Cordova Document Viewer Plugin

A common requirement when developing a cordova based app is to embed a performant and secure inline viewer for pdf files which doesn't allow the user to extract a copy of the pdf file out of the apps sandbox.

Simple delegation to commonly available viewer apps like Acrobat Reader or MuPDF is no proper solution, as the app looses control over the pdf file in this case. The external viewer app may or may not provide features to send the document via email or save it to the devices disk, which is not acceptable.

This plugin offers a slim API to view PDF files which are either stored in the apps assets folder (/www/*) or in any other file system directory available via the cordova file plugin (e.g. cordova.file.applicationDirectory, cordova.file.dataDirectory).

Online files reachable via http(s) are not supported. Download them to a temp folder before starting the viewer. You may use the `onClose` callback to cleanup the temp dir when the viewer is closed.

Viewer features like "Save as" or "Send via EMail" are configurable at runtime.

Labels for buttons (i18n) are configurable at runtime.

Plugin's Purpose

The purpose of the plugin is to create an platform independent javascript interface for Cordova based mobile applications to view different document types by using native viewer components.

Overview

Supported Platforms

- Cordova/Phonegap >=4.4.0
  - iOS 7+
  - Android 4.1+
  - Windows 8.1
  - Windows 10

Installation

The plugin can either be installed from git repository, from local file system through the Command-line Interface, or cloud based through PhoneGap Build.

The plugin is published at the npm plugin registry.

An ionic native wrapper for the plugin is available.

Local development environment

From master:

```
# ~~ from master branch ~~
cordova plugin add https://github.com/sitewaerts/cordova-plugin-document-
viewer.git
```

from a local folder:

```
# ~~ local folder ~~
cordova plugin add cordova-plugin-document-viewer --searchpath path/to/plugin
```

or to use the last stable version:

```
# ~~ stable version ~~
cordova plugin add cordova-plugin-document-viewer
```

or to use a specific version:

```
# ~~ stable version ~~
cordova plugin add cordova-plugin-document-viewer@[VERSION]
```

You may replace cordova with phonegap regarding to your needs.

PhoneGap Build

Add the following xml to your config.xml to always use the latest version of this plugin:

```
<gap:plugin name="cordova-plugin-document-viewer" />
```

or a specific version:

```
<gap:plugin name="cordova-plugin-document-viewer" version="[VERSION]"/>
```

For available versions and additional information visit the npm plugin registry.

Using the plugin

See https://github.com/sitewaerts/cordova-plugin-document-viewer-sample-app for a working example.

The plugin creates the object `cordova.plugins.SitewaertsDocumentViewer`.

Plugin initialization

The plugin and its methods are not available before the *deviceready* event has been fired.

```
document.addEventListener('deviceready', function () {
    // cordova.plugins.SitewaertsDocumentViewer is now available
}, false);
```

Common Arguments

url

String pointing to a device local file (e.g. 'file:///...')

mimeType

String representing the mime type of the file. Currently only 'application/pdf' is supported.

options

Some optional features like search or bookmarks are not (yet) implemented on every platform!

```
var options = {
        title: STRING,
        documentView : {
                closeLabel : STRING
        },
        navigationView : {
                closeLabel : STRING
        },
        email : {
                enabled : BOOLEAN
        },
        print : {
                enabled : BOOLEAN
        },
        openWith : {
                enabled : BOOLEAN
        },
        bookmarks : {
                enabled : BOOLEAN
        },
        search : {
                enabled : BOOLEAN
        },
        autoClose: {
                onPause : BOOLEAN
        }
}
```

Check if a Document File could be shown

```
cordova.plugins.SitewaertsDocumentViewer.canViewDocument(
    url, contentType, options, onPossible, onMissingApp, onImpossible,
onError);
```

onPossible

```
function onPossible(){
  window.console.log('document can be shown');
  //e.g. track document usage
}
```

onMissingApp

```
function onMissingApp(appId, installer)
{
    if(confirm("Do you want to install the free PDF Viewer App "
            + appId + " for Android?"))
    {
        installer();
    }
}
```

onImpossible

```
function onImpossible(){
  window.console.log('document cannot be shown');
  //e.g. track document usage
}
```

onError

```
function onError(error){
  window.console.log(error);
  alert("Sorry! Cannot show document.");
}
```

Open a Document File

```
cordova.plugins.SitewaertsDocumentViewer.viewDocument(
    url, mimeType, options, onShow, onClose, onMissingApp, onError,
linkHandlers);
```

onShow

```
function onShow(){
  window.console.log('document shown');
  //e.g. track document usage
}
```

onClose

```
function onClose(){
  window.console.log('document closed');
  //e.g. remove temp files
}
```

onMissingApp

```
function onMissingApp(appId, installer)
{
    if(confirm("Do you want to install the free PDF Viewer App "
            + appId + " for Android?"))
    {
        installer();
    }
}
```

onError

```
function onError(error){
  window.console.log(error);
  alert("Sorry! Cannot view document.");
}
```

linkHandlers

Currently only supported on iOS!

Array of link handlers. Optional.

Links in the pdf (when clicked by the user) are delegated to the first linkHandler with a matching pattern. If no matching pattern is found, the link is handled with the default link handler of the native viewer component (if any).

```
var linkHandlers = [
            {
                pattern: STRING, // string representation of a plain regexp
(no flags)
                close: BOOLEAN, // shall the document be closed, after the
link handler was executed?
                handler: function (link) {} // link handler to be executed
when the user clicks on a link matching the pattern
            },
            {
                pattern: '^\/',
                close: false,
                handler: function (link) {
                    window.console.log('link clicked: ' + link);
                    }
                }
    ];
```

Close the viewer

```
cordova.plugins.SitewaertsDocumentViewer.closeDocument(onClose, onError);
```

onShow

```
function onClose(url){
    if(url)
        window.console.log('closed viewer document ' + url);
    else
        window.console.log('viewer not open');
}
```

onError

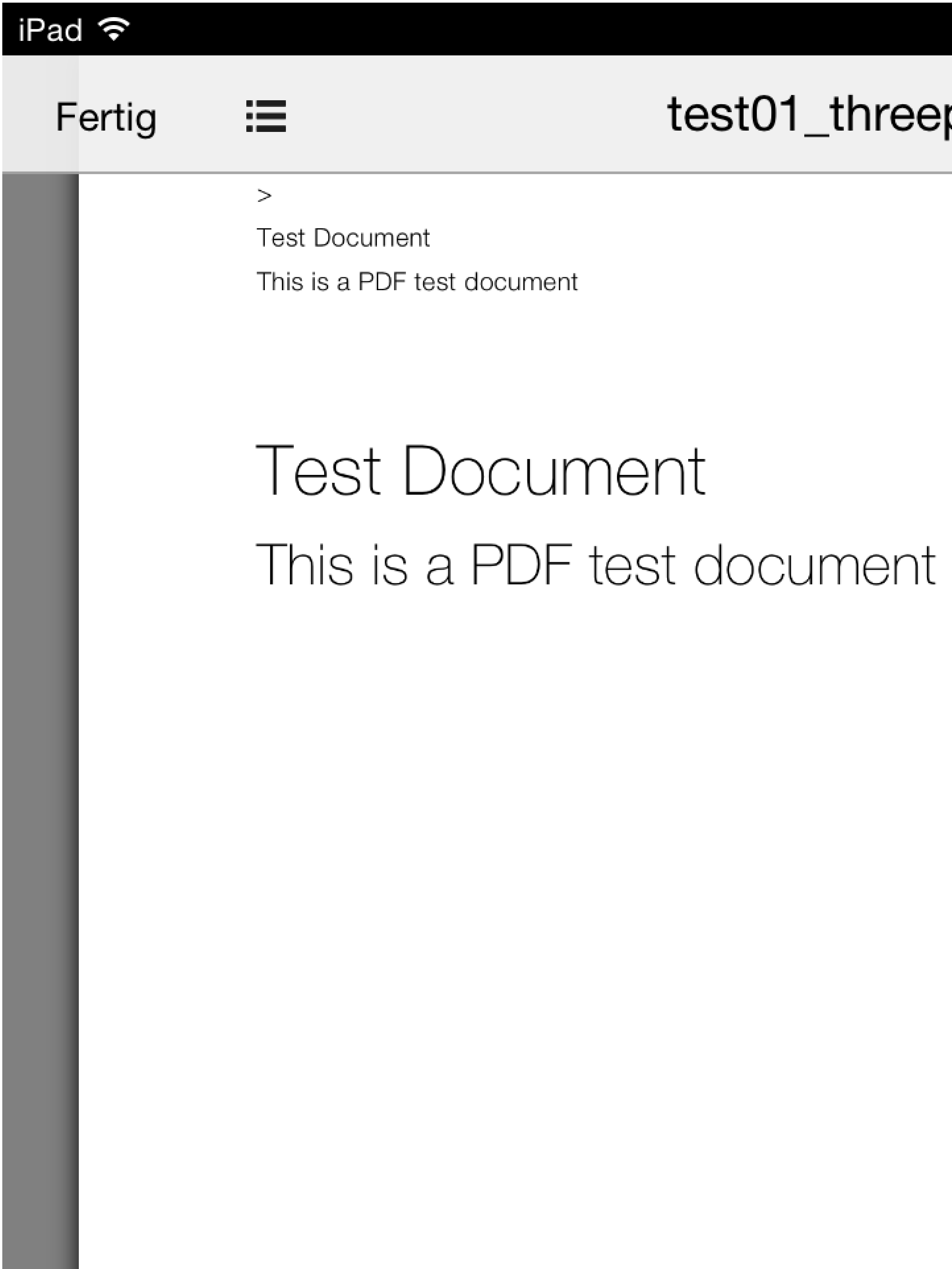
```
function onError(error){
  window.console.log(error);
  alert("Sorry! Cannot close viewer.");
}
```

iOS

The plugin uses the awesome VFRReader (https://github.com/vfr/Reader) to embed pdf viewer functionality in the app.

To open a pdf at a given page number add { page: pageIndex } to the options when calling viewDocument.

Screenshots



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Test Document

This is a PDF test document

Test Document

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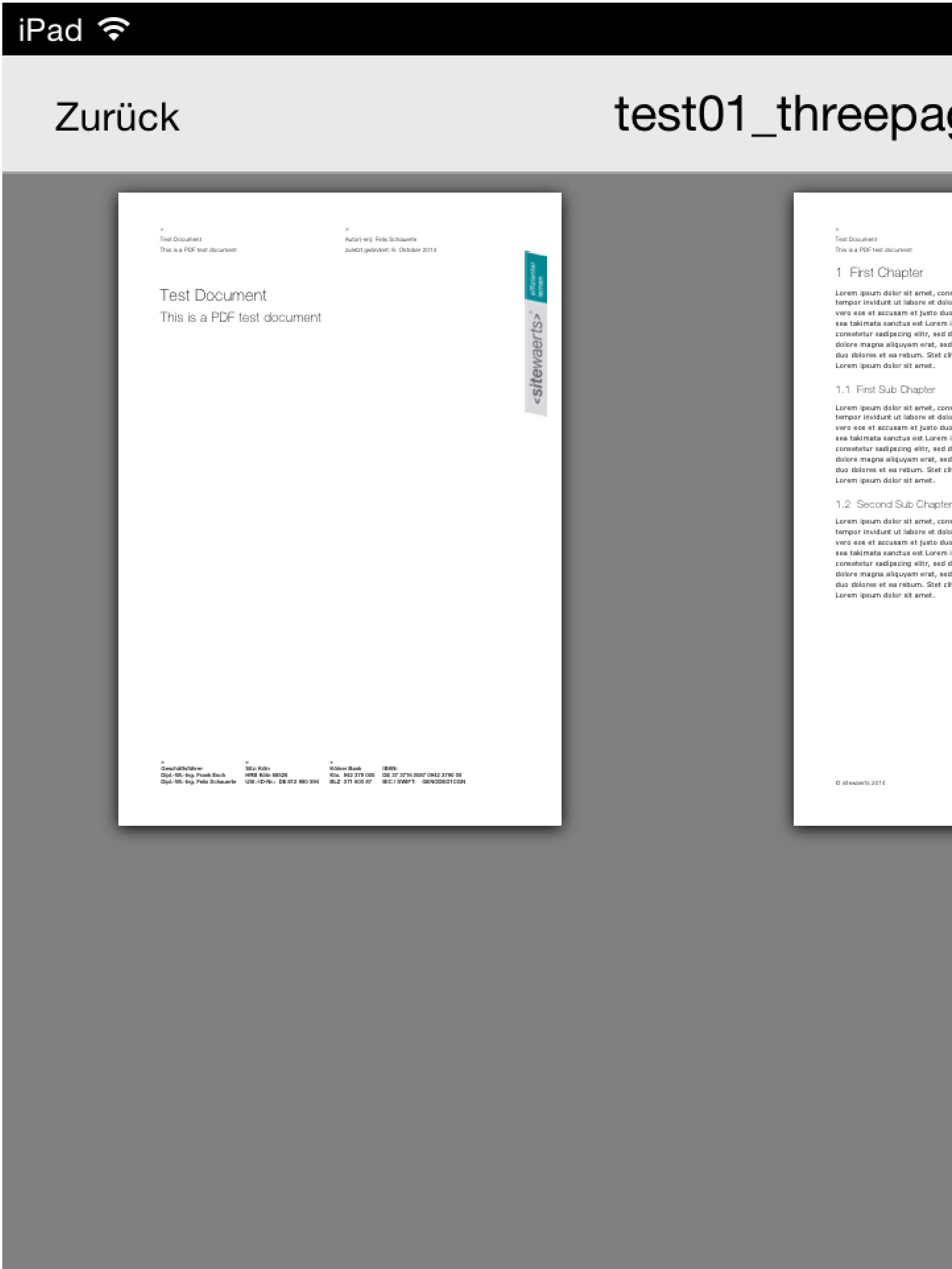

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Test Document
This is a PDF test document

Autor(-en): Felix Schauerte
zuletzt geändert: 6. Oktober 2014

Test Document
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Geschäftsführer
Dipl.-Wi.-Ing. Frank Bock
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BLZ 371 600 87

IBAN: DE 37 3716 0087 0942 3790 05
BIC / SWIFT: GENODED1CGN

Test Document
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1 First Chapter

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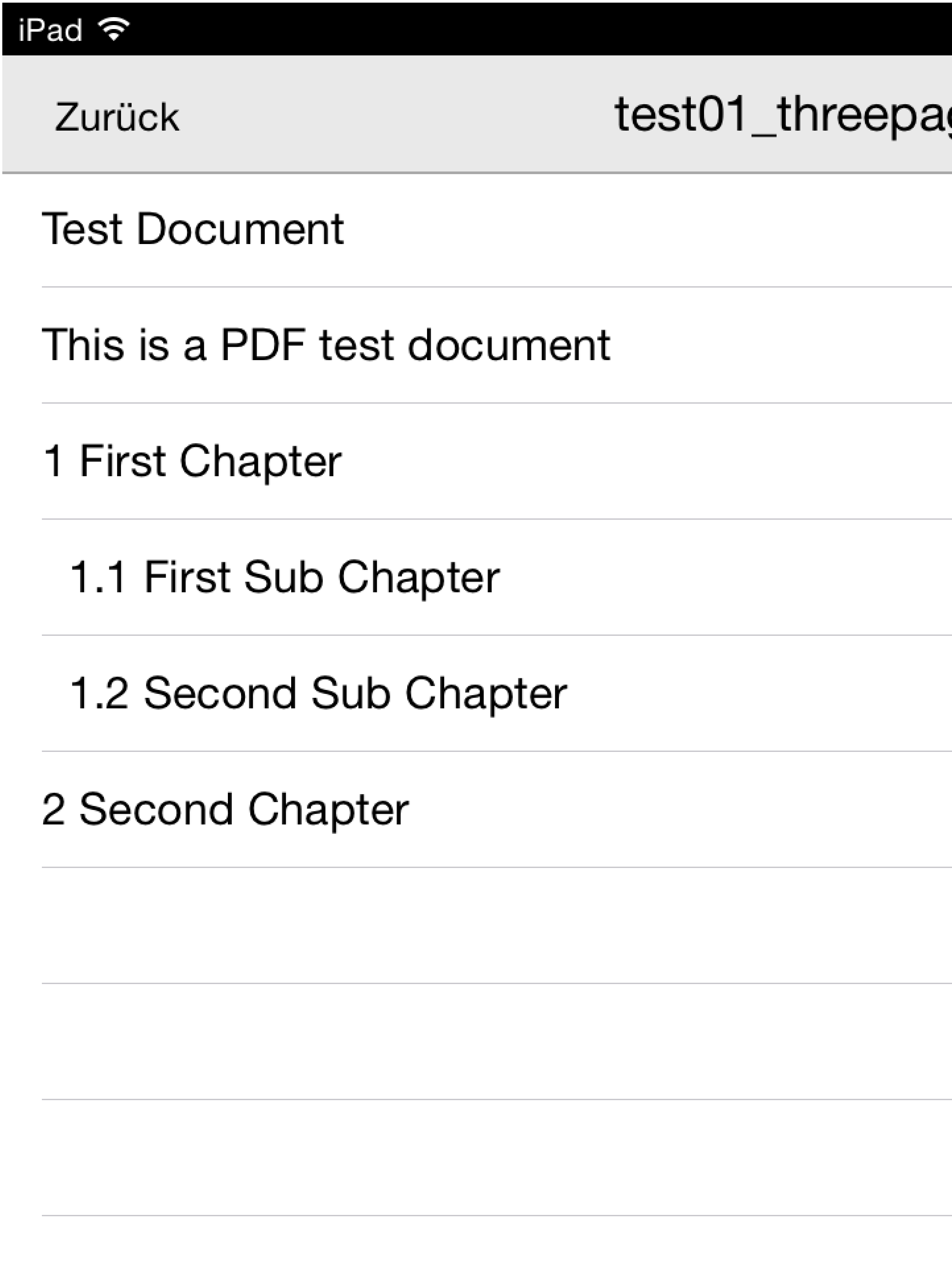


Test Document

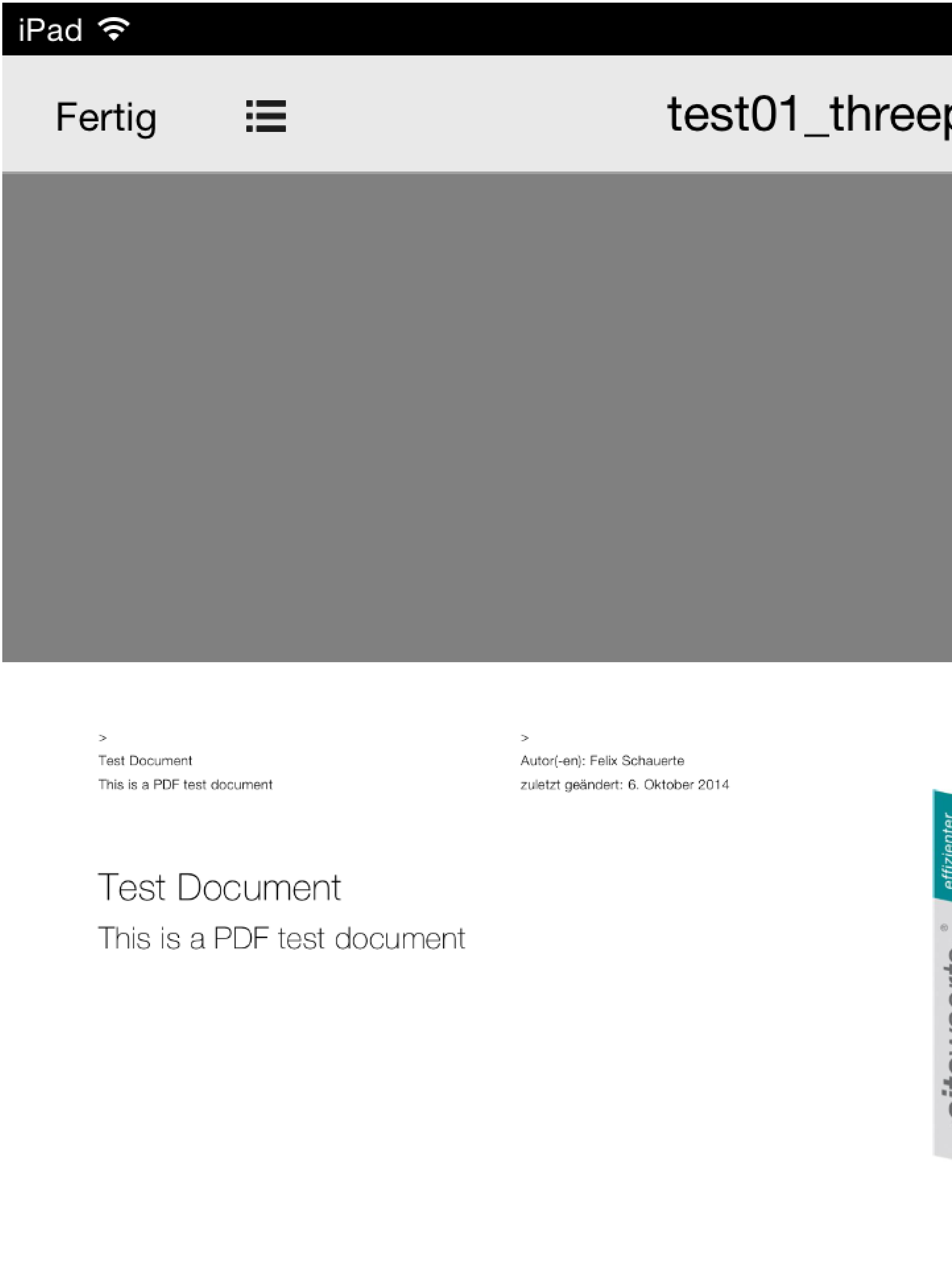
This is a PDF test document

1 First Chapter

1.1 First Sub Chapter

1.2 Second Sub Chapter

2 Second Chapter



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Android

Due to license restrictions in muPDF, the plugin dispatches to a separate (free) viewer app based on muPDF. If the viewer app is not yet installed, the user may be redirected to the google play app store.

https://play.google.com/store/apps/details?id=de.sitewaerts.cleverdox.viewer

https://github.com/sitewaerts/android-document-viewer

Screenshots

Test Document

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Autor(-en): Feli

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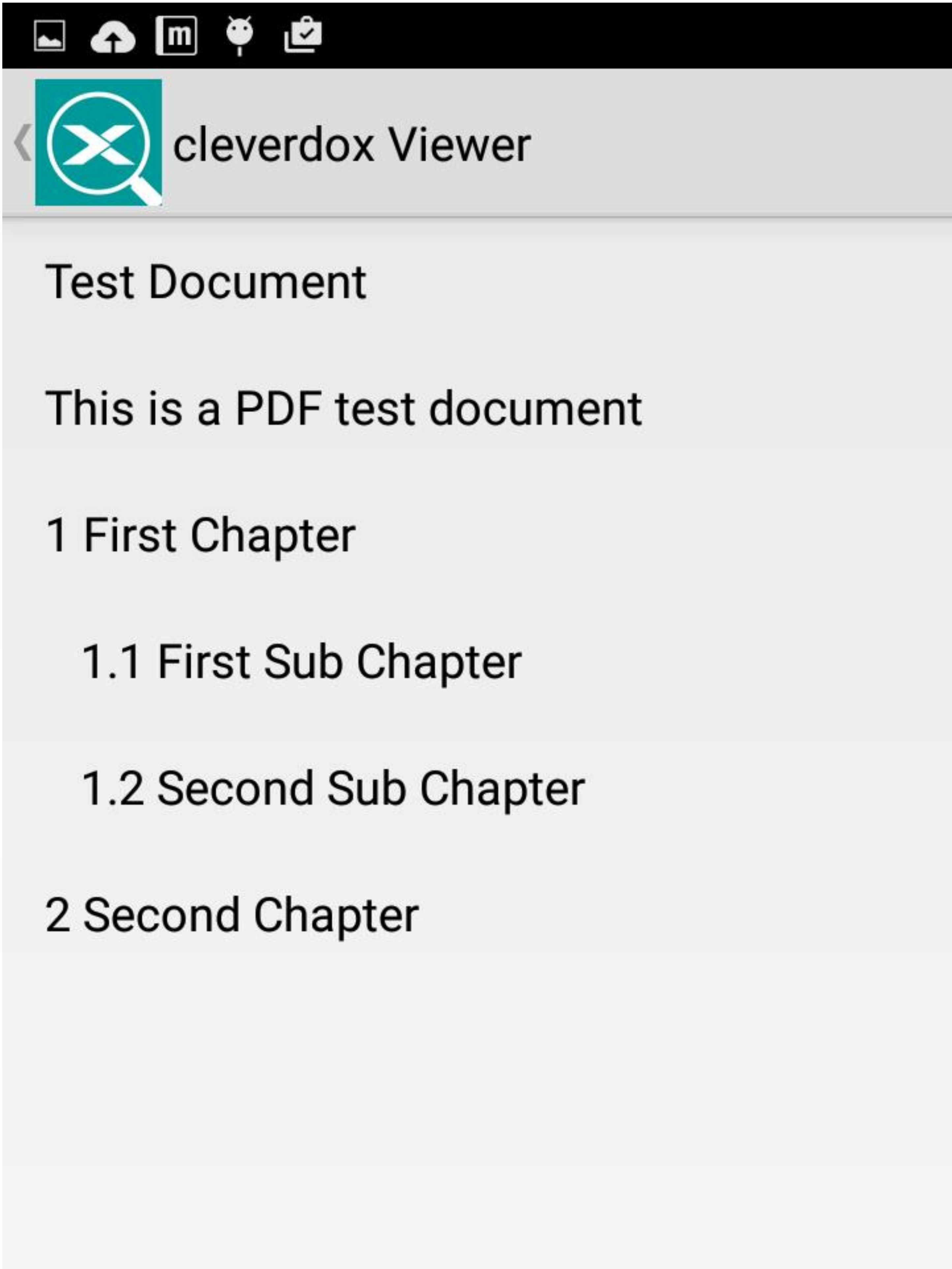
Test Document

This is a PDF test document



Test Document

This is a PDF test document

1 First Chapter

1.1 First Sub Chapter

1.2 Second Sub Chapter

2 Second Chapter

Windows

The plugin uses

- Windows.Data.Pdf.PdfDocument to generate images for PDF pages
- pdf.js to display outline / table of contents

Screenshots

TODO

Known issues

- Add transparent support for online files.
- The external Viewer App (Android) cannot access files stored in app private directories. Due to this fact, the plugin copies a file to a shared temp folder before starting the viewer. When the viewer is closed, the temp file is immediately deleted. While the viewer is running, a sophisticated user may 'steal' the file from the shared temp directory. We are still searching for a better solution, any good idea is welcome.
- Add support for pdf forms.
- Add fulltext search features.
- Add user bookmark support.
- Add support for additional mime types like dwg, docx, etc.
- Optimize user experience for small screens. Currently the viewer components are tested and optimized on tablets only.
- Let developers provide graphics for buttons at runtime.

Credits

based on https://github.com/vfr/Reader

based on https://github.com/mindstorm/CDVPDFViewer

based on pdf.js

based on winjs

inspired by https://github.com/pebois/phonegap-plugin-PDFViewer

inspired by https://msdn.microsoft.com/en-us/library/windows/apps/dn263105.aspx