0pt}{12pt}{6pt}
\titlespacing{\subsection}{0pt}{12pt}{6pt}
\titlespacing{\subsubsection}{0pt}{12pt}{6pt}


\newlength{\originalparskip}
% =====
% 6. Cover
% =====
\NewDocumentCommand{\cover}{0{width=0.8\textwidth} 0{}}{%
  \pagestyle{empty}
  \begingroup % Grupo local para cambios de espaciado
  % Save the original parskip value
  \setlength{\originalparskip}{\parskip}
  \renewcommand{\baselinestretch}{0.4} % Ajuste principal (20% más de espacio)
  \renewcommand{\parskip}{\originalparskip} % Ajuste principal (20% más de espacio)
  \begin{titlepage}
  \thispagestyle{titlepagestyle} % <--- Aplica el footer
  % -----
  % Cabecera con logo y datos institucionales
  % -----
  \ifdefvoid{\@logo}
    {\vspace*{4em}}{}
  \noindent\begin{minipage}[t]{0.4\textwidth}
  \ifdefvoid{\@logo}
    {}
    {\includegraphics[#1]{\@logo}}
  %% \vspace{-1.5\baselineskip} % Alineación precisa
  \end{minipage}%
  \hfill
  \begin{minipage}[t]{0.6\textwidth}
    \vspace{-2\baselineskip} % Alineación precisa
    \raggedleft
    \ifdef{\@type}{\fontsize{14}{35}\selectfont\itshape\@type}{\par}
    \ifdef{\@projectcode}{\fontsize{9}{35}\selectfont\itshape\@projectcode}{\par}

```

```

\end{minipage}

\vspace{0.5\baselineskip} % Alineación precisa

\begin{flushright}
  {\fontsize{18}{35}\selectfont\bfseries\itshape\@title}
\end{flushright}
\vspace*{-1\baselineskip} % Reduce espacio posterior
  {\rule{\textwidth}{2pt}}

\noindent\begin{minipage}{0.7\textwidth}
  \raggedright
  \ifdef{\@author}{%
    {\fontsize{10}{35}\selectfont\itshape\@author}
  }{}
\end{minipage}
\hfill
\begin{minipage}{0.25\textwidth}
  \raggedleft
  \ifdef{\@subtitle}{%
    {\fontsize{10}{35}\selectfont\itshape\@subtitle}
  }{}
\end{minipage}

% -----
% Summary condicional
% -----
\ifdefvoid{\@summary}{}{%
  \vspace{0.75cm}

  \hspace{1.75cm}
  \begin{minipage}{13.6cm}
    \begin{center}
      \noindent{\bfseries ABSTRACT}
    \end{center}
    {\fontsize{10}{35}\selectfont\@summary}\par
    {\rule{\textwidth}{1pt}}
  \end{minipage}
}

\ifstrequal{#2}{continue}{
  \tocloftpagestyle{titlepagestyle}
  %% \vspace{0.75cm}

  \hspace{1.75cm}
  \begin{minipage}{13.6cm}
    {\fontsize{9}{35}\selectfont
      \tableofcontents
      \iftotalfigures
    }
  \end{minipage}
}

```

```

        \listoffigures
        \fi
        \iftotaltables
        \listoftables
        \fi
        \iftotallistings
        \listoflistings
        %% \maybeListOfListings
        \fi
    }
    \end{minipage}
    \vfill
    \ifdefined\@notes\{}{
        \noindent\raggedright{\fontsize{8}{35}\selectfont\@notes\vspace{-1\baselineskip}}}
    \end{titlepage}
    \endgroup}{
        \vfill
        \ifdefined\@notes\{}{
            \noindent\raggedright{\fontsize{8}{35}\selectfont\@notes\vspace{-1\baselineskip}}}
        \end{titlepage}
    \endgroup
    \tocloftpagestyle{tocstyle}
    \pagestyle{tocstyle}
    \tableofcontents
    \iftotalfigures
    \listoffigures
    \fi
    \iftotaltables
    \listoftables
    \fi
    \iftotallistings
    \listoflistings
    %% \maybeListOfListings
    \fi
}
\clearpage
\pagestyle{mainstyle}
}

\AddToHook{cmd/section/before}{
    \clearpage
}

\setlength{\cftbeforesecskip}{0pt}
\renewcommand{\cftsecleader}{\cftdotfill{\cftdotsep}}
\renewcommand{\cftdotsep}{1}% Default is 4.5

```

```

\renewcommand{\cftaftertoctitleskip}{2em}
\renewcommand{\cftafterloftitleskip}{2em}
\renewcommand{\cftafterlottitleskip}{2em}

\renewcommand{\cftfigindent}{0pt}
\renewcommand{\cftfigpresnum}{\figurename~}
\renewcommand{\cftfigaftersnum}{.}
\setlength{\cftfignumwidth}{5em}
\renewcommand{\thefigure}{\arabic{section}-\arabic{figure}}
\renewcommand{\cftsecpagefont}{\normalsize}

% =====
% List of Tables Customization
% =====
% 1. Set table numbering format: section-table (e.g., 1-1)
\renewcommand{\thetable}{\arabic{section}-\arabic{table}}

% 2. Configure table entries in List of Tables
\renewcommand{\cfttabindent}{0pt}           % Remove indentation
\renewcommand{\cfttabpresnum}{\tablename~}   % Prefix: "Table "
\renewcommand{\cfttabaftersnum}{.}           % Suffix: "."
\setlength{\cfttabnumwidth}{5em}             % Width for table numbers

% 3. (Optional) Set section page numbers in TOC
\renewcommand{\cftsecpagefont}{\normalsize} % Normal font for section page numbers


\setlength{\parindent}{0pt}
\setlength{\baselineskip}{50pt}
\renewcommand{\baselinestretch}{1.2} % Ajuste principal (20% más de espacio)


\makeatletter
\apptocmd{\@afterheading}{
  \vspace{-0.5\baselineskip}
  \setlength{\parskip}{12pt}
}{\@afterheading}{}
\makeatother


\addto\captionsspanish{%
  \renewcommand{\contentsname}{\hfill\bfseries\normalsize Contenido\hfill}
  \renewcommand{\figurename}{Figura} % Override figure name globally
  \renewcommand{\tablename}{Tabla}

```

```
\renewcommand{\test}{Código}
\renewcommand{\listfigurename}{\hfill\bfseries\normalsize Lista de figuras\hfill}
\renewcommand{\listtablename}{\hfill\bfseries\normalsize Lista de tablas\hfill}
\renewcommand{\listlistingname}{\hfill\bfseries\normalsize Lista de códigos\hfill}
}

\addto\captionsenglish{%
  \renewcommand{\contentsname}{\hfill\bfseries\normalsize Content\hfill}
  \renewcommand{\tablename}{Table}
  \renewcommand{\figurename}{Figure} % Override figure name globally
  \renewcommand{\test}{Code}
\renewcommand{\listfigurename}{\hfill\bfseries\normalsize List of figures\hfill}
\renewcommand{\listtablename}{\hfill\bfseries\normalsize List of tables\hfill}
\renewcommand{\listlistingname}{\hfill\bfseries\normalsize List of codes\hfill}
}

\makeatletter
\renewcommand{\l@listing}[2]{%
  \renewcommand{\figurename}{\test} % Override figure name globally
  \l@figure{#1}{#2}%
}
\makeatother

\tocloftpagestyle{tocstyle}
```


6. Known - Bugs

- 6.1. *TODO If there more than X sections the template do crazy things.*
- 6.2. *TODO Change langs is not easy as I want.*
- 6.3. *TODO Adjust toc style not in header*
- 6.4. *TODO Modificar la web del header*