

SESSION 2: TECHNICAL WRITING AND GITHUB

**DIGIPRES101: PROGRAMMING
BASICS AND PRESERVATION TOOLS
AMIA CONFERENCE 2016**

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AGENDA

1. Technical Writing
2. GitHub

1. TECHNICAL WRITING

1. communicating about technical or specialized topics, such as computer applications, medical procedures, or environmental regulations;
2. communicating through technology, such as web pages, help files, or social media sites;
3. providing instructions about how to do something, regardless of the task's technical nature

Source: [Society for Technical Communication](#)

WHY BOTHER?

Move your project/work forward

Interact with your techie colleagues

Participate in hackathons (tomorrow? **#AVHackDay**)

Support [open source projects](#)

THINGS DEVELOPERS DO (1/2)

Discuss **interface design** with designers

Test a site on various browsers / devices

Tweak the design when it doesn't work on the browser/device

Write **bug reports**

Reproduce bugs and confirm with the bug reporter that's the problem

Communicate about **feature requests** and bugs

THINGS DEVELOPERS DO (2/2)

Google for error messages and how to fix specific bugs

Add test data to a CMS to check if it works

Clean up an Excel or CSV dump with data, or import it in a database

Sketch out possible solutions for a **user story**

Decide which task is most important

Write blog posts, send tweets, make screenshots of the product

All archivists are digital archivists.
- Ashley Blewer

THINGS NON-CODERS CAN DO (1/3)

Flesh out user stories to exhaustively **detail a specific function or workflow** of the project

Create and/or tweak the **interface design**
(simple paper prototyping or Photoshop/Illustrator)

Test the product in **all possible combinations** of OS/browser - and write bug reports.

Clean available data and export it to exchangeable formats (e.g. CSV).

THINGS NON-CODERS CAN DO (2/3)

Write / blog / tweet about the project

Create a video / graphic / presentation about the project

Set up a blog / site / Facebook page showcasing the project

Fast and simple **user testing**

Necessary paperwork - including **documentation**

THINGS NON-CODERS CAN DO (3/3)

Track usage of the project using an analytics package

Communicate with clients / users / designers

Fill the database / CMS with 'real' content

Research hosting / catering / workspace

Set up servers, hosting and deployment procedures
(command line)

Prioritisation and task assignment

REQUIREMENTS (1)

ELICITING REQUIREMENTS

Interviews

Focus Groups

Requirement Workshops

Surveys/Questionnaires

Document Analysis

Brainstorming

Observation

REQUIREMENTS (2)

USER STORIES

As a...	I want ...	So that...
User	built-in help pages	assistance is available offline
Admin	restricted access per user level	user management is organised
...

REQUIREMENTS (3)

REQUIREMENTS IN OPEN SOURCE

The Power of the Mailing List

[FFmpeg-user] Strange output of ffprobe Forums x Download Print Share

 **Анатолий Коростелев** gilgameshfreedom@yandex.ru via ffmpeg.org Oct 27 (12 days ago) Star Reply Dropdown

to FFmpeg ▾

Hello!

Recently I recieved a mp4 for playing. When I tried to play this file I didn't hear any sound in some players (in ffplay sound worked). When I looked at the metadata of this file (via ffprobe), I saw the following:

```
$ ffprobe 6kad_16_144p.mp4
ffprobe version 3.1.4 Copyright (c) 2007-2016 the FFmpeg developers
  built with Apple LLVM version 8.0.0 (clang-800.0.38)
  configuration: --prefix=/usr/local/Cellar/ffmpeg/3.1.4 --enable-shared --enable-threads --enable-gpl --enable-version3 -
-enable-hardcoded-tables --enable-avresample --cc=clang --host-cflags= --host-ldflags= --enable-openc1 --enable-
libx264 --enable-libmp3lame --enable-libxvid --enable-libfreetype --enable-libvorbis --enable-libvpx --enable-libass --
enable-libfdk-aac --enable-libopus --enable-libx265 --disable-lzma --enable-nonfree --enable-vda
libavutil 55. 28.100 / 55. 28.100
libavcodec 57. 48.101 / 57. 48.101
libavformat 57. 41.100 / 57. 41.100
libavdevice 57. 0.101 / 57. 0.101
libavfilter 6. 47.100 / 6. 47.100
libavresample 3. 0. 0 / 3. 0. 0
libswscale 4. 1.100 / 4. 1.100
libswresample 2. 1.100 / 2. 1.100
libpostproc 54. 0.100 / 54. 0.100
Input #0, mov,mp4,m4a,3gp,3g2,mj2, from '6kad_16_144p.mp4':
Metadata:
  major_brand : isom
  minor_version : 512
  compatible_brands: isomiso2avc1mp41
  creation_time : 2016-10-04 13:33:08
```

DOCUMENTATION



FEEDBACK

Try to make the problem specific but concise

Explain exactly what you were doing to cause the error to occur

Make sure to mention if you are able to make the bug repeat, or if it only happened once and not again

Assign to person (if you know who should fix)

Be brave, kind, assertive

Source: [Non-Technical Person's Guide to Becoming an Open Source Software Contributor Via Github](#)

FEEDBACK

BUG TRACKERS I'VE (LEARNED TO) LOVE



Logged in as: *bg_erwin* (Erwin Verbruggen - manager) 2016-11-08 04:20 CET Project: EUscreenXL - Portal General

[Main](#) | [My View](#) | [View Issues](#) | [Report Issue](#) | [Change Log](#) | [Roadmap](#) | [Summary](#) | [Manage](#) | [My Account](#) | [Logout](#)

Reporter:	Monitored By:	Assigned To:	Category:	Severity:	Resolution:	Profile:
any	any	any	any	any	any	any
Status:	Hide Status:					Priority:
any	closed (And Above)					any
Show:	View Status:	Show Sticky Issues:	Changed(hrs):	Use Date Filters:	Relationships:	
50	any	Yes	6	No	any	
Platform:	OS:	OS Version:	Tags:			
any	any	any				
Note By:	any	Sort by:	Updated Descending			
Match Type:	All Conditions					

[[Advanced Filters](#)] [[Create Permalink](#)]

Viewing Issues (1 - 50 / 52) [[Print Reports](#)] [[CSV Export](#)] [[Excel Export](#)] [[First](#) [Prev](#) [1](#) [2](#) [Next](#) [Last](#)]

	P	ID	#	@	Category	Severity	Status	Updated	Summary
<input type="checkbox"/>		0004399	10	4	Sync with MINT	minor	resolved (euscreen_eve)	2016-10-31	Sync and update provider names
<input type="checkbox"/>		0004457	2	1	Preview Tool - Search	block	assigned (pieter)	2016-10-24	Cannot access RTÉ items on Preview tool
<input type="checkbox"/>		0002847	6	1	Related to format of metadata, way data is stored	major	assigned (rutger)	2016-10-13	Search results page: Strange/incorrect filter options
<input type="checkbox"/>		0004316	2		Home page	minor	resolved (rutger)	2016-04-22	analytics code in euscreen pop-up player on euscreen homepage

FEEDBACK

BUG TRACKERS I'VE (LEARNED TO) LOVE



This repository Search

Pull requests Issues Gist



ebu / awesome-broadcasting

Unwatch 23

Star 79

Fork 23

Code

Issues 1

Pull requests 0

Projects 0

Pulse

Graphs

A curated list of amazingly awesome open source resources related to broadcast technologies inspired by Awesome PHP

133 commits

2 branches

0 releases

14 contributors

Branch: master

New pull request

Create new file

Upload files

Find file

Clone or download

barroco committed on GitHub Merge pull request #56 from ebu/media4dplayer

Latest commit 09b0b47 6 days ago

CONTRIBUTING.md	Initial commit based on awesome-sysadmin	2 years ago
LICENSE.md	Add License	6 months ago
README.md	Media4DPlayer	6 days ago

README.md

Awesome Broadcasting

A curated list of amazingly awesome open source resources for broadcasters.

2. GITHUB

a distributed revision control system

VERSION CONTROL

the diff

PARLANCE

DigiPres folks take note: *A repository is not a repository*

- *branching*
- *merging*

USING GITHUB FOR DOCUMENTATION

Adding & improving / Request to Change Things

Make change => Commit changes

Fork => Changes on your account only

Pull request => Ask for changes in main codebase

Peer review => Comments

Example: Testing on Ashley Blewer's GitHub
<https://github.com/ablwr/testing>

FEEDBACK, FEATURE REQUEST, BUGS ISSUES

If there's something bigger you want to fix but you don't know how to do it, you can open an issue.

- the best way to fix a problem is by *doing it yourself*
- provide feedback and bring up problems

FORMATTING: MARKDOWN

INTERFACE VS COMMAND LINE

git cheat sheet

learn more about git the simple way at ragerdudler.github.com/git-guide/
cheat sheet created by Nina Jaeschke of ninagrafik.com

create & clone

create new repository `git init`
clone local repository `git clone /path/to/repository`
clone remote repository `git clone username@host:/path/to/repository`

add & remove

add changes to INDEX `git add <filename>`
add all changes to INDEX `git add *`
remove/delete `git rm <filename>`

commit & synchronize

commit changes `git commit -m "Commit message"`
push changes to remote repository `git push origin master`
connect local repository to remote repository `git remote add origin <server>`
update local repository with remote changes `git pull`

branches

create new branch `git checkout -b <branch>`
e.g. `git checkout -b feature_x`
switch to master branch `git checkout master`
delete branch `git branch -d <branch>`
push branch to remote repository `git push origin <branch>`

merge

merge changes from another branch `git merge <branch>`
view changes between two branches `git diff <source_branch> <target_branch>`
e.g. `git diff feature_x feature_y`

tagging

create tag `git tag <tag> <commit ID>`
e.g. `git tag 1.0.0 1b2e1d63ff`
get commit IDs `git log`

restore

replace working copy with latest from HEAD `git checkout -- <filename>`



Tip

Want a simple but powerful
git-client for your mac?
Try Tower: www.git-tower.com/

CHECK OUT AT #AMIA16

- Meeting: Open Source Committee
Thurs, Nov. 10, 12:00 PM @Carnegie III - Conference Level.
- AMIA [Open Source GitHub](#)

HELPFUL RESOURCES

- Ashley Blewer (2014), [Non-Technical Person's Guide to Becoming an Open Source Software Contributor Via Github](#).
- Lauren Sorensen (2014), [Open Source and Digital Preservation and Access: Open Source Tools, Technologies and Considerations](#). Presented at the 2014 AMIA Open Source Digital Preservation & Access Stream.
- Hay Kranen (2015), [Help a Coder, Even If You Can't Code](#).