Work Diary

Jesper Kjær Nielsen Aalborg University Bang & Olufsen

Version 1.0.4 Last compiled: August 27, 2018

Contents

I	2014	4	1
1	Mar	rch	3
	1.1	March 15, 2014	3
		1.1.1 Aim and Usage of the Work Diary	3
		1.1.2 Initial Code Base	10
	1.2	March 16, 2014	10
		1.2.1 Automatic Generation of Tasks from Templates	10
		1.2.2 Adding Tags	11
	1.3	March 20, 2014	11
		1.3.1 SQLite Database	11
	1.4	March 22, 2014	11
		1.4.1 SQLite 3 Database Wrapper	11
	1.5	March 23, 2014	11
		1.5.1 Adding Tags	11
	1.6	March 24, 2014	11
		1.6.1 Creating a New Build (Conditional Compilation)	12
	1.7	March 29, 2014	12
		1.7.1 Creating a New Build (Conditional Compilation)	12
2	Apr	i1	13
	2.1	April 2, 2014	13
		2.1.1 Creating a New Build (Conditional Compilation)	13
	2.2	April 4, 2014	13
		2.2.1 Creating a New Build (Conditional Compilation)	13
3	Aug	gust	15
	3.1	August 16, 2014	15
		3.1.1 Excluding Tags in a Build (Conditional Compilation)	15
	3.2	August 17, 2014	15
		3.2.1 Conditional Compilation for Particular Task Labels	15
	3.3	August 18, 2014	15

		3.3.1 Adding Authors	15
	3.4	August 20, 2014	15
		3.4.1 Including Author Information in the Diary	16
	3.5	August 22, 2014	16
		3.5.1 Building an Author Dictionary	16
	3.6	August 24, 2014	16
		3.6.1 Changing Tags	16
	3.7	August 26, 2014	16
		3.7.1 Changing Tags and Authors	16
	3.8	August 27, 2014	17
		3.8.1 Truncating Long File Names	17
4	Sept	rember	19
	4.1	September 1, 2014	19
		4.1.1 Python 3 Compatibility	19
	4.2	September 3, 2014	19
		4.2.1 Python 3 and Windows Compatibility	19
	4.3	September 5, 2014	20
		4.3.1 Testing the Diary on Windows and OSX	20
	4.4	September 29, 2014	20
		4.4.1 Correcting Two Errors	20
5	Octo	ber	21
	5.1	October 8, 2014	21
		5.1.1 Updating the User Guide with Tips	21
	5.2	October 22, 2014	21
		5.2.1 Future Entries in the Diary	21
II	201	.5	23
6	Tame		25
b	Janu		
	0.1	January 21, 2015	25
		6.1.1 Correcting an Error in the Indices	25
Bi	bliog	raphy	27

People Index	29
File Index	31
Author Index	33
Tag Index	35

Todo list

Part I

March

March 15, 2014

Aim and Usage of the Work Diary

How often have you returned to an old task wondering what you were thinking the Userguide (userguide) last time you worked on it? Did I really write this piece of code? How did I connect the DUT to the measurement equipment? What did I search for in Google when I found that interesting paper? What did I name that file? Where did I place that piece of paper with the magnificent derivation? Unfortunately, I am guilty of asking myself these and many other questions way too often. Yes, I tend to forget things. Even important things. Things which I am sure that the future me will remember, but he often disappoints me.

I am also guilty of being a happy $\LaTeX 2\varepsilon$ user [1, 2, 3]. And friendly - to myself at least. Therefore, I decided to create the present \LaTeX 2 ϵ -based work diary to the forgetful future me. The diary resembles a good old lab journal, but it is hopefully also much more powerful while still being fairly simple to use. The focus should be on the work - not on managing a diary - because the current me hates bureaucracy.

Sure sure, that all sounds great and all, but how do you manage the diary in two years from now when it consists of 1000 pages? What about in 10 years? Can you write confidential information in the diary and still share your work with an external partner? Yes, you can! Thanks to a tagging system, the diary can be build conditionally on these tags or on the time. If I remember it, I will say much more about this later.

The work diary can also be used as a collaborative tool for multiple forgetful people working on the same project. When used in this way, the diary is a project diary which serves as the documentation of the project.

All right. Enough introduction. Now let us discuss how you actually use this diary.

Tags (tags)

Jesper Kjær Nielsen (jkn)

File(s): addTask.pv newTag.py changeTag.py newAuthor.py changeAuthor.py newBuild.py

4 Chapter 1. March

An Example

Both the current and future me like to learn through examples so therefore I better start with one. One cold morning, Jon Snow shows up at work at Castle Black. He turns on his computer while he tries to recall what he was supposed to do this morning before the pigeon pie is served for lunch. It annoys him since he often finds himself forgetting things. Suddenly he remembers that interesting diary template he accidentally stumbled upon yesterday evening while he was searching for methods to work smarter and more efficiently. Jon quickly looks at the photo of Ygritte next to his screen and decides to try this template. He downloads it and copies the diary folder in the zip-archive to the location c:\path\to\the\diary.

"Literature review", he finally recalls, "I have to look into how people build and maintain a really tall wall. My partner, Stark Industries, is really interested in this *Tall Wall* project." Jon takes a sip of his Westerosi coffee, flexes his sword hand, hits the Windows button, writes cmd in the search field to launch the terminal, and changes the current directory to the diary folder while he silently complains about that the Night's Watch IT policy forces him to use Windows. For a moment he looks angry at the blinking cursor next to the path

```
1 c:\path\to \diary>
```

Then he writes

```
1 python addTask.py "tallWall, ustark" "Literature Review on Building Tall Walls" js
```

Since this is the first time Jon adds an entry to the diary, he is prompted for tag titles for the unknown tallWall and stark tags. He writes The Tall Wall Project and Stark Industries. Moreover, this is also the first time that he has provided the optional author initials js after the addTask.py Python script so he also fills in his name and email address. Immediately after filling in the email address, his favourite LATeX $2_{\mathcal{E}}$ editor is launched displaying a file with the following content.

```
1  % mainfile: ../../../master.tex
2  \subsection{Literature Review on Building Tall Walls}
3  \label{task:20140315_js0}
4  \tags{tallWall, stark}
5  \authors{js}
6  %\files{}
7  %\persons{}
```

"Great", he thinks and starts reading and typing in all his findings and sources on how to build and maintain a really tall wall. A few hours later he has finished his literature review - and his stomach is rumbling, but before he goes to lunch he wants to compile the diary. To do that, Jon first writes in the terminal

```
1 python newBuild.py all
```

to create all the necessary build files for $\LaTeX 2_{\mathcal{E}}$ to assemble the diary. Then he compiles the diary as he would normally compile a $\LaTeX 2_{\mathcal{E}}$ document.

1.1. March 15, 2014 5

The above was a simple little example of how the diary can be used. Below you will find the much more elaborate and boring documentation. Do not forget to read the list of useful tips at the end of the documentation.

Organisation

The work diary is basically a book of ever increasing size and organised by time. In this book, a year is a part, a month is a chapter, and a day is a section. Each day is comprised of a number of tasks. These tasks are all you should care about, because $\text{LATEX} \, 2_{\mathcal{E}}$ handles the rest.

Tasks

So what do you need to know about these tasks? Well, a new task is created by running the following Python script from a command line¹.

This automatically creates a new task in a separate file with the title Literature Review on Building Tall Walls and the tags tallWall and stark. The file is automatically placed in the entries folders which is organised in a year, month, and day structure. Moreover, the newly created file is opened in your default $\text{LATEX}\,2_{\mathcal{E}}$ editor. The Python script addTask.py takes five input variables of which three are optional.

"tagA, tagB, tagC" The first input variable is required and contains a comma separated list of valid tags. I will say more about these tags later.

"Task Title" The second input variable is also required and is the title of the task.

author initials The third input variable is optional and specifies the author initials. If not set or set to "", no author is used. This will be described in more detail later.

template The fourth input variable is also optional and generates the task from a particular template such as a meeting or an agenda. If not set or set to "", the default template is used. The creation of new templates is described later.

YYYY-MM-DD The fifth input variable is also an optional input variable which specifies the date of the task. If not set, today is used as the date.

If you actually ran the Python file above with the same input parameters, a new file should open in your default \LaTeX 2 ϵ editor with the following content.

```
1  % mainfile: ../../../master.tex
2 \subsection{Literature Review on Building Tall Walls}
3 \label{task:20140315_0}
```

¹On unix-like systems, you can write the shorter ./addTask.py instead of python addTask.py. Moreover, you can also use single quotes instead of double quotes.

6 Chapter 1. March

```
4 \tags{tallWall, stark}
5 %\authors{}
6 %\files{}
```

7 %\persons{}

The first line enables synctex forward and inverse search support for my editor of choice (gedit) and possible also for other editors. If your editor does not need this line, it can be safely ignored or deleted in the template file default.tpl.tex located in the template folder. The second line simply prints the task title as a subsection. The third line is a unique label of the task so that is can be referred to from other tasks. The fourth line in the opened file contains the comma separated list of tags which will be described later. The fifth, sixth, and seventh lines are commented out by default, but they can be used to specify the authors of the task entry, which files/folders are created or changed in the task, and which persons are also involved in the task. Late automatically generates separate indices in the work diary from the list of authors, files, and persons. These indices can be used to quickly find who wrote which entries and where in the diary you worked on a particular file or had a meeting with a particular person.

Tags

Aside from being based on \LaTeX 2 ϵ , the tag list is really the most compelling feature of the present work diary. It provides you with two powerful possibilities.

- An index is generated for the tags so that tasks labelled with one particular tag can quickly be found in the work diary.
- The work diary can be compiled conditioned on just one or a few tags. Suppose, for example, that you work on various projects with multiple external partners. If one of these partners (partner A, say) wants to see what you have been doing on the project, you probably do not want to send them the entire diary. Instead you can compile your work diary only with the tasks labelled by the partnerA tag. Another usage of the tag-dependent compilation is that you can quickly get an overview over previous work labelled with the same tag. I will say more about conditional compilation later.

Before a tag can be used, it must be defined and given a title. This is easily done by running the following python script.

```
1 python newTag.py tag "Title_of_the_tag"
```

The tag should be a short id which can only contain letters (a-zA-Z) and numbers (0-9). The tag title is a longer description. Both the tag and its title is shown in the margin next to a task. Moreover, they can also be found in the index. Tags can also be renamed by running the following python script.

```
1 python changeTag.py oldTag newTag "Newutitleuofutheutag"
```

1.1. March 15, 2014

When a tag is renamed, the entire diary is updated with the new name. Finally, you can always get a list of all tags in the database by writing

```
or
l python newTag.py --help
or
l python newTag.py -h
```

Conditional Compilation

So how do you compile the work diary for just one or a few tags? You simple run the following python script.

```
1 python newBuild.py "tagA,tagB" "dateA,dateB" "taskLabel1,taskLabel2"
```

When this python script is run, a build file and a tag dictionary are made so that the next time \LaTeX 2 $_{\mathcal{E}}$ compiles the diary, only the relevant tasks are kept. If no input parameters are given, the default build file contains every task from the last 90 days. If you want to compile the diary for just 2014, you could write

```
l python newBuild.py all 2014
```

If you want to compile the diary for just March and April 2014, you could write

```
1 python newBuild.py all "2014-03, 2014-04"
```

If you want to compile the diary for only some specific task labels, you can write

```
1 python newBuild.py all all "20140315_0,20140316_0"
```

And so on. Aside from specifying dates and tags, you can also write

```
1 python newBuild.py all
```

to include everything in your diary. A few years from now, however, compiling the diary for this build profile might be a time consuming process.

You can also exclude particular tags by preceding the tag name by an exclamation mark. If you for example have defined a tag with the tage name confidential, you can compile a non-confidential version of your diary by writing

```
1 python newBuild.py "all,!confidential" all
```

Multiple Authors

When multiple authors are working simultaneously on the same diary, every new task should have at least one author attached to it. This makes it easier for the authors to see which person completed which task and is also essential in order to avoid file name conflicts. A task by the author js can be created as

```
1 python addTask.py "tagA,tagB" "Task_{\sqcup}title" js
```

8 Chapter 1. March

Before an author can be attached to a task, he or she must be in the author database. To add the author (e.g., Jon Snow (js@nightswatch.wes) with initials js) to the author database, simply run

```
1 python newAuthor.py js "JonuSnow" "js@nightswatch.wes"

An author can also be changed by running

1 python changeAuthor.py oldInitials newInitials "Newuname" "Newuemailuaddress"

The last two options are optional. If not provided, only the initials will be updated.
```

New templates

New templates can also easily be added by creating them in the template folder. A new template such as a meeting agenda can be added by using the *default* template as a starting point. A new template should have the file name <someName>.tpl.tex. A new task can be created from a template by writing, e.g.,

```
1 python addTask.py "tagA,tagB" "Task⊔title" "" myTemplate
```

This will create a task based on the template myTemplate.tpl.tex. When you create a new template, make sure that it is saved with the UTF-8 encoding. By default, all Python script assumes that this is the case.

System Requirements

You need to have a LaTeX $2_{\mathcal{E}}$ distribution and Python installed. The diary has been developed and tested on a 64 bit Ubuntu 12.04.4-12.04.5 system with the versions of Python (2.7.3 and 3.2.3) and TexLive (2009-15) from the repositories installed. Moreover, all unit tests also pass under a 32 bit Windows 7 with TexLive 2014, Python 2.7.8, and Python 3.4.1 installed (remember to add Python to the path when you install it). I do not have a Mac so I have not tested the diary on OSX. By default, the various operating systems use different encoding for standard text files such as .tex files. To avoid problems with special characters such as the Danish æ,ø, and å, I have therefore decided that all files are created and read with the UTF-8 encoding. I you observe any strange problems when trying to compile the diary, a file saved in the wrong encoding might be the cause.

Compiling the Diary

When I compile the diary, I run the following commands.

```
1 pdflatex -shell-escape -file-line-error -synctex=1 master.tex
2 bibtex master.aux
3 splitindex master.idx
4 pdflatex -shell-escape -file-line-error -synctex=1 master.tex
5 pdflatex -shell-escape -file-line-error -synctex=1 master.tex
```

You can find these commands in the Makefile which you can use on Linux.

1.1. March 15, 2014 9

Some Useful Tips

Here is a totally random collection of useful tips.

1. Installing Python under Windows:

Installing Python under Windows as quite easy. Just download the latest version and double click on it to install it. Remember, though, to enable the *Add python.exe to Path* check box during installation!

2. A Project Diary and Subversion:

When the diary is used by multiple people, I strongly recommend that a version control system such as Subversion or Git is used to manage the diary. In fact, I also recommend this if the diary is just used by a single person. To avoid too many conflict, pay attention to the following.

- Since the tag and author database cannot be merged, the users should remember to
 - update their local copy of it before adding a tag or author to the database
 - commit their local copy of the database to the main repository immediately after adding a new author or tag to it.
- When the first task of the day is created, new folders are created in the entries directory. If another user has already done the same and committet this to the central repository, SVN (not git) will complain on the next run of
- 1 svn update

that an unversioned directory of the same name already exists. This error can be overridden by running

1 svn update --force

Be careful, though, since this will overwrite any local changes since the last commit. A better solution is to

- update your local repository immediately before creating your first entry of the day
- commit your local repository immediately after creating your first entry of the day.

If all users do this, nearly all conflicts should be avoided.

Anything else?

Nope! Or not that I can think of at the moment. To start your own work/project diary, just copy the contest of the diary folder in the zip archive you have downloaded. As I claimed earlier, the diary should be very simple to use. If you lack any functionality, you are very welcome to change the code as you see fit.

10 Chapter 1. March

Initial Code Base

Tag(s): Development (development)

Author(s): Jesper Kjær Nielsen (jkn) The current version of the work diary is based on my own version which is tailored to my set up. Therefore, various shell scripts must be rewritten in Python. Moreover, some of the features described above must be implemented and tested. Finally, many small refinements must be made.

March 16, 2014

Automatic Generation of Tasks from Templates

As described in yesterday's user guide, a Python script should be written for generating and opening a new task in the user's default \LaTeX 2 ε editor. The script should do the following.

 The input parameters must be validated and, if not provided, the optional input parameters must be set to their default values. The default is today for the date, empty for the author, and

```
1  % mainfile: ../../../master.tex
2  \subsection{<task title>}
3  \label{task:YYYYMMDD_IIIX}
4  \tags{<tags>}
5  %\authors{}
6  %\files{}
7  %\persons{}
```

for the template. The provided tags must be compared to the tag database. If not found, the user must be asked whether he/she wants to create it.

- 2. The missing year, month, and/or day directories must be created in the entries folder.
- 3. The task index corresponding to the date must be found and a file name must be generated. The structure of a file name for a task is YYYYMMDD_IIIX.tex where III are the author initials (if any) and X is the task index. The author initials is added to the file name to prevent a possible conflict when multiple authors are working on the same diary.
- 4. The task file must be created and stored from the specified template.
- 5. The current active build configuration (if any) must be updated.
- 6. The created file must be opened in the default $\LaTeX 2_{\mathcal{E}}$ editor.

I have implemented everything in addTask.py with the exception of tag validation and author validations. This functionality will be implemented when the Python scripts for creating new tags and new authors have been written.

Tag(s): Development (development) Tasks (tasks)

Author(s): Jesper Kjær Nielsen (jkn)

File(s): addTask.py

11 1.3. March 20, 2014

Adding Tags

The user guide also describes how tags should be added using a Python script. The Development (development) script should do the following.

Tags (tags)

1. The input variables should be validated. The tag can only consist of letters (azA-Z) and numbers (0-9). Moreover, if the tag has already been defined, an error newTag.py must be given.

Author(s): Jesper Kjær Nielsen (jkn)

2. The tag and the tag list must be stored in a cross-platform database. An SQLite database looks like a simple and cross platform solution for the database.

March 20, 2014

SQLite Database

I have started implementing a number of functions for creating, adding, retrieving, updating, and deleting tags and authors. Only a few of the functions have been written, and I have not tested anything yet.

Tag(s): Development (development) Database (database) Tags (tags)

Jesper Kjær Nielsen (jkn)

File(s):

logic/DiaryDatabaseWrapper.py

March 22, 2014

SQLite 3 Database Wrapper

I have finished writing the simple database wrapper class to interface with the SQLite 3 database. Functionality such as inserting, updating, selecting, and deleting entries in the database have been implemented and tested.

Tag(s): Database (database)

Author(s): Jesper Kjær Nielsen (jkn)

logic/DiaryDatabaseWrapper.py

March 23, 2014

Adding Tags

I have now implemented the functionality for adding a tag to the database as described in task 1.2.2. Moreover, I have updated the Python script for adding the new tasks so that the provided tag(s) is/are validated against the diary database. If a provided tag is not in the diary database, the user is offered to add this tag to the database.

Tag(s): Development (development) Tags (tags)
Database (database)

Author(s): Jesper Kjær Nielsen (jkn)

newTag.pv newTask.py

March 24, 2014

12 Chapter 1. March

Tag(s): Development (development) Conditional Compilation (building)

Author(s): Jesper Kjær Nielsen (jkn)

File(s): newBuild.pv

Creating a New Build (Conditional Compilation)

As described in the user guide in task 1.1.1, it should be possible to compile the diary only for specific tags and dates. The Python script newBuild.py should handle this by doing the following.

- 1. The input parameters must be validated and default values for the non-specified parameters must be set.
 - If no parameters are given, the default build of all tasks within the last 90 days should be selected.
 - If only tags are given, tasks labelled with these tags from all time should be selected.
 - If only dates are selected, all tags and tasks from these dates should be selected.
- Scan all files in the entries directory satisfying the selected dates. Create a list of those tasks which are labelled with the selected tags and/or task labels. Moreover, retrieve all other tags as well.
- 3. From the list of extracted tags, create the tag dictionary in the buildFiles folder.
- 4. From the list of selected tasks, create the task list file in the buildFiles folder. In addition to including the filenames of the paths, the task list file must also format years, months, and days as parts, chapters, and sections.

March 29, 2014

Creating a New Build (Conditional Compilation)

I have started implementing input validation in the function for creating new build profiles. The functionality of this function is described in task 1.6.1

Tag(s): Development (development) Conditional Compilation (building)

Author(s): Jesper Kjær Nielsen (jkn)

File(s): newBuild.py

April

April 2, 2014

Creating a New Build (Conditional Compilation)

I have finalised the input validation and the initialisation of the default values for those input parameters which have not been set. This is the first point described in task 1.6.1.

Tag(s): Development (development) Conditional Compilation (building)

Author(s): Jesper Kjær Nielsen (jkn)

File(s): newBuild.py

April 4, 2014

Creating a New Build (Conditional Compilation)

The script newBuild.py has now been implemented as described in task 1.6.1, except for building conditioned on task labels. The list of tag names and tag titles are written to the file tagDictionary.tex in the buildFiles folder. The list of valid tasks is written to the file taskList.tex also in the buildFiles folder. Notice that the tags has been defined in a rather strange way to ensure that numbers can be used in the tag names.

Tag(s): Development (development) Conditional Compilation (building)

Author(s): Jesper Kjær Nielsen (jkn)

File(s):
 newBuild.py
buildFiles/tagDictionary.tex
buildFiles/taskList.tex

August

August 16, 2014

Excluding Tags in a Build (Conditional Compilation)

I have implemented conditional compilation for the excluding tags. An excluding tag is preceded by an exclamation mark such as in this example

Tag(s): Development (development) Conditional Compilation (building) Tags (tags)

python newBuild.py "all,!confidential" all

Author(s): Jesper Kjær Nielsen (jkn)

It can be used to compile the diary for all entries except for one or more tags.

File(s): newBuild.py

August 17, 2014

Conditional Compilation for Particular Task Labels

I have implemented conditional compilation for task labels. Thus, the diary can now be compiled for only a few tasks by running

Tag(s): Conditional Compilation (building) Development (development)

python newBuild.py all all "20140315_1,20140817_0"

Author(s): Jesper Kjær Nielsen (jkn)

File(s): newBuild.py

August 18, 2014

Adding Authors

I have written the function for adding a new author in the author database. The next step is to include the author information in the diary as well.

Tag(s): Development (development) Authors (author)

Author(s): Jesper Kjær Nielsen (jkn)

August 20, 2014 File(s): newAuthor.py

16 Chapter 3. August

Including Author Information in the Diary

The Python script for adding a task has been updated so that author initials are now validated against the author initials in the author database. Moreover, multiple author initials can now be specified as a comma separated list from the command line when a task is created. However, only the first author initials is used in the file name and the task label.

August 22, 2014

Building an Author Dictionary

The author dictionary is now build and placed in the buildFiles folder. Moreover, the author names are now shown in the margin of the diary and in the index. If an author name is clicked, an email can be written to him or her.

August 24, 2014

Changing Tags

The tag name or title can be changed by running the command

python changeTag.py oldTag newTag "New_title_of_the_tag"

The Python script for doing this should do the following.

- 1. The input parameters must be validated and, if not provided, the optional input parameter (the tag title) must be set to its default value (the old tag title). The old tag should be looked up in the database. If not found, the script should tell the user and abort.
- 2. The database should be updated with the new tag and the new tag title. If a new tag title is not set, the old tag title is kept.
- 3. All diary tasks must be scanned. If the old tag is found, it must be replaced by the new tag. The step can be omitted if the old and new tags are identical (only the tag title is changed).

August 26, 2014

Changing Tags and Authors

I have written the Python scripts for changing an author or an tag. The implementations are based on the description in task 3.6.1.

Tag(s): Development (development) Authors (author)

Author(s): Jesper Kjær Nielsen (jkn)

File(s): addTask.py

Tag(s): Development (development) Authors (author)

Author(s): Jesper Kjær Nielsen (jkn)

File(s): newBuild.py authorDictionary.tex

Tag(s): Development (development) Tags (tags)

Author(s): Jesper Kjær Nielsen (jkn)

File(s): changeTag.py

Tag(s): Development (development) Tags (tags) Authors (author)

Author(s): Jesper Kjær Nielsen (jkn)

File(s): changeTag.py changeAuthor.py

17 3.8. August 27, 2014

August 27, 2014

Truncating Long File Names

Some file names are so long that they cannot fit in the margin. To avoid that the file Development (development) name is overlapping the text, I have included the truncate package in the preamble so Author(s):

Jesper Kjær Nielsen (jkn) that too long file names are truncated.

 $File (s) : \\ a \texttt{ReallyReallyReallyReallyRe} \dots$

September

September 1, 2014

Python 3 Compatibility

I have updated all the Python scripts so that they now work with Python 2.X and 3.X. I had to change three things to make all the scripts work with Python 3.X.

Tag(s): Development (development)

Author(s): Jesper Kjær Nielsen (jkn)

File(s):
addTask.py
newBuild.py
newTag.py
newAuthor.py
changeTag.py
changeAuthor.py

• The print statement has been changed from

```
1 print "Some utext uto uprint."

to
1 print("Some utext uto uprint.")
```

- All strings are stored in UTF-8 in Python 3 so the encoding and decoding, which is used in Python 2 to convert between byte strings and unicode strings, is not necessary in Python 3.
- The raw_input() function is changed to input() in Python 3.

September 3, 2014

Python 3 and Windows Compatibility

I have discovered that many of the problems that I observed with cross-platform compatibility were causes by different encoding of files. Therefore, I have decided to store and read all files with the UTF-8 encoding using the io module. In addition to updating the Python scripts with this, I have also updated the preamble and the user guide with a warning about changing the encoding.

Developm

Author(s):

Jesper Kjæ

File(s):

newBuild.

addrask. File(arask. rechangeAuthor)

partibility were causes by different encoding using the io module. In addition to updating the Python scripts with this, I have also updated the preamble and the user guide have also updated the preamble and the use

Tag(s): Development (development)

Author(s): Jesper Kjær Nielsen (jkn)

File(s): newBuild.py addTask.py changeAuthor.py changeTag.py

September 5, 2014

Testing the Diary on Windows and OSX

I have emailed the diary Martin, Christer, and Nicolai and asked them to test it thoroughtly under Windows and OSX.

September 29, 2014

Correcting Two Errors

I have corrected two errors in the diary.

- 1. Christer pointed out that a \section{...} was missing in the task dictionary when the year was changed, but not the month. I have corrected this now in the current version of the diary.
- 2. Jacob pointed out that I had written addAuthor.py instead of newAuthor.py in the diary user guide. This has also been corrected in the new version of the diary.

The new version of the diary has been increased to version 1.0.1 and is published on my website.

Tag(s): Testing the Diary (testing)

Author(s): Jesper Kjær Nielsen (jkn)

Person(s): Martin Weiss Hansen Christer Peter Volk Nicolai Bæk Thomsen

Tag(s): Bug Fixing (bugFix)

Author(s): Jesper Kjær Nielsen (jkn)

File(s): newBuild.py

Person(s): Christer Peter Volk Jacob Møller Hjerrild Hansen

October

October 8, 2014

Updating the User Guide with Tips

I have updated the user guide in the beginning of the diary with some useful tips. Tag(s): User guide (userguide) These should hopefully (if people read them) avoid to many problems for the users of Author(s): this diary template.

Jesper Kjær Nielsen (jkn)

October 22, 2014

Future Entries in the Diary

I have discovered that future entries are not included in the diary if no option or the $^{Tag(s):}_{Bug\ Fixing\ (bugFix)}$ all option are given as input to the script for generating build profiles. This has been Author(s):

Jesper Kjær Nielsen (jkn) corrected now.

File(s): newBuild.py

Part II

January

January 21, 2015

Correcting an Error in the Indices

Christer pointed out that the hyperref links to the indices did not work anymore and that the indices were not at the same levels as the parts in the table of contents. It turned out that the cause of this was that the splitidx package apparently does not work anymore with hyperref in newer versions of TexLive. Therefore, I have decided to use the imakeidx package instead as it seems to work well. The newest version (1.0.4) contains this update to how the indices are generated.

Tag(s): Bug Fixing (bugFix)

Author(s): Jesper Kjær Nielsen (jkn)

File(s): preamble.tex master.tex diary.macro.tex

Person(s): Christer Peter Volk

Bibliography

- [1] Lars Madsen. Introduktion til LaTeX. http://www.imf.au.dk/system/latex/bog/. 2010
- [2] Frank Mittelbach. The LATEX companion. 2. ed. Addison-Wesley, 2005.
- [3] Tobias Oetiker. *The Not So Short A Introduction to LaTeX2e*. http://tobi.oetiker.ch/lshort.pdf. 2010.

People Index

Christer Peter Volk, 20, 25

Jacob Møller Hjerrild Hansen, 20

Martin Weiss Hansen, 20

Nicolai Bæk Thomsen, 20

File Index

```
addTask.py, 3, 10, 16, 19
aReallyReallyReallyReallyLongFileName.c, 17
authorDictionary.tex, 16
buildFiles/tagDictionary.tex, 13
buildFiles/taskList.tex, 13
changeAuthor.py, 3, 16, 19
changeTag.py, 3, 16, 19
default.tpl.tex, 3
diary.macro.tex, 25
logic/DiaryDatabaseWrapper.py, 11
{\tt master.tex}, 25
newAuthor.py, 3, 15, 19
newBuild.py, 3, 12, 13, 15, 16, 19-21
newTag.py, 3, 11, 19
newTask.py, 11
preamble.tex, 25
```

Author Index

Jesper Kjær Nielsen (jkn), 3, 10–13,

15–17, 19–21, 25

Tag Index

Authors (author), 15, 16

Bug Fixing (bugFix), 20, 21, 25

Conditional Compilation (building), 12, 13, 15

Database (database), 11

Development (development), 10–13, 15–17, 19

Tags (tags), 3, 11, 15, 16 Tasks (tasks), 3, 10 Testing the Diary (testing), 20

User guide (userguide), 3, 21