Subook

TO WHICH IS ADDED MANY USEFUL ONE
LINERS AND CODE SO THAT
YOU CAN AWK LIKE A HAWK BY

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An Human

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User Manual

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As the year went on, I started typesetting my personal notes during class and realized that the LaTeXformat, while great for publications and lecture notes in general, was lacking a few small but useful template for me.

1.1 Required Packages

For *Subook,* the following packages are required

$$\text{marginnote, sidenotes, fancyhdr, titlesec, geometry, and tcolorbox.}$$

For a brief summary, the marginnote, sidenote, titlesec, and tcolorbox packages are used in creating the \part environment, the package geometry is used globally to set the page width, page height, and margin width, and finally, fancyhdr, which is overridden on the title page, the contents page, and the \part page, sets the header for the body.

1.2 License

This work may be distributed and/or modified under the conditions of the LaTeX Project Public License, either version 1.3 of this license or (at your option) any later version. The latest version of this license is found in http://www.latex-project.org/lppl.txt, and version 1.3 or later is part of all distributions of LaTeX version 2005/12/01 or later. The current maintainer of this work is Changxing Su.

1.3 Features

Subook includes the following:

1. Several mathematics and physics packages.

2. Margins and margin environments for tables, figures, and asides.

3. T_EX shortcuts for various math scripts namely vector bold math, mathbb, math-frak, and mathcal.

4. amsthm integrations and special environments for theorems, lemmas, proofs, definitions, examples, and remarks.

5. Stylized support for the part environment.

6. A fullpage environment that spans across the text width and the margin for longer equations and horizontal figures.

Each of these will be discussed in the following subsections.

1.4 TEX Shortcuts

subook comes built in with a minimal set of keyboard shortcuts for a few special characters. All of these shortcuts can be found in subook.cls just under

```
% ------------------------------------------------------------------
%          User Created Commands
% ------------------------------------------------------------------
...
```

If one has their own macros then simply add it under this area.

1.5 amsthm **Environments**

amsthm environments are defined as usual being enclosed by \begin{environment}···
\end{environment} and most have been modified ostensibly from the original amsthm presets. Primarily, most environments, with the exception of the exercise environment, are now integrated with the wonderful tcolorbox package. Note that the counting for theorems and lemmas is distinct from the counting for definitions. Also note that the breakable for tcolorbox allows these environments to span multiple pages. All of these environment and the associated tcolorbox are provided by the code in subook.cls just under

Most people have their own shortcuts for commonly used mathematics, such as derivatives or integrals. For those looking for physics shortcuts, the excellent physics package (automatically included in *subook*) has possible everything that one can imagine.

```
% ------------------------------------------------------------------
%                    User Created Environments
% ------------------------------------------------------------------
...
%% --------------------------- tcolorbox ---------------------------
...
```

Definition 1.1 (Test)

The definition environment   ♣

Lemma 1.1 (Test)

The lemma environment   ◇

Theorem 1.1 (Test)

The theorem environment   ♡

Corollary 1.1 (Test)

The corollary environment   ◇

Proposition 1.1 (Test)

The proposition environment   ♠

Example 1   Test

The example environment

❙ **Proof.**   The proof environment   □

❙ **Remark.** The remark environment   ❙

Some extra box environment

The something extra environment

1.5.1 tcolorbox **Environment and Known Issues**

The breakable should allow the proof environment to span multiple pages. If one wishes to change the color, simply modify the line which states borderline west={1pt} {0pt}{blue}. The first numeric value dictates the width of the line, the second dictates how close it is away from the *left* margin, while the last argument obviously dictates the color. This code could also be used to change any of the other amsthm environments.

1.6 Fullpage Environment

The fullpage environment is defined by

$$\begin{fullpage}$$
$$\cdots$$
$$\end{fullpage}$$

with the width of the fullpage environment given by \textwidth+\marginparsep+\marginparwidth There are some clear benefits of having use of the full page at times. Suppose that one wants to place a figure that cannot fit into the margins, or if an equation is quite long and it bleeds into the margin, then the fullpage environment can both clearly separate these from the surrounding text and allot for the dimensions without hassle.
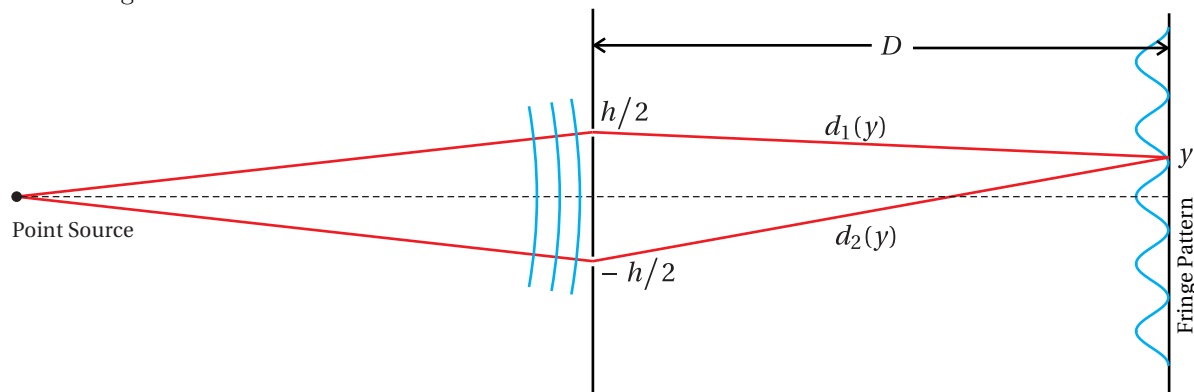

Figure 1.1: Figure caption

Definition 1.2 (big box)

dsdd ♣

Figure is a floating environment and minipage is, unfortunately, not. Therefore, if you put a floating object inside a non-floating minipage, you will get an error.One way is to avoid using figure entirely. This can be done with help of the caption package (with its captionof facility, so that you can have a caption for the figure):

```
\centering
    \includegraphics{img/f08Young.pdf}
    \captionof{figure}{Figure caption}
    \label{fig:example} % Unique label used for referencing the figure
```