Analysis and documentation of a single page application based on TiddlyWiki

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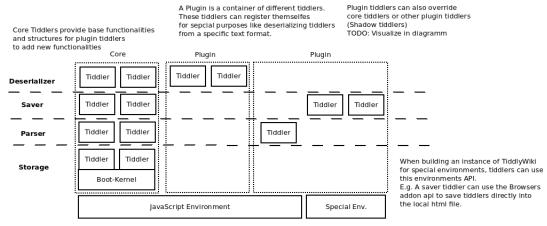
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Introduction 1 1

Decomposition of the TiddlyWiki-Architecture 2 3

Architecture of the single page application Tiddly-2.1 Wiki 1



The Boot kernel is the only part of TiddliWiki which is not build from tiddlers. It provides basic functionality to load the Tiddlers composing the Core.

- * By overriding tiddlers, a plugin can extend nearly every aspect of the wiki * Tiddlers register themselfes for special purposes by using regular tiddler fields
- -> no extra mechanisms needed

Figure 1: Decomposition of TW

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5.2 Data Persistence 1

Persist data

TiddlyWiki supports a wide rage of methods to persist your data. One of this methods is the HTML5 fallback saver. This methods works on almost every browser. With this method a copy of the entire wiki will be downloaded by the browser. This means you get a new file everytime you hit the save button. To avoid this there a some plugins for different browsers to allow to save direct to the current open TiddlyWiki-File.

Data-Storage

TiddlyWiki persists the data within the HTML-File in two Div-Areas depending on whether the encryption of the TiddlyWiki is activated or not. If the TiddlyWiki is not encrypted the data is stored in the Div-Area called "StoreArea". Every created Tiddler is stored in a own Div-area with a few custom values. An example of a saved Tiddler is shown below (Listing 1). The Div-Area has the following attributes, all attributes which are not in these list are parsed as a custom field:

created Timestamp number of milliseconds since 01.01.1970.

modified Timestamp number of milliseconds since 01.01.1970.

tags list of tags seperated by whitespace. Tags which contain whitespaces are wrapped by [[]], e.g. [[example Tag]].

type Type of the Tiddler.

title Title of the Tiddler

Listing 1: Data-Div

With a activated encryption the data is stored in a special Div-Area called "encryptedStoreArea". TiddlyWiki uses the Standford JavaScript Crypto Libary¹. The encrypted Tiddlers are saved in a JSON string within this Div-Area.

¹http://bitwiseshiftleft.github.io/sjcl/

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