A document class for theses for the Clayton and Caulfield Schools of Information Technology Monash University

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Date: 2005/10/18 15:30:00

1 Introduction

This file implements a document class suitable for theses presented in the Clayton and Caulfield Schools of Information Technology and Monash University. It may be suitable for publications at other universities with some modifications.

The cssethesis document class is based on book document class contained in the standard LATEX2e distribution. The basic functionality of book.cls is retained. A few routines from book have been redefined. Note that the default layout is for two-sided printing. Use the class option oneside if you want margins, headers and footers for single-sided printing.

cssethesis.dtx requires an additional LATEX2e package, setspace. Packages can be found on CTAN archive sites, and setspace.sty should have been included in this distribution (though you should probably leave it and use the version with your LATEX2e distribution, which is most likely more recent). setspace defines four new environments: singlespace, doublespace, onehalfspace, and spacing. Please refer to its documentation for more information. cssethesis.dtx also makes use of the standard LATEX2e packages geometry and graphicx.

Also included with this distribution are the files for the harvard package, which provides a powerful citation scheme, and some associated bibliography style files. The combination of the harvard package and the dcu bibliography style is recommended (see example.tex). Note that the natbib package supports similar functionality, and is preferred by many.

cssethesis.dtx was originally based on utthesis.cls written by Dinesh Das. It also has origins in the wuthesis.dtx by Kevin S. Ruland of Sever Institute.

2 Docstrip Commands

This section of code is for docstrip. If LATEX is run with this file, cssethesis.dtx, as input, documented source code will be produced.

- 1 (*driver)
- 2 \documentclass{ltxdoc}
- 3 \usepackage{doc}
- 4 \IndexPrologue{}
- % use the doc package
- % remove default index prologue

```
% two column index
5 \setcounter{IndexColumns}{2}
6 \EnableCrossrefs
                                    % make the command index
7 \CodelineIndex
                                        by code line
8 \CodelineNumbered
                                    % number the code lines
9 % I really want the changelog to be one column. So
10 % theglossary is redefined.
11 \makeatletter
12 \renewenvironment{theglossary}{%
13 \smallskip
14 \GlossaryParms
15 \let\item\@idxitem
16 \ignorespaces}{}
17 \makeatother
18 \RecordChanges
                                     % make the changelog
19 \begin{document}
    \DocInput{cssethesis.dtx}
21 \end{document}
22 (/driver)
```

3 Identification

Identify this package, and its contents to the user and latex.

4 Declaration of Options

The pdflatex option allows the user to specify that they wish to compile their document using pdflatex. This means that the Adobe PDF file format must be used for included graphics, rather than Postscript. We need to know this so that we can pass the right option to the graphicx package.

```
39 \newif\if@pdflatex \@pdflatexfalse % Default is false
40 \DeclareOption{pdflatex}{\@pdflatextrue}
```

Intercept the openright and openany options. We want to be able to override them in the frontmatter.

```
41 \newif\if@wasopenright \@wasopenrighttrue % true is the default 42 \DeclareOption{openright}{\@wasopenrighttrue}
```

```
43 \DeclareOption{openany}{\@wasopenrightfalse}
```

The thesisdraft option is useful for printing draft copies of the thesis. It will print a time stamp in the header of every page.

```
44 \DeclareOption{thesisdraft}{%
   \AtEndOfClass{% So it will override the definition given below
46 \let\ps@plain\@empty
47
      \def\ps@plain{%
       \let\@oddfoot\@empty\let\@evenfoot\@empty
48
       \def\@oddfoot{\hfil\textsl{Draft of \timestamp}}%
49
       \def\@evenfoot{\textsl{Draft of \timestamp}\hfil}%
50
51 }
52 \let\ps@headings\@empty
53
      \def\ps@headings{%
       \let\@oddfoot\@empty\let\@evenfoot\@empty
54
       \def\@oddfoot{\hfil\textsl{Draft of \timestamp}}%
56
       \def\@evenfoot{\textsl{Draft of \timestamp}\hfil}%
57 }
58
     }
59 }
   If printing on a PostScript printer thesispsdraft can be used to add a
PostScript special draft message across the page. dr
60 \DeclareOption{thesispsdraft}{%
    \AtEndOfClass{% So it will override the definition given below
62 \let\ps@plain\@empty
      \def\ps@plain{%
64 \special{!userdict begin /bop-hook{gsave 70 270 translate
            90 rotate /Times-Roman findfont 80 scalefont setfont
65
            0 0 moveto 0.9 setgray (DRAFT) show grestore}def end}
66
67\ \% note: what follows here is, and should be identical to that for
68 % the thesis draft option above. There must be some way of making
69 % this happen automatically...
       \let\@oddfoot\@empty\let\@evenfoot\@empty
70
71
       \def\@oddfoot{\hfil\textsl{Draft of \timestamp}}%
72
       \def\@evenfoot{\textsl{Draft of \timestamp}\hfil}%
73 }
74 \let\ps@headings\@empty
      \def\ps@headings{%
75
       \let\@oddfoot\@empty\let\@evenfoot\@empty
76
       \def\@oddfoot{\hfil\textsl{Draft of \timestamp}}%
77
78
       \def\@evenfoot{\textsl{Draft of \timestamp}\hfil}%
79 }
80 }
81
```

Either a phd thesis, masters, masters (minor) or honours thesis. Default is phd thesis. Note the different options for honours and degrees in Computing, Computer Science, Digital Systems, Software Engineering and Science. There are also options for different kinds of Masters theses.

```
82 \DeclareOption{phdthesis}{%
83 \ifx\undefined\thesistype
84 \newcommand{\thesisfulfillment}{for fulfillment}
85 \newcommand{\thesistype}{Thesis}
86 \newcommand{\thesisdegree}{Doctor of Philosophy}
```

```
87 \newcommand{\thesisdegreeabbreviation}{PhD}
88 \newcommand{\thesiscoursecode}{0190}
89 \else
90 \ClassError{cssethesis}{only one thesis type option may be
91 specified}{}
92 \fi
93 }
94 \DeclareOption{mitthesis}{%
95 \ifx\undefined\thesistype
96 \newcommand{\thesisfulfillment} \{for \ fulfillment\}
97 \newcommand{\thesistype}{Thesis}
98 \newcommand{\thesisdegree}{Master of Information Technology (Research)}
99 \newcommand{\thesisdegreeabbreviation}{MIT}
100 \newcommand{\thesiscoursecode}{1895}
101 \else
102 \ClassError{cssethesis}{only one thesis type option may be
103 specified}{}
104\fi
105 }
106 \DeclareOption{mitminorthesis}{%
107 \ifx\undefined\thesistype
108 \newcommand{\thesisfulfillment}{in partial fulfillment}
109 \newcommand{\thesistype}{Minor Thesis}
110 \newcommand{\thesisdegree}{Master of Information Technology (Minor Thesis)}
111 \newcommand{\thesisdegreeabbreviation}{MIT}
112 \newcommand{\thesiscoursecode}{3316}
114 \ClassError{cssethesis}{only one thesis type option may be
115 specified}{}
116 \fi
117 }
118\ \% This one is for people doing an MIT (Coursework) with a minor thesis
119 \DeclareOption{mitcourseworkthesis}{%
120 \ifx\undefined\thesistype
121 \newcommand{\thesisfulfillment}{in partial fulfillment}
122 \newcommand{\thesistype}{Minor Thesis}
123 \newcommand{\thesisdegree}{Master of Information Technology (Coursework)}
124 \newcommand{\thesisdegreeabbreviation}{MIT}
125 \newcommand{\thesiscoursecode}{2402}
126 \else
127 \ClassError{cssethesis}{only one thesis type option may be}
128 specified}{}
129 \fi
130 }
131 \DeclareOption{mcsminorthesis}{%
132 \ifx\undefined\thesistype
133 \newcommand{\thesisfulfillment}{in partial fulfillment}
134 \newcommand{\thesistype}{Minor Thesis}
135 \newcommand{\thesisdegree}{Master of Computer Science (Minor Thesis)}
136 \newcommand{\thesisdegreeabbreviation}{MCS}
137 \newcommand{\thesiscoursecode}{3328}
138 \else
139 \ClassError{cssethesis}{only one thesis type option may be}
140 specified}{}
```

```
141 \fi
142 }
143 \DeclareOption{mdcthesis}{%
144 \ifx\undefined\thesistype
145 \newcommand{\thesisfulfillment}{for fulfillment}
146 \newcommand{\thesistype}{Thesis}
147 \newcommand{\thesisdegree}{Master of Digital Communications}
148 \newcommand{\thesisdegreeabbreviation}{MDC}
149 \newcommand{\thesiscoursecode}{2406}
150 \else
151 \ClassError{cssethesis}{only one thesis type option may be
152 specified}{}
153 \fi
154 }
155 \DeclareOption{bcomphonoursthesis}{%
156 \ifx\undefined\thesistype
157 \newcommand{\thesisfulfillment}{in partial fulfillment}
158 \newcommand{\thesistype}{Thesis}
159 \newcommand{\thesisdegree}{Bachelor of Computing with Honours}
160 \newcommand{\thesisdegreeabbreviation}{BComp(Hons)}
161 \newcommand{\thesiscoursecode}{0194}
162 \else
163 \ ClassError\{cssethesis\}\{only\ one\ thesis\ type\ option\ may\ be
164 specified}{}
165 \fi
166 }
167 \DeclareOption{bcshonoursthesis}{%
168 \ifx\undefined\thesistype
169 \newcommand{\thesisfulfillment}{in partial fulfillment}
170 \newcommand{\thesistype}{Thesis}
171 \newcommand{\thesisdegree}{Bachelor of Computer Science with Honours}
172 \newcommand{\thesisdegreeabbreviation}{BCompSc(Hons)}
173 \newcommand{\thesiscoursecode}{1608}
174 \else
175 \ClassError{cssethesis}{only one thesis type option may be
176 specified}{}
177 \fi
178 }
179 \DeclareOption{bdshonoursthesis}{%
180 \ifx\undefined\thesistype
181 \verb|\newcommand{\thesisfulfillment}{ in partial fulfillment}|
182 \newcommand{\thesistype}{Thesis}
183 \newcommand{\thesisdegree}{Bachelor of Digital Systems with Honours}
184 \newcommand{\thesisdegreeabbreviation}{BDigSys(Hons)}
185 \newcommand{\thesiscoursecode}{1200}
187 \ClassError{cssethesis}{only one thesis type option may be
188 specified}{}
189 \fi
190 }
191 \DeclareOption{bshonoursthesis}{%
192 \ifx\undefined\thesistype
193 \newcommand{\thesisfulfillment}{in partial fulfillment}
194 \newcommand{\thesistype}{Thesis}
```

```
195 \newcommand{\thesisdegree}{Bachelor of Science (Computer Science) with
196 Honours}
197 \newcommand{\thesisdegreeabbreviation}{BSc(Hons)}
198 \newcommand{\thesiscoursecode}{0051}
200 \ ClassError\{cssethesis\}\{only one thesis type option may be
201 specified}{}
202 \fi
203 }
204 \DeclareOption{bsehonoursthesis}{%
205 \ifx\undefined\thesistype
206 \newcommand{\thesisfulfillment}{in partial fulfillment}
207 \newcommand{\thesistype}{Thesis}
208 \newcommand{\thesisdegree}{Bachelor of Software Engineering with
209 Honours}
210 \newcommand{\thesisdegreeabbreviation}{BSE(Hons)}
211 \newcommand{\thesiscoursecode}{2770}
212 \else
213 \ClassError{cssethesis}{only one thesis type option may be
214 specified}{}
215 \fi
216 }
217 %
    The following two Masters degree types are being phased out. They are re-
tained for historical accuracy.
219 \DeclareOption{mcompthesis}{%
220 \ifx\undefined\thesistype
221 \newcommand{\thesisfulfillment}{for fulfillment}
222 \newcommand{\thesistype}{Thesis}
223 \newcommand{\thesisdegree}{Master of Computing}
224 \newcommand{\thesisdegreeabbreviation}{MComp}
225 \newcommand{\thesiscoursecode}{}
226 \else
227 \ClassError{cssethesis}{only one thesis type option may be
228 specified}{}
229 \fi
230 }
231 \DeclareOption{mcompminorthesis}{%
232 \ifx\undefined\thesistype
233 \newcommand{\thesisfulfillment}{in partial fulfillment}
234 \neq \{Thesis\}
235 \newcommand{\thesisdegree}{Master of Computing (Minor)}
236 \newcommand{\thesisdegreeabbreviation}{MComp}
237 \newcommand{\thesiscoursecode}{}
238 \else
239 \ClassError{cssethesis}{only one thesis type option may be
240 specified}{}
241 \fi
242 }
```

The nocoursecode option is used to suppress the printing of the course code after the name of the course.

```
243 %
244 \DeclareOption{nocoursecode}{%
245 \let\thesiscoursecode\@undefined
246 }
247 %
```

The litreview option is used to indicate that this is a literature review for the thesis, rather than the thesis itself. This changes the title, and also causes information such as the student ID, supervisors and email addresses to be shown. This is not yet fully supported.

```
248 %
249 \newif\if@litreview \@litreviewfalse
250 \DeclareOption{litreview}{%
251 \@litreviewtrue
252 \renewcommand{\thesistype}{Literature Review}
253 }
254 %
```

These do the obvious, that is switch spacing in the main body of text. Monash University requires either oneandhalfspace or doublespace. singlespace is useful for drafts and doesn't kill as many trees. If none is selected, the body will be set with singlespace spacing.

Each option executes the corresponding command from setspace at the \begin{document} command. Their execution must be delayed because setspace requires the macro \@normalsize to be defined. But the definition of \@normalsize (in book) is delayed until after the entire class is loaded.

This option forces the first paragraph after section headings to be indented.

```
258 \DeclareOption{indentfirst}{\let\@afterindentfalse\@afterindenttrue}
259 \@afterindenttrue}
```

Pass all other options to book.cls

```
260 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{book}}
```

The default options are

```
261 \ExecuteOptions{oneandhalfspace}
```

262 \ProcessOptions

272 \fi

We need to load the base class book

263 \LoadClass{book}[1994/12/01]

Make sure that one of phdthesis, mitthesis, etc. is selected.

```
264 \ifx\undefined\thesistype
265 \ClassError{cssethesis}
266 {thesis type not specified. Please give a class option to specify the
267 thesis type}%
268 {Use, for example, \protect\documentclass[phdthesis]{cssethesis}.
269 Possibilities are: phdthesis, mitthesis, mitminorthesis,
270 mitcourseworkthesis, mcsminorthesis, mdcthesis, bcomphonoursthesis,
271 bcshonoursthesis, bdshonoursthesis, bshonoursthesis, bsehonoursthesis}
```

Load in the **geometry** package, setting up the page layout. This simplifies things greatly compared to trying to set all the lengths manually.

```
273 \RequirePackage[paper=a4paper,left=30mm,width=150mm,top=25mm,bottom=25mm]{geometry}
```

Load in the graphicx package. This package is used to load the image for the Monash Crest. Note that the default is to pass the dvips option—the user must give the pdflatex option to \documentclass if they want to use PDF figures.

```
274 \if@pdflatex
275 \RequirePackage[pdftex]{graphicx}
276 \else
277 \RequirePackage[dvips]{graphicx}
278 \fi
```

Load in setspace to control baseline spacing

279 \RequirePackage{setspace}

5 User Customization

This section shows the default settings for a mutitude of user changeable commands. These are used in setting the various pages of the thesis.

5.1 Should be set by the author

Each of the following should be customized by the author using commands of the form \thesisauthor{Ima B. Student}. The default values may be O.K. for some things.

```
280 \newcommand*{\thesisauthor}[1]{\gdef\@thesisauthor{#1}}
281 \newcommand*{\thesisauthorlastname}[1]{\gdef\@thesisauthorlastname{#1}}
282 \newcommand*{\thesisauthorpreviousdegrees}[1]{\gdef\@thesisauthorpreviousdegrees{#1}}
283 \newcommand*{\thesisauthorstudentid}[1]{\gdef\@thesisauthorstudentid{#1}}
284 \newcommand*{\thesisauthoremail}[1]{\gdef\@thesisauthoremail{#1}}
285 \ensuremath{\$} [1] {\ensuremath{\$}} and $\$ (\ensuremath{\$}) $
286 \def\@thesismonth{\ifcase%
287 \month\or January%
288 \or February%
289 \or March%
290 \or April%
291 \or May%
292 \or June%
293 \or July%
294 \or August%
295 \ \ \  September%
296 \or October%
297 \or November%
298 \or December\fi} % use current month as default
299 \newcommand*{\thesisyear}[1]{\gdef\@thesisyear{#1}}
300 \def\@thesisyear{\number\year} % use current year as default
301 \newcommand*{\thesistitle}[1]{\gdef\@thesistitle{#1}}
302 \newcommand*{\thesissupervisor}[1]{\gdef\@thesissupervisor{#1}}
303 \newcommand*{\thesissupervisoremail}[1]{\gdef\@thesissupervisoremail{#1}}
304 \newcommand*{\thesisassocsupervisor}[1]{\gdef\@thesisassocsupervisor{#1}}
305 \newcommand*{\thesisassocsupervisoremail}[1]{\gdef\Qthesisassocsupervisoremail}\#1}
```

```
306 %% Set up these ones with default values
307 \gdef\@thesisdepartment{Clayton School of Information Technology}
308 \newcommand*{\thesisdepartment}[1]{\gdef\@thesisdepartment{#1}}
309 \newcommand*{\thesisuniversity}[1]{\gdef\@thesisuniversity{#1}}
310 \def\@thesisuniversity{Monash University}
311 \newcommand*{\thesistypist}[1]{\gdef\@thesistypist{#1}}
312 \def\@thesistypist{the author}
313 \newcommand*{\thesisdedication}[1]{\gdef\@thesisdedication{#1}}
```

5.2 Need not be redefined

These commands are usually fine as is. They may be changed using \renewcommand if desired.

```
314 \mbox{ } \mbox{newcommand{\thesisdefaultbaselinestretch}{1.5}
315 \newcommand{\thesistypetypesize}{\large}
316 \newcommand{\thesistitletypesize}{\Large}
317 \newcommand{\thesistitlebold}{\textbf{\thesistitletypesize\@thesistitle}}
318 \newcommand{\thesisstudenttypesize}{\large}
319 \newcommand{\thesisstudentbold}{\textbf{\thesisstudenttypesize \thesisstudent}}
320 \newcommand{\thesisdegreetypesize}{\large}
321 \mbox{ }\mbox{ }
322 \newcommand{\thesiscopyrightholder}{\@thesisauthor}
323 \newcommand{\thesiscommittee}{Supervising Committee:}
324 \newcommand{\thesiscommitteesize}{5}
325 \newcommand{\thesisvitahead}{Vita}
326 \newcommand{\thesisvitaheadtypesize}{\huge\bfseries}
327 \newcommand{\thesisacknowledgmenthead}{Acknowledgments}
328 \newcommand{\thesisacknowledgmentsigname}{\Othesisauthor}
329 \newcommand{\thesisacknowledgmentsignametype}{\large}
330 \newcommand{\thesisacknowledgmentsigplace}%
                  {{\slshape
331
332
                             \@thesisuniversity \\
                            \@thesismonth\ \@thesisyear}}
334 \newcommand{\thesisstudent}{%
335 \ifx\undefined\@thesisauthorpreviousdegrees
336 \@thesisauthor
337 \else
338 \Othesisauthor, \Othesisauthorpreviousdegrees
339 \fi
340 }
          These penalties eliminate widows, orphans (clubs), and pages ending in hy-
  phens.
341 \setminus \text{widowpenalty} = 10000
342 \clubpenalty =10000
343 \brokenpenalty=10000
```

6 Page styles and chapter openings

We like to use different page styles for the front matter and main text of the document. For the front matter, the page numbers should be at the bottom so we use the plain page style. For the main matter, we use the default headings style from book.cls. We also want "chapters" to be able to start on any page in

the front matter, but only on righthand pages in the main matter (unless the user specifies the option openany).

\frontmatter

```
344 \renewcommand{\frontmatter}{%
            345
                  \cleardoublepage
                  \@mainmatterfalse
                  \pagenumbering{roman}
            348 % These line added (not in book.cls):
                  \@openrightfalse
                  \pagestyle{plain}}
            350
\mainmatter
            351 \renewcommand{\mainmatter}{%
                  \cleardoublepage
            353
                  \@mainmattertrue
                  \pagenumbering{arabic}
            355 % These lines added:
                  \if@wasopenright
            356
                   \@openrighttrue % restore previous setting
            357
                  \else
            358
                   \@openrightfalse
            359
            360
                  \pagestyle{headings}}
            361
```

7 Frontmatter

These commands typeset various pages in the front matter. Their order in this file is not the order in which they should appear in a thesis. Please refer to the sample document for proper order.

\thesisdedicationpage

This is a simple command.

```
\verb|\newcommand{\thesisdedicationpage}{%}|
        \strut \vfill
363
        \begin{spacing}{1.5}
364
        \begin{center}
365
          \@thesisdedication
366
        \end{center}
367
        \end{spacing}
        \vfill \strut
369
370
        \newpage}
```

thesisacknowledgments

Currently it sets the contents in single spacing, but in the future may be changeable.

```
371 \newenvironment{thesisacknowledgments}
372 {%
373 \chapter*{\thesisacknowledgmenthead}
374 \@mkboth{\thesisacknowledgmenthead}
375 {\thesisacknowledgmenthead}}
376 \addcontentsline{toc}{chapter}{\thesisacknowledgmenthead}
377 \begin{spacing}{1.1}}
378 {\nopagebreak\end{spacing} \par\nopagebreak}
```

```
\raggedleft
                                                              379
                                                                                               \{\verb|\thesisacknowledgmentsignametype| thesisacknowledgmentsigname|\}
                                                              380
                                                                                            \\*[10mm]
                                                              381
                                                              382
                                                                                            \raggedright
                                                                                               \thesisacknowledgmentsigplace
                                                              383
                                                              384
                                                                                            \newpage}
\thesistitlepage Sets the title page.
                                                              385 \mbox{ \newcommand{\thesistitlepage}{\mbox{\%}}
                                                              386 \thispagestyle{empty}
                                                              387 \begin{spacing}{1.5}
                                                              388 \begin{center}
                                                              389 \text{ } \text{\ } \text
                                                              390 by \\[4mm]
                                                              391 \ \text{thesisstudentbold} \ \
                                                              392 \ifx\undefined\@thesisauthoremail
                                                              393 \relax
                                                              394 \else
                                                              395 \if@litreview
                                                              396 \vspace{-8pt}
                                                              397 \text{texttt}(\theta)
                                                              398 \fi
                                                              399 \fi
                                                              400 \vspace{8mm}
                                                              401 \begin{center}
                                                              402 \includegraphics[width=5cm] {MonashCrest}
                                                              403 \end{center}
                                                              404 \textbf{\thesistypetypesize \thesistype} \\
                                                              405 \setminus if@litreview
                                                              406 \relax
                                                              407 \else
                                                              408 Submitted by \@thesisauthor \\
                                                              409 \thesisfulfillment\ of the Requirements \%\
                                                              410 \; \text{for the Degree of } \setminus
                                                              412 \ifx\undefined\thesis course code
                                                              413 \textbf{\thesisdegreetypesize \thesisdegree} \\
                                                              415 \textbf{\thesisdegreetypesize \thesisdegree} \ \
                                                              416 \fi
                                                              417 \vspace{12mm}
                                                              418 \ifx\undefined\@thesissupervisor
                                                              419\ \c) when
                                                              420 the litreview option is used}{}
                                                              421 \else
                                                              422 Supervisor: \@thesissupervisor\\
                                                              423 \fi
                                                              424 \ifx\undefined\Cthesisassocsupervisor
                                                              425 \ \text{relax}
                                                              426 \ensuremath{\setminus} else
                                                              427 Associate Supervisor: \Cthesisassocsupervisor\\\
                                                              428 \fi
                                                              429 \strut \vfill
                                                              430 \textbf{\Large \@thesisdepartment} \\
```

```
431 \textbf{\Large \Othesisuniversity} \\%[4mm]
                                                      432 \@thesismonth, \@thesisyear
                                                       433 \end{center}
                                                       434 \end{spacing}
                                                                         \newpage}
\thesiscopyrightpage Creates the copyright page.
                                                       436 \mbox{ \lower} {\mbox{\lower}} {\mbox{\l
                                                                         \thispagestyle{empty}
                                                       437
                                                                         \strut \vfill
                                                       438
                                                       439
                                                                         \begin{center}
                                                       440
                                                                               \begin{spacing}{2}
                                                       441
                                                                               \copyright\ Copyright \\ by \\ \thesiscopyrightholder \\ \@thesisyear
                                                       442
                                                                              \end{spacing}
                                                       443
                                                                         \end{center}
                                                       444
                                                                         \vfill \strut
                                                       445
                                                                         \newpage}
                thesisabstract The abstract environment. Will only typeset the abstract using 1.5 spacing.
                                                      446 \newenvironment{thesisabstract}{\%
                                                                            \newpage
                                                       448
                                                                            \addcontentsline{toc}{chapter}{Abstract}
                                                       449
                                                                            \setlength{\unitlength}{1mm}
                                                       450
                                                                                   \begin{center}
                                                       451
                                                                                      \begin{spacing}{1.5}
                                                                                      \thesistitlebold \\[7mm]
                                                      452
                                                                                      \end{spacing}
                                                       453
                                                                                      \begin{spacing}{1}
                                                       454
                                                                                      \@thesisauthor
                                                      455
                                                      456 \ifx\undefined\@thesisauthorpreviousdegrees
                                                      457 \\
                                                       458 \else
                                                       459
                                                                  , \@thesisauthorpreviousdegrees \\
                                                       460 \fi
                                                       461 \ifx\undefined\@thesisauthoremail
                                                      462 \relax
                                                      463 \else
                                                       464 \text{\texttt}(\c thesisauthoremail}\)
                                                      465 \fi
                                                                                       \Othesisuniversity, \Othesisyear \\[7mm]
                                                       466
                                                                                      Supervisor: \@thesissupervisor \\
                                                      467
                                                      468 \ifx\undefined\@thesissupervisoremail
                                                      469 \relax
                                                      470 \else
                                                      471 \texttt{\@thesissupervisoremail}\\
                                                      473 \ifx\undefined\@thesisassocsupervisor
                                                      474 \relax
                                                      475 \else
                                                      476 Associate Supervisor: \@thesisassocsupervisor\\
                                                      477 \ifx\undefined\@thesisassocsupervisoremail
                                                      478 \relax
                                                       479 \else
```

 $480 \text{\texttt}(\theta thesisassocsupervisoremail})$

```
481 \fi
                        482 \fi
                        483 \vspace*{7mm}
                                     \textbf{Abstract} \\
                        484
                                     \end{spacing}
                        485
                                    \end{center}
                        486
                        487
                                 \vspace{5mm}
                        488
                                 \noindent}
                        489
                                 \newpage
                        Sets the declaration page.
\thesisdeclarationpage
                           \newcommand{\thesisdeclarationpage}{%
                        491
                                \begin{center}
                        492
                                  \begin{spacing}{1.5}
                        493
                                  \thesistitlebold
                        494
                                  \end{spacing}
                        495
                                \end{center}
                        496
                                \vspace{20mm}
                                \begin{center}
                        497
                                {\bf Declaration}
                        498
                                \end{center}
                        499
                        500
                                 \begin{spacing}{1}
                                I declare that this thesis is my own work and has not been
                        501
                                submitted in any form for another degree or diploma at any university
                        502
                        503
                                or other institute of tertiary education. Information derived from
                        504
                                the published and unpublished work of others has been acknowledged in
                        505
                                the text and a list of references is given.
                                \end{spacing}
                        506
                        507
                                \vspace{15mm}
                                \hfill \begin{minipage}{67mm}
                        508
                                                  \begin{spacing}{1}
                        509
                        510
                                                  \vspace{10mm}
                                                  \setlength{\unitlength}{1mm}
                        511
                        512
                                                  \begin{picture}(67,1)(0,0)
                                                     line(1,0){67}
                        513
                        514
                                                  \end{picture} \\
                                                  \@thesisauthor \\
                        515
                                                  \today
                        516
                                                  \end{spacing}
                        517
                                                \end{minipage}
                        518
                                \newpage}
                        519
  \thesissignaturepage
                        Sets the signature page.
                        520 \newcommand{\thesis
signaturepage}{\%}
                                \begin{center}
                        521
                        522
                                  \begin{spacing}{1.5}
                                  \thesistitlebold
                        523
                                  \end{spacing}
                        524
                        525
                                \end{center}
                                \vspace{20mm}
                        526
                                \begin{center}
                        527
                        528
                                  {\bf \thesistype\ Acceptance}
                        529
                                \end{center}
                        530
                                \begin{spacing}{1}
```

```
This student's \t entitled
                                                           531
                                                                             \textbf{\@thesistitle}
                                                           532
                                                                             has been examined by the undersigned committee of
                                                           533
                                                                              examiners and has received full approval for acceptance \thesisfulfillment\
                                                           534
                                                                              of the requirements for the degree of \thesisdegree.
                                                           535
                                                                              \end{spacing}
                                                           536
                                                           537
                                                           538
                                                                              \vspace{15mm}
                                                                              \hbox to \hsize{\hfill APPROVAL: \begin{minipage}[b]{67mm}
                                                           539
                                                                                                                           \setlength{\unitlength}{1mm}
                                                           540
                                                                                                                           \begin{picture}(67,-70)
                                                           541
                                                                                                                                \mbox{multiput}(0,-2)(0,-10)
                                                           542
                                                                                                                                     {\tesiscommitteesize}{\tesiscommitteesize}{\tesiscommitteesize}{\tesiscommitteesize}
                                                           543
                                                                                                                           \end{picture}
                                                           544
                                                           545
                                                                                                                     \end{minipage} Chief Examiner}
                                                                              \newpage}
                                                           546
\thesisshorttitlepage Sets the short title page
                                                           547 \mbox{ \newcommand{\thesisshorttitlepage}{\mbox{\normand}} \mbox{\normand} \mbox{\norman
                                                                             \vbox to 4.1in{\vfil
                                                           548
                                                          549
                                                                                   \hbox to \hsize {Short Title: \thesisshorttitle \hfill
                                                           550
                                                                                           \verb|\dthesis author last name|, \verb|\dthesis degree abbreviation| \verb|\dthesis year| |
                                                           551\ \% This little hack is to make it centered on the page.
                                                                                           \hspace{0.5in}}}
                                                           552
                                                           553
                                                                              \newpage}
                                                                     These are modified from IATEX2e book.cls so they make table of contents
                                                             entries. They are also simplified by removing the two column and heading settings.
                   \listoffigures
                                                           554 \renewcommand{\listoffigures}{\%}
                                                                         \chapter*{\listfigurename}%
                                                                        \addcontentsline{toc}{chapter}{\listfigurename}%
                                                                        \@starttoc{lof}
                                                           557
                                                           558 }
                     \listoftables
                                                           559 \renewcommand{\listoftables}{%
                                                                        \chapter*{\listtablename}%
                                                           560
                                                                        \addcontentsline{toc}{chapter}{\listtablename}%
                                                           561
                                                                        \@starttoc{lot}
                                                           562
                                                           563 }
```

8 Mainmatter

We need to modify the listing of appendices in the toc. This does require a new conditional and changes to \appendix and \@chapter.

\if@appendix

564 \newif\if@appendix\@appendixfalse

```
\appendix
           565 \renewcommand{\appendix}{\par
                \setcounter{chapter}{0}%
           566
           567
                 \setcounter{section}{0}%
                \renewcommand{\@chapapp}{\appendixname}%
                 \renewcommand{\thechapter}{\Alph{chapter}}
           570
                \@appendixtrue}
 \@chapter
           \if@mainmatter
           572
           573
                                        \refstepcounter{chapter}%
                                        \verb|\typeout{@chapapp\space\thechapter.}|%
           574
                                        \if@appendix
           575
                                          \addcontentsline{toc}{chapter}%
           576
                                                  {\appendixname\ \thechapter\ #1}%
           577
           578
                                          \addcontentsline{toc}{chapter}%
           579
           580
                                                  {\protect\numberline{\thechapter}#1}%
           581
                                        \fi
           582
                                      \else
                                        \addcontentsline{toc}{chapter}{#1}%
           583
                                      \fi
           584
                                   \else
           585
                                     \addcontentsline{toc}{chapter}{#1}%
           586
           587
                                   \chaptermark{#1}%
           588
                                   \addtocontents{lof}{\protect\addvspace{10\p@}}%
           589
           590
                                   \addtocontents{lot}{\protect\addvspace{10\p0}}%
           591
                                   \if@twocolumn
                                     \@topnewpage[\@makechapterhead{#2}]%
           592
                                   \else
           593
                                     \@makechapterhead{#2}%
           594
           595
                                     \@afterheading
                                   \fi}
           596
\1@chapter
           Some changes to the toc entries are required. Every entry should be followed by
            a dot leader. In the book.cls, chapter entries are not followed by a dot leader.
            This code corrects that.
           597 \renewcommand{\l@chapter}[2]{%
           598 % Some older versions of LaTeX2e (older than Dec. 1994) define \l@chapter
           599 % using \newcommand instead of \newcommand*. If you have an error
           600 % at this line, try removing the *.
                \ifnum \c@tocdepth >\m@ne
                   \addpenalty{-\@highpenalty}%
           602
           603
                  \vskip 1.0em \@plus\p@
           604
                  \setlength\@tempdima{1.5em}%
           605
                  \begingroup
                     \parindent \z@ \rightskip \@pnumwidth
           606
                     \parfillskip -\@pnumwidth
           607
                     \leavevmode \bfseries
           608
                     \advance\leftskip\@tempdima
           609
           610
                     \hskip -\leftskip
```

#1\nobreak%

611

```
612 % This line changed from \hfil
         \leaders\hbox{$\m@th \mkern \@dotsep mu.\mkern \@dotsep mu$}\hfill
         \nobreak\hbox to\@pnumwidth{\hss #2}\par
614
615
         \penalty\@highpenalty
616
       \endgroup
617
     \fi}
```

Backmatter 9

thesisauthorvita

```
This is really a stupid environment. All it does is enter a contents line, place the
                 heading, and enter single spacing. The author must do all formatting for the page.
                 618 \newenvironment{thesisauthorvita}{%
                 619
                         \clearpage
                         \chapter*{\thesisvitahead
                 620
                             \@mkboth{\uppercase{\thesisvitahead}}
                 621
                                      {\uppercase{\thesisvitahead}}}
                 622
                        \addcontentsline{toc}{chapter}{\thesisvitahead}
                 623
                 624
                        \begin{spacing}{\thesisdefaultbaselinestretch}}
                        {\end{spacing} \par \vspace{20mm}
                 625
                         \noindent Permanent Address:
                 626
                           \begin{minipage}[t]{90mm}
                 627
                 628 {\Othesisdepartment\\Monash University\\Australia}
                 629
                           \end{minipage}
                 630
                         \par \vspace{15mm}
                         \noindent This \lowercase\expandafter{\thesistype} was
                 631
                           typeset with \LaTeXe\footnote{\LaTeXe{} is an extension of \LaTeX.
                 632
                           \LaTeX{} is a collection of macros for \TeX. \TeX{} is a
                 633
                 634
                           trademark of the American Mathematical Society. The macros used in
                 635
                           formatting this \lowercase\expandafter{\thesistype} were written
                           by Glenn Maughan and modified by Dean Thompson and David Squire of Monash University.
                 636
                        } by \@thesistypist.}
                 637
                 This hasn't been changed much from book.cls. Only the addition of the
thebibliography
                  \addcontentsline. In addition, the \bibname is changed to "References".
                 638 \renewcommand{\bibname}{References}
                 639 % Updated in v1.5 using more recent code from book.cls, 2000/05/19 v1.4b.
                 640 \renewenvironment{thebibliography}[1]
                         {\chapter*{\bibname%
                 642 % This line added.
                          \addcontentsline{toc}{chapter}{\bibname}
                 643
                 644
                            \@mkboth{\MakeUppercase\bibname}{\MakeUppercase\bibname}}%
                 645
                          \list{\@biblabel{\@arabic\c@enumiv}}%
                               {\settowidth\labelwidth{\@biblabel{#1}}%
                 646
                                 \leftmargin\labelwidth
                 647
                                 \advance\leftmargin\labelsep
                 648
                                 \@openbib@code
                 649
                                 \usecounter{enumiv}%
                 650
                 651
                                 \let\p@enumiv\@empty
                                 \renewcommand\theenumiv{\@arabic\c@enumiv}}%
                 652
                 653
                          \sloppy
                 654
                          \clubpenalty4000
                          \@clubpenalty \clubpenalty
                 655
```

```
656 \widowpenalty4000%
657 \sfcode'\.\@m\
658 {\def\@noitemerr
659 {\@latex@warning{Empty 'thebibliography' environment}}%
660 \endlist}
```

10 Utility Functions

```
This one computes the current time for the thesisdraft option.
\thesistime
           661 \newcount\hour \newcount\minute
           662 \leftarrow \frac{1}{100} hour=\time \divide \hour by 60
           663 \minute=\time
           665 \def\thesistime{\ifnum \hour<13 \number\hour:%
                                   \ifnum \minute<10 0\fi
           667
                                   \number\minute
           668
                                   \ifnum \hour<12 \ am\else \ pm\fi
           669
                       \else \advance \hour by -12 \number\hour:%
           670
                                   \ifnum \minute<10 0\fi
           671
                                   \number\minute \ pm\fi}
```

\timestamp

672 \def\timestamp{\thesistime, \today}

\@uppercase \@uppercase is simply short hand to convert the contents of a macro to uppercase.

It may not work under all circumstances, but does it's job for this style

 $673 \end{0} percase [1] {\{\expandafter uppercase expandafter $\{1\}\}\}}$

\@separator \@separator will draw the rule used on both the title and abstract pages.

674 \newcommand\@separator{\vrule height.4pt depth0pt width3.5in}

$\verb|\@numberword|$

675 \newcommand\@numberword[1]{\ifcase#1 zero\or one\or two\or three\or four\or five\or six\or set