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Diplom Thesis Informatics

Mit der Trello-API rummuckeln

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Abstract

Trello is a collaboration webservice to manage projects and assign their todo items to co-workers. There are many collaboration tools today, but most of them are very basic. Trello is very extensive and it is optimal for small businesses. But although it works fine like it's supposed to it has its limits. Trello as its state now is a closed system. Nothing gets in or out unless you use Trello itself. But sometimes it would be handy if you were able to get content from Trello out into other applications. For example a CMS which should contain completed theses which you are already managing in Trello.

So this thesis addresses small scripts which let Trello interact with other webservices and applications. For this purpose I wrote a wrapper of the Trello API in Ruby to accomplish this task in the most dynamic way possible.

Acknowledgements

Write here your acknowledgements.

Contents

List of Figures	v
List of Tables	vii
List of Abbreviations	ix
1 Introduction	1
2 Principles	3
2.1 Trello	3
2.1.1 How Trello works	3
2.1.2 Why Trello	3
2.1.3 Trello API	3
2.2 Ruby	4
2.2.1 Ruby concepts	4
2.2.2 Ruby Gems and packages	4
2.3 JSON	4
3 Applications	5
3.1 Trello API wrapper	6
3.2 Trello framework	6
3.3 Export to HTML	6
3.3.1 Twitter Bootstrap Framework	6
3.3.2 HTML 5	6

3.3.3	CSS 3 / SASS	6
3.3.4	ERB / Templating	6
3.4	One way sny to Google Calendar	6
3.5	Export to iCal	6
3.6	One way sync to Joomla	6
3.6.1	For every card an article	6
3.6.2	All cards in one article	6
3.6.3	One way sny to WordPress	6
3.7	Backup	6
3.7.1	Export	6
3.7.2	Import	6
3.7.3	Member import	7
4	Conclusion	9
5	Outlook	11
	Bibliography	13

List of Figures

List of Tables

List of Abbreviations

BLAST	Basic Local Alignment Search Tool
...	...

Chapter 1

Introduction

Blablabla.....

Die Arbeit gliedert sich dazu wie folgt: Die Grundlagen von BlaBlaBla werden in Kapitel 1 erarbeitet. ... Eine Diskussion und ein kurzer Ausblick im Kapitel ?? beschließen diese Arbeit.

Bevor wir uns der Auswertung bzw. Bewertung der gewonnenen Primärdaten zuwenden, wollen wir zunächst einige grundlegende Begriffe der deskriptiven Statistik wiederholen.

Chapter 2

Principles

2.1 Trello

2.1.1 How Trello works

Trello is a webservice by the New York City based web corporation Fog Creek Software. It is a collaboration tool where you can manage your projects. There is the concept of so called *boards* which contains several configurable lists. In these lists you can create todo items you're working on, these are called *cards*. You can add your co-workers to these boards and cards. So everyone who's working on a project can see what's going on at the moment.

2.1.2 Why Trello

Trello is not just one of hundreds of thousands of todo applications. It is streamlined for the purposes of small businesses. So for our needs in the university with small groups of people working on the same things it was perfect. Trello has proofed its value several months already.

The first wish was to see the due dates of the cards one is assigned to in Google calendar. Because Google calendar is the calendar tool of our choice. But thinking about that there were many other use cases for small scripts which could run as a cron job on a server to serve several regular tasks.

2.1.3 Trello API

Trello has an API which is still in beta at the moment I'm writing this. But it is already very extensive.

- JSON

- OAuth2

Rest

2.2 Ruby

2.2.1 Ruby concepts

2.2.2 Ruby Gems and packages

2.3 JSON

Chapter 3

Applications

3.1 Trello API wrapper

3.2 Trello framework

3.3 Export to HTML

3.3.1 Twitter Bootstrap Framework

3.3.2 HTML 5

3.3.3 CSS 3 / SASS

3.3.4 ERB / Templating

3.4 One way sny to Google Calendar

3.5 Export to iCal

3.6 One way sync to Joomla

3.6.1 For every card an article

3.6.2 All cards in one article

3.6.3 One way sny to WordPress

3.7 Backup

3.7.1 Export

3.7.2 Import

Filename option

The -n (or -name) argument for this script stands for the filename of the backup

file to import. While processing the script first checks if the user has passed this argument. If not, it aborts. If the -n argument is given, the script proves if the file is a ZIP file. For that it doesn't use the filename but the MIME type of the file.

Listing 3.1: Bewegungsdaten auslesen [?]

```
1 if `file -Ib #{@filename}`.gsub(/;.*\n/, "") != "
   application/zip"
2   puts "ERROR: The backup file has to be a ZIP file!"
3   abort
4 end
```

In line 1 the `file -Ib #{@filename}` is a bash call for receiving the MIME type of a file. Ruby executes it and with the `gsub`-Method it cuts the MIME part out of the received string.

3.7.3 Member import

Chapter 4

Conclusion

Chapter 5

Outlook

Selbständigkeitserklärung

Hiermit versichere ich, dass ich die vorliegende Diplomarbeit selbständig und nur mit den angegebenen Hilfsmitteln angefertigt habe und dass alle Stellen, die dem Wortlaut oder dem Sinne nach anderen Werken entnommen sind, durch Angaben von Quellen als Entlehnung kenntlich gemacht worden sind. Diese Diplomarbeit wurde in gleicher oder ähnlicher Form in keinem anderen Studiengang als Prüfungsleistung vorgelegt.

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