



What We Do

Allegan County GIS
www.allegancounty.org/gis

July 13, 2018

Contents

I	Brand	1
1	Awards	2
1.1	The GIS Champion Award	2
1.1.1	GIS Champion Award Code	2
II	Methods	5
2	Documentation	6
2.1	About Documentation	6
2.1.1	How This Book Works	6
2.2	Document Storage Concepts	9
2.2.1	GIS File Standard	9
2.3	Team Concept	10
2.3.1	Paired Programming	10
III	Service	11
3	Tools	13
3.1	L ^A T _E X Packages	13
3.1.1	float Package	14
3.1.2	graphicx Package	15
3.1.3	hyperref Package	15
3.1.4	import Package	18
3.1.5	standalone Package	19
3.1.6	wrapfig Package	21
	References	21

Part I

Brand

Chapter 1

Awards

1.1 The GIS Champion Award

1.1.1 GIS Champion Award Code

```
\documentclass[landscape]{article}
\usepackage{wallpaper}
\usepackage{niceframe}
\usepackage{xcolor}
\usepackage{ulem}
\usepackage{graphicx}
\usepackage{geometry}
\geometry{tmargin=.75cm,bmargin=.25cm,lmargin=.8cm,rmargin=.2cm}
\usepackage{multicol}
\setlength{\columnseprule}{0.4pt}
\columnwidth=0.3\textwidth

\begin{document}

%\TileWallPaper{4cm}{2cm}{CoLogo133x200.png}

\centering
\scalebox{3}{\color{green!30!black!60}}
\begin{minipage}{.33\textwidth}
\font\border=umrandb
\generalframe
{\border \char113} % up left
{\border \char109} % up
{\border \char112} % up right
{\border \char108} % left
{\border \char110} % right
```

```

{\border \char114} % lower left
{\border \char111} % bottom
{\border \char115} % lower right
{\centering

\includegraphics[height=1.25cm]{GIS_Logo_better.jpg}
%\end{minipage}
\vspace{-8mm}

\curlyframe[.9\columnwidth]{

\textcolor{red!10!black!90}
{\small Allegan County GIS Services}\\
\textcolor{green!10!black!90}{
\tiny recognizes}

\\
\uline{\textcolor{black}
{Ian Hanes}}
\\
\smallskip
\tiny Chief Equalization Technician
\smallskip

\textcolor{green!10!black!90}
{
\tiny as a
}
\smallskip
\tiny
\\
\textcolor{black}{\large \textsc{GIS Champion}}
\\
\vspace{1mm}
\textcolor{green!10!black!90}
{
\tiny for outstanding dedication and service to the community
\\while using GIS technology on this day
\itshape June 29, 2018
}
\vspace{3mm}

{\color{blue!40!black}
\scalebox{.6}{

\begin{tabular}{ccc}

```

```
\cline{1-1}
%\cline{2-2}
\cline{3-3}
%\cline{4-4}
%\cline{5-5}
\\
Neil Besteman & & Bryan May \\
GIS Manager & & GIS Analyst \\
\end{tabular}
}}}}
\end{minipage}

}
\end{document}
```

Part II

Methods

Chapter 2

Documentation

2.1 About Documentation

2.1.1 How This Book Works

Project General Notes:

- Book folder can be renamed and moved.
- This project is coded with relative paths from processing folder down.

Project file structure:

J:\LIS\GIS_Doc\book\build

pdf docs created by the underlying .tex docs and copied here manually.

J:\LIS\GIS_Doc\Book\source

images that appear in

`\GIS_Documentation.tex`

J:\LIS\GIS_Doc\Book\processing

the Tex workspace.

`\GIS_Documentation.tex`

top level of documentation of type "book" in L^AT_EX. Where book properties and book parts are managed and chapters are imported.

`\archive`

archive copies of entire processing folder.

`\brandPart`

L^AT_EX "book part" about the brand.

`\methodsPart`

L^AT_EX "book part" about the methods.

`\servicePart`

L^AT_EX "book part" about services.

`\build`

folder for temp docs when created by compiling of:

`GIS_Documentation.tex`

*** Note:** each level from here down has a build folder for temp Latex files like this.

Service Book Part Detail

relative path:

```
\processing\servicePart\toolsChapter.tex
```

intermediate level of "book" in L^AT_EX. Where (service part, tool) chapter properties are managed and sections are imported.

toolsChapter

relative path:

```
\processing\servicePart\toolsChapter
```

intermed level of "book" in L^AT_EX. Where book section properties are managed and subsections are imported.

2.2 Document Storage Concepts

2.2.1 GIS File Standard

Folders inside the project folder

- archive
- build
- delivered
- documentation
- processing
- source

2.3 Team Concept

2.3.1 Paired Programming

some point about pp

Part III

Service

text [[1](#), pg.4].

Chapter 3

Tools

3.1 \LaTeX Packages used by AC GIS

3.1.1 float Package

usepackage

text

Simple Use

text

Options

text

Add optional arguments to the usepackage line:

Useful options:

- **OPTION NAME**
OPTION NOTE
- **OPTION NAME**
OPTION NOTE

Use with options

text

Commands

3.1.2 graphicx Package

usepackage

text

Simple Use

text

Options

text

Add optional arguments to the usepackage line:

Useful options:

- **OPTION NAME**
OPTION NOTE
- **OPTION NAME**
OPTION NOTE

Use with options

text

Commands

3.1.3 hyperref Package

Introduction

[Official hyperref package documentation](#)

Note: Add the *hyperref package* to the preamble **last**.

```
\usepackage[options]{hyperref}
```

Simple Use

Use `\href{URL}{DESCRIPTION}` to add a link with description

```
\href{https://www.latex-tutorial.com}{Website with tutorials}  
produces:
```

Website with tutorials

Options

Add optional arguments to the usepackage line:

Useful options:

- **pdftex**
enables other options like breaklines
- **breaklinks**
allow links to be broken across several lines
eg. <https://lists.gnu.org/archive/html/emacs-orgmode/2013-06/msg00776.html>
- **colorlinks**
Colors the text of links and anchors.(default is false)
- **linkcolor**
Color for normal internal links(default is red).
- **anchorcolor**
Color for anchor text.
- **citecolor**
Color for bibliographic citations in text.
- **urlcolor**
Color for linked URLs

Use with options

```
\usepackage[breaklinks,colorlinks,citecolor=blue,
urlcolor=green]{hyperref}
```

Commands

```
\href{URL}{text}  Makes text a link to URL.
```

To put a file path in text:

eg:

[Official hyperref package documentation](#)

(documentation Pt.4 pg.15)

```
\href[options]{URL}{text}
```

Options:

- absolute

```
\href{C:/AC/jalapeno/documentation/packageDocs/hyperref2017.pdf}  
  {Official hyperref doc}
```

- relative **Note: relative path must be from final pdf location**

```
\href{../../../../../documentation/packageDocs/hyperref2017.pdf}  
  {Official hyperref package doc}
```

*This path works from main document

```
\href{../../documentation/packageDocs/hyperref2017.pdf}  
  {Official hyperref package documentation}
```

*This path works from subsection document

```
\hyperref[label]{text}  
  Makes text a link to where \ref{label} would point.
```

```
\hypertarget{name}{text}  
  Sets an anchor on text with the label name.
```

```
\hyperlink{name}{text}  
  Makes text a link that takes you to the anchor labeled name.  
  *Pair with \hypertarget.
```

```
\phantomsection  
  Used in conjunction with
```

```
\addcontentsline  
  to make the correct link in the Table of Contents.
```

3.1.4 import Package

usepackage

text

Simple Use

text

Options

text

Add optional arguments to the usepackage line:

Useful options:

- **OPTION NAME**
OPTION NOTE
- **OPTION NAME**
OPTION NOTE

Use with options

text

Commands

3.1.5 standalone Package

Introduction

[Link to official standalone documentation](#)

standalone provides a **package** and a **class**

- The *standalone* **package** is used for:
 - Main documents that will input or import sub documents.
 - For example:


```
\usepackage[subpreambles=false]{standalone}
```

 - * Ignores preambles of imported sub documents [1, pg.4]
- the *standalone* **class**:
 - Is a document class
 - Provides standalone / subdocument switches and options
 - For example:


```
\documentclass[class=article]{standalone}
```

 - * behaves as an article when standalone
 - * makes document available for import into a master document

Simple Use

- The *standalone* **package**
 - In the main document:


```
\documentclass[openany]{book}

\preamble...

\usepackage{standalone}
```
- the *standalone* **class**:
 - In any subdocument:


```
\documentclass[class=article]{standalone}

\preamble...
```

Options

- The *standalone* **package**
 - **subpreamble**
 - * default value of subpreambles is *false*
- the *standalone* **class**:
 - **crop**
 - **titlepage**
 - **twoside**
 - * Makes pagination style match book
 - * default value is *false*
 - **multi**
 - * `multi=true|false`
 - * `multi={<environment name>, ...>}`
 - **float**

Use with options

- the *standalone* **package**:
 - `\usepackage[subpreambles=false]{standalone}`
- the *standalone* **class**:
 - `\documentclass[class=article , crop=false, titlepage, twoside, multi={itemize, figure, verbatim}, float=false]{standalone}`

Commands

3.1.6 wrapfig Package

usepackage

text

Simple Use

text

Options

text

Add optional arguments to the usepackage line:

Useful options:

- **OPTION NAME**
OPTION NOTE
- **OPTION NAME**
OPTION NOTE

Use with options

text

Commands

References

- [1] Martin Scharrer, *The standalone package*, CTAN, 1.3a ed., 03 2018.