Intermediate Report of the Slidewiki Trial

ULEI Team

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Abstract

The structure of this document is as follows: First we lay out the *background of this report* and the motivation for the approach taken for this evaluation. The feasibility of our proposal was evaluated with a *pre-evaluation*, concluding with a reasoning of the infeasibility of our original project design. The barriers to the implementation of our proposal are further specified, both from a *project infrastructure perspective*, and a *collaboration design perspective*. In the *summary at large*, we address the questions posed by the supervisors in advance. Finally, to conclude with the obstacles to our original plan, the *results of the usability test* of the project are described in more detail.

The conclusion of the infeasibility of our original plan compared to the real current state of SlideWiki then motivated the readjustment of our plan, on which basis we structured the second phase of our project, that is to be tackled after this intermediate report is given.

1 General

We committed to contributing to the SlideWiki tender, addressing almost all points mentioned in the "Notice of invitation to tender" with a focus on

(1) providing extensive feedback (1., selection criteria, award criteria 5 and 7),

(2) providing sufficient relevant input (2., award criteria 2),

(3) engagement and dissemination of Slidewiki.eu (award criteria 6),

(4) actions to increase the number of registered and active users (selection criteria, award criteria 9).

As "the objective of the trials is to assess SlideWiki's effectiveness", we assumed the "large scale trials to be proposed by the subcontractors" to be in the scope of *Beta Testing a software ready for use*. This was the starting point of our proposal to roll out an entirely new course concept with integrated participation facilities as a complex use case and show case for a SlideWiki application. The proposal was discussed with the local SlideWiki team at InfAI Leipzig (the *local supervisors* in the following) and **submitted in final form** on April 5, 2018.

In parallel we **tested, in a pre-evaluation phase**, the reliability of our course concepts in the SlideWiki environment at that time, to prepare the summer term 2018. Unfortunately, it turned out that SlideWiki, in the given state, could not be used for such a complex task, since even the upload of existing course material met essential hurdles, and tools to organize cooperative work (in particular social web functionality) were in a very rudimentary state (see below for details).

Hence we **had to skip all of our more advanced course communication concepts** and decided to focus our trial contribution on upload and import of course materials as part of a students' practical project within our course

(2a) to provide sufficient relevant input (at the moment about 200 slides from two courses),

(1a) to provide feedback in the form of issues

concentrating on the aspects of a Usability Test according to the *real* current state of the SlideWiki project.

More precisely: One of the goals of our course is to introduce the non-computer science students with computer science practices in a propaedeutic way as part of the students' training. Since SlideWiki could not be used in the expected way for the main course goals, **the trial goals (3) and (4) had to be reduced**. We changed our plans and **set up a students' project group to be involved in the SlideWiki trial itself**.

Due to the substantial usage problems with SlideWiki (we reported more than 70 serious issues so far), **the time schedule of the tasks proposed in our application turned out to be far too optimistic**. In particular the import of existing material into SlideWiki proved to be very cumbersome and time expensive due to the poorly performing input interface, as discussed with the developers several times during the last months.

The students did intense work, mainly importing the existing slides from the lecture, requiring very heavy postediting. Within that process, they compiled many issues and submitted them

to the SWAQ tracker. A disappointing students' experience was the low response rate to the issues by the SlideWiki development team.

2 Results of the pre-evaluation

The pre-evaluation results refer to SlideWiki as it was available until April 8, 2018. The pre-evaluation yielded the following results:

- **Importing existing slides** from odp destroyed line distances, list formatting, several standard list bullets were not imported properly, etc. Importing slides with pictures was a complete mess. Imported slides required heavy postediting to be ready for use.
- In the **presentation mode** slides casually were not displayed in their entirety. Reliable presentation of slides is a central requirement for the use of SlideWiki in our course.
- The **PDF export** did not produce slides in slide format, but instead in pdf A4 paper format. Moreover, the pdf export produced casually incomplete content areas (SWAQ-821). Reliable pdf export of slides is a central requirement in our course concept.

  Until now the PDF export problems remain, with no progress at all on the side of SlideWiki. SlideWiki did not improve in that direction, although the Jira issue SWAQ-821 was marked as "resolved".
- The **group management** was very rudimentary. It offered no role concept to attach gradually differing rights (e.g., maintainer, developer, reporter, guests, as gitlab does) to individual users. No social collaboration tools were available, even the list of group members was only shown to the group creator. Hence using SlideWiki in a collabarative setting required (at least at that time) to set up an additional collaborative environment. Since we use OPAL as E-Learning platform, but there is no SlideWiki integration available for OPAL, we had to refrain from all cooperative tasks as listed in our proposal.
- **Importing decks into a deck** meets the problem that it is almost impossible from the input dialogue to distinguish between distinct versions of the same deck as created, e.g. by forking.

  Later on, the concept "deck of decks" as an aggregation principle for slides (the only aggregation principle available in the pre Horizon2020 version of SlideWiki) unveiled more issues. The SlideWiki developers introduced playlists as an alternative aggregation principle and do recommend not to use "deck of decks" for aggregation anymore.

  Hence we were faced with a serious design flaw of SlideWiki at that time.
- The **help system** is in a very rudimentary state and – as communicated by the local supervisors – does not reflect the current state of development of the project.

The pre-evaluation revealed that SlideWiki in its current state could not be used reliably to conduct the course concept as described in our proposal. It showed that the existing lecture slides could not easily be transferred to SlideWiki in order to be used directly in the lecture. It further showed that the platform is not yet ready to be used by the students in the format described as the 'future concept' in our proposal.

The realization that the platform was not in a state needed to perform the trials as sketched in the proposal made us reevaluate our approach. Due to the lack of engagement statistics, user interaction functionality, and the lack of analytics and statistical insights, a large part of the participatory and interactive focus was lost for the seminar. With the shortcomings of the search functionality, the respective change of evaluation method for the seminar became infeasible.

3 Trial Infrastructure

One of the central goals of SlideWiki is to support "collaborative content authoring". We expected to find a rich environment for collaborative authoring tools that will also be used as a communication medium between the different trial groups. As we learned from the trial coordinators this was intentionally not in the scope of the trial planning, since the trial coordinators aimed at getting *independent* evaluation results from the different trial partners.

In the first three months of our trial we concentrated on a SlideWiki usability test mainly tracking the many problems

- importing existing files from odp sources,
- heavily postediting the imports,
- arranging the imports in a deck aggregation (playlist) for the whole course,
- struggling with the pitfalls of edit rights in such an aggregation.

We set up our own gitlab based git infrastructure with internal issue tracking. Very early in our trial we agreed with the local supervisors to propagate all issues to SlideWiki's JIRA based SWAQ issue tracker and compiled an RDF-based file with meta information about these issues. Such efforts were not met by the trial coordinators with the expected reliability – most of the issues were not touched over weeks, hence the students were disappointed by the lacking response on their efforts.

Due to the disappointing results of our trials we agreed with the trial organizers not to compile official surveys (mail by Mari Carmen and Edna 2018-07-05) or interviews (mail by Alexandra 2018-07-05). We changed that rule after Edna insisted in taking part in the evaluation survey (mail by Edna 2018-07-23).

4 The SlideWiki Collaboration Concept

The collaboration concept is a crucial design flaw that prevents SlideWiki to achieve its goals. It is document-centric and heavily draws on the concepts of *intellectual property* and *copyright* but doesn't support copyleft and open culture principles even if it forces (!) users to "share" sildes along the CC-SA.

Slides and decks are owned by single users and the creator has *practically* the full power not only to invite other users to collaborate but also to revoke such right at any time.

- To invite other users to cooperate, a group has to be created and edit rights have to be granted to that group.
- By design only the creator of the group has the right to invite people to that group. No tools for collaborative tasks to discuss group-internal problems are available. Even the list of "Shared Decks" is not group-centric, but user-centric. Group members even don't know about the other collaborators (this is even intentional, as pointed out in a comment to SWAQ-899).
- There is no way to share or even transfer the administration of such a group to a different person or to transfer ownership of a collaboratively edited deck to that group.
- Hence the collaborative design propagates the principle that the group supports the creator to improve her "intellectual property". Credits are collected somewhere in the history but since cooperative rights can be revoked by the creator, she is in the position to expropriate the collaborators.
- The main principle to prevent such expropriation is given by forking a deck. SlideWiki implements forking as a central social tool and makes it as easy as pressing a button. But in open culture, a fork is considered as a very serious decision that is met only in an extraordinary situation, if social collaboration based on the principle "rough consensus and running code" does not work anymore. A fork is considered harmful since it does not concentrate but spread efforts.

More comments on a role system for groups we added to the protocol of the telco 2018-07-23.

5 Summary at Large of our SlideWiki Test

This is a short summary of answers to the questions posed by the supervisors in advance:

- How much content was generated? How may people were involved creating the content? Did you create the content collaboratively?
  - We supplied about 200 slides of two lecture series and additional material.
    - `https://slidewiki.org/playlist/43`
    - `https://slidewiki.org/playlist/46`
    - `https://slidewiki.org/deck/108366`
    - `https://slidewiki.org/deck/115897`
  - The material was uploaded from odp sources and required heavy postediting.
  - The content was created by the subcontractor team (4 people) and a team of students (3 people).
  - The content was uploaded from existing material; we collaboratively worked on the pitfalls of uploading and postprocessing the material.
- What presentations were held with SlideWiki?

  - We didn't use SlideWiki for presentations due to the heavy display problems in presentation mode.

- What is your experience with SlideWiki? Which parts of SlideWiki did you use?
  - In general we think that SlideWiki is not ready for use as explained in more detail in the rest of this report.
  - We used slides, decks (shared and non-shared), playlists, presentation mode, groups, history, tags and experimented with decks of decks.
  - We compiled more than 70 issues and supplied them to the SWAQ tracker.

6 Usability Test Results

In this section, we report on the overall results of the Usability Test by the students' trial group during the summer term 2018. All issues are available with more detailed information in the SWAQ issue tracker, grouped as "Leipzig trial feedback".

6.1 Upload

Uploading a presentation to SlideWiki changes its appearance and causes issues, in particular, stylistic problems that sometimes changes the content of the slide at all. Within the project, we created a list of bugs describing such editorial problems specified in the following categories.

6.1.1 Spacing

Looking at the spacing in general, the main problems occur with the vertical and horizontal spacing between lines and paragraphs which often results in a disorganized layout. #2 = SWAQ-847

Referring to horizontal spacing, the length of the text indents are way bigger than in the original presentation. This occurs in regular text and – particularly visible – between different enumeration levels. The text indents in SlideWiki seem to be bigger by default than it's common. #6 = SWAQ-851, #9 = SWAQ-853

Vertical spacing by that contains a similar issue meaning the default settings. The spacing after or before paragraphs is often either too small or missing completely which is also visible between enumerations. The same also occurs with spacing between lines. #10 = SWAQ-855, #5 = SWAQ-850, #3 = SWAQ-848

It would be practicable to adjust the default settings to common practices to achieve a less different and disarranged presentation after the upload. Also, it would reduce the additional postprocessing expense.

6.1.2 Theme/Editorial Work

Referring to the original theme of a presentation SlideWiki seems to completely ignore the individual design and every content inside header and footer. This concerns the existence of (color) themes, graphics and page numbers, which results in rather blank presentation. Especially for graphics we often find in the header the origin of the presentation, in our

case the logo of the Leipzig University. To us this seems to be crucial information. #4 = SWAQ-848, #28 = SWAQ-862, #2 = SWAQ-847

6.1.3 Type Setting

The typesetting seems to work in general but SlideWiki has some major problems recognizing special text parts as for example superscripted text. Superscripts are displayed bigger and in a single line above the affected line. #11 = SWAQ-856

6.1.4 Dimensioning

In this part we look at the shape properties of different elements. SlideWiki seems to change some curtail shape properties such as the size or meaning of the elements, as for example tables, pictures and objects. #15 = SWAQ-830

Beginning with tables, there seems to be a problem with the upload of the layout as well as the size of tables. In general the portioning of tables are uploaded correctly but the size of the different columns and rows is often not correct. This results in a table that is only visible in part. #11 = SWAQ-856

Referring to objects SlideWiki changes sizes, forms and directions that are created inside Powerpoint or Open Office. Especially the last part is problematic as it sometimes changes the whole meaning of an object e.g. arrow directions.

6.2 Layout

Creating slides from scratch or editing existing ones is fundamental for archieving SlideWiki's aims. The usage of bullet points, that fit in both categories, carry a big problem affinity. Our issues relating to a slide's layout so far mostly refer to editing uploaded slides and the usage of bullet points.

For instance, it is only sometimes possible to resize and edit graphics, especially when a slide contains more than one graphic or if a graphic is slide-based composed of multiple graphic elements (see issue #58 = SWAQ-954).

Some issues describe problems during format changes, like e.g. change text from bolt to normal (see issue #62 = SWAQ-956), wich doesn't work, or formatting in general is not possible because the cursor disappeared in editing mode (issue #57 = SWAQ-953). In one case, plain paragraphs appeared without a reason and couldn't be deleted (issue #63 = SWAQ-957).

6.2.1 Enumeration

Several issues are related to the enumeration within slides. For instance, reformatting bullet points a lot of times results in unexpected behaviuor and context next to it is deleted (see issue #65 = SWAQ-954).

Another issue is, that Arabic numeral-based enumerations are displayed on the first level only, although they are recognized as sub enumerations (issue #56 = SWAQ-952).

Furthermore, there's no possibility to combine arabic enumeration with bullet points in a consistent order (issue #56 = SWAQ-960).

6.3 History

An insight in the history of a presentation gives users an idea of the contribution process it's gone through. According to the current state, SlideWiki puts the users already in a position to inspect slide's history:

There are revisions for decks and slides. Each time a slide changes, a new revision is automatically created. Deck revisions are not automatically created. Only a first revision is created that will collect all changes to the whole deck until a new revision is created manually.

In some cases, it could be helpful to have automatically created deck / slide revisions (issue #25 = SWAQ-913).

Moreover, there is a big semantic difference between *history* and *activity feed* both attached to that deck, not really obvious for the casual user.

Another, critical issue refers to the deletion of slides: Unlisted decks may be still accessed by others if the URL is known. To prevent angry users searching for this function, they should have a low-threshold possibility to delete their decks and slides (issue #19 = SWAQ-790) if they would like to do so.

6.4 Navigation

A clear and easy navigation through the website is essential for an easy and smooth use of SlideWiki. Whenever there is a problem with the use of a navigation tool we labeled it as navigation issue.

6.4.1 Navigation problems related to a tool's position, design or language

In most cases, navigation issues cause misunderstandings related to the positions (e.g. issues #32 = SWAQ-866, #30 = SWAQ-864, #27 = SWAQ-861) designs (issues #32, #26 = SWIK-2360) or language (issue #31 = SWAQ-865) of tools and buttons.

An handsome example gives the position and design of the "Edit" Button, which isn't yet optimized to find it intuitively (see issue #32 = SWAQ-866).

6.4.2 Navigation problems that cause misconception

Other navigation problems are resulting in user's misconception due to unexpected behaviour of tools (issues #36 = SWIK-2343, #35 = SWAQ-882, #34 = SWAQ-883, #26 = SWIK-2360, #25 = SWAQ-913, #16 = SWIK-2272). The unexpected behaviour might result from both – bugs and the user's disability to guess the function right.

The lack of a button that guides you from a slide back to its playlist's oversight is indicative for this kind of issue.

6.5 Search

Search is an essential tool on the SlideWiki platform to help users and groups find each other's content as well as to discover completely new stuff. The intended aim should be for users to find content by searching for random keywords they are interested in as well as finding determined content without problems.

The Search facility has many flaws. The general search offers several fields for faceted search but the results are discouraging (issues #52 = SWAQ-940, #60 = SWAQ-941).

Another intention relating to entities that isn't fulfilled is searching after playlists, which is not possible yet. Playlists should be displayed in search results and they should be added as search entity to find e.g. all decks relating to one lecture series (issue #46 = SWAQ-917).

The search to attach a deck or slide offers plenty of variations of decks or slides (formerly forked) where it is almost impossible to navigate to the desired place, since all they look similar (#49 = SWAQ-920). For "My decks" there is no faceted search at all, for "from SlideWiki" there a faceted search exists (search fields "language" and "user") but no way further to shrink the search space nor to sort the output by any principle (e.g., by creation date or last update).

A general problem seems to be that the platform is partly littered with test slides and decks or spam. We found no concepts of quality assurance as, e.g., a competent editorial team that cares about such problems (#60 = SWIK-2403).

The search facility looks old fashioned and hard coded: The developers decide what may be of interest to the users. What about semantic search? In more detail: We propose a RDF based semantic search API to the catalogue of decks, slides and playlists. There should be a deck ontology that an experienced user can use to implement her own search based on a SPARQL endpoint provided by the SlideWiki platform (issue #61 = SWAQ-942).

For improving user's unpurposed fluctuation on yet unknown content (and improving further search engagement), it would be nice if recently published decks, that have gone through an at least rudimentary quality check (issue #60 = SWIK-2403), were displayed on SlideWiki's main page instead of the static display of three featured, years old presentations (issue #76 = SWAQ-971).

6.5.1 Tags

Tags are a good possibility to ensure an easy search for random and as well particular content (see above, section "search). We suggest to promote the usage of tags by displaying it more offensive to creators of slides: To point users to the tag function, tags should be possibly added immediately while uploading or creating slides, next to the description section (issue #30 = SWAQ-864).

Furthermore, there is no possibility to tag a bundle of decks, like for instance decks of a lecture session. Neither is it possible to tag a whole playlist (issue #71 = SWAQ-966). This would be an important function, e.g. to improve the results of search querys (see search issues above).

6.6 Contribution and Collaboration

Since contribution and collaboration are central aspect of the SlideWiki platform, the different functions of e.g. sharing, creating and improving slides together should be uncomplicated and easy. So far many of the existing collaboration tools seem to work quite well (within the general deficits of the collaborative design of the platform as discussed above).

Still, fixing the following contribution and collaboration issues might improve the function of the whole site.

6.6.1 Collaboration

In contrast to the contribution issues described below, collaboration issues concentrate on reusing and sharing slides and decks. A central point is the usage of themes:

Users should be able to change the themes of single slides as well as a deck's theme (issue #29 = SWAQ-863).

Users should be asked to save the original theme of their presentation (issue #28 = SWAQ-862), although they might prefer to use another theme from the SlideWiki platform.

Such improvements could help that slides and presentations can be reused easier, for instance in case of a branding on a presentation's original theme.

6.6.2 Group Management

The organisation of users in separated groups on the platform is SlideWiki's central way to manage the collaboration of users and their contribution to presentations. As explained above this group management is in a very raw state yet.

We propose various improvements for the platform's future group management and its benefits for e.g. educational institutions:

The user's page "groups" for instance only allows to exit or to delete groups and memberships (admins only). It would be desirable to have a news feed for each group that displays group activities depending on the contribution and collaboration in the group (issue #21 = SWAQ-899).

Furthermore, a function that allows to show or share slides to the group activity news feed and allows as well to give the whole group an invitation to contribute by one click could gain advantages in the platform's group management (issue #22 = SWAQ-912).

6.6.3 Contribution

Contribution Management labels all cases of problems that refer to co-working on presentations. As a matter of practical routine, contribution to slides and decks should be designed comfortable. In due consideration of interests coming up while contributing, we noticed the following issues:

Sharing decks (e.g. with a group) and contributing to them isn't possible if they are unlisted. It would be very expedient to give users (e.g. as member of one group) the opportunity to contribute to a deck before it is published (issue #34 = SWAQ-883).

To extend the opportunities to contribute on a presentation, we suggest to manage contributions as well via the social bar and via link (see also the section "Sharing / Social Bar" in the text below and the issues #22 = SWAQ-912, #39 = SWAQ-911 and #40 = SWAQ-910).

6.6.4 Sharing / Social Bar

Thanks to the social bar, users can share, spread and send their SlideWiki presentations with one click only to other platforms like Twitter or via their mail software. Because of its simple function, the social bar surely enhances rates of sharing presentations and this way the rates of collaboration. We noticed three possible improvements to enrich the social bar:

It could contain a button for sharing it directly to group members - whether to point them on a presentation or to invite them to contribute (see issue #22 = SWAQ-912).

Furthermore, there should be a "share via link" option in context of the social bar (issue #39 = SWAQ-911).

Last but not least, it might be a good idea to be able to invite (unregistered or registered) users via link and/or via the social bar to contribute to a presentation (issue #40 = SWAQ-910).

6.7 Presentation Modes

Beside SlideWiki's contribution, collaboration and sharing aspects, presenting live is one of its main features. Presenting live on SlideWiki should be smooth and easy. Last but not least, SlideWiki-based live presentations towards audiences spread and promote the platform's existence and ideas.

6.7.1 Browser-based Presentation

Casually, the first Slide of a deck isn't displayed correctly in presentation mode. There are some ways to achieve a correct display for experienced users. But in general, this unexpected behavoiur makes the presentation mode untrustworthy – at least for 'important' presentations (issue #68 = SWAQ-961).

Casually, there are problems due to slide navigation during a live presentation: While navigating between slides, it wasn't possible to go through the presentation via arrow keys. In this cases, the presenter has to use the 'next slide' element (issue #8 = SWIK-2271).

6.7.2 Presentation Room

The presentation room is a nice feature to give live presentations location-independent. This feature doesn't work without giving access to the microphone. We couldn't start the presentation room since there's a defect note "Missing microphone" that comes up again and again after the automatic browser refreshment even if the microphone is available. Since there are presentations that might not need an audioscript, it would make sense to enable presentation rooms without audioscript that still allow the other tools for users participation and dialogue (issue #74 = SWAQ-969).

6.8 Tutorials and Help System

SlideWiki uses many "hidden concepts" (e.g., the decision not to allow decks to be deleted). The link "Learn more about SlideWiki" leads to the page https://slidewiki.org/discover that contains a very short summary about the functionality. A small link at the very end of that page leads to the "Help file deck" https://stable.slidewiki.org/deck/10467.

This "help file deck" explains mainly navigational points and covers only deck and slide related problems. No information about collaboration scenarios is given. The slideshow of this deck has several display problems (pictures over text, text outside the displayed area). Moreover it seems that actual changes within SlideWiki are propagated to the help deck only on a casual base.

In the current release another link "Guides and Help" was added to the SlideWiki footer that points to a playlist with five decks. We found no comprehensible explanation about the (obviously yet planned) structure of the SlideWiki Help System.

A more elaborated tutorial with explanations also about the concepts behind SlideWiki would be *very* helpful. Also a description of the SlideWiki social process similar to Wikipedia:About as it is linked in the footer of the (english) Wikipedia would help the target audience better to understand the SlideWiki organizational principles.

6.9 Feature Requests

In the first sections we focused on problems we discovered using the platform. During this process we also imagined some features that would improve the use of the website. In the following we describe these features. We explain briefly their usefullness and how we think they would fit into the platform.

6.9.1 Theme library

Importing and creating presentation the user can already choose from many different themes. In our point of view, it would be a useful asset to the existing themes, if the users could create themes themselves. Especially regarding the problem that some parts of the original theme - for example the heading – sometimes doesn't get imported with the rest of the content, this feature would make it easier to produce homogeneous slides. Additionally, once created the user could also share the theme with groups etc.

A theme library could also enable to get easily rid of e.g. branded themes. If users would like to do so now, they must download and re-upload slides / decks. On the other hand, if users don't want to copy but cite (for instance an academic authority), they can use the original theme for offering a transparent citation of a special slide to their audition, whether the creator of the original slide chose another theme for presenting it on SlideWiki or not.

6.9.2 Deleting Decks

An essential feature for working with decks is the ability to remove them. Currently it is only possible to mark existing slides as "unlisted", but as mentioned before they are still reachable afterwards. Therefore, it is very important to be able to delete whole decks. This supports a clean and intuitive work especially for new and inexperienced users.

6.9.3 LaTeX

Currently it is only possible to upload files from .pptx or .odp. Especially in terms of increasing the reach of the platform it is pleasant to offer other formats such as .tex from LaTeX beamer. Especially for the academic field it has a range of attractive features thru the possibility to use a whole bunch of different packages, such as for the creation of mathematical equations.

6.9.4 Contribution Options

Contribution is a central function of SlideWiki. For ambitious users and user groups, it would be much more comfortable to contribute to unlisted decks, too – not only to published ones.

6.9.5 Enrichment of the Social Bar

The social bar could be enriched by an additional button that offers a direct link to the presentation, slide or deck. Further, there should be a social button for sharing slides via SlideWiki itself, for instance, with a contributor or with a group – maybe SlideWiki's own social button could find its way to other platforms, e.g. if a user wants to point to a contributor on external content?

Users just might expect such sharing functions like the ones described above by opening the social bar. Because of their simplicity, this functions could enhance as well the collaboration and sharing rate - especially between unexperienced users.

6.9.6 Malware detection

The SlideWiki platform should guarantee a safe usage to its users. Since there were malware alerts by antivirus software (e.g. Avira) after opening some decks in presentation mode (#37 = SWAQ-893), we suggest a general malware detection right after the upload of slides. This ensures each uploader that this won't happen mistakenly with his or her presentation, as well as it ensures consumers, contributors and collaborators that the material and content are safe to use.

6.9.7 RDF Based Search API

We propose not only to provide a very old fashioned hard coded search facility where the developers decide what may be of interest to the users, but also a true semantic search.

In more detail: We propose to develop a RDF based semantic search API to the catalogue of decks and/or slides, opening the deck ontology to the public such that an (experienced) user could implement her own search based on a SPARQL endpoint provided by the SlideWiki platform.

6.10 Promotion Ideas

6.10.1 Analytics

There aren't any open analytics yet. At least optional group analytics for tracking, e.g., development in contribution might be very easy to offer. Beside that, there could be slide, deck, playlist analytics (and so on) that enable users to optimize their content and the metadata of their content. On top, user's profile analytics (for single users and in comparison to all users of the platform) could give an impressive insight to the platform's community and its success.

Freemium publishing platforms or browser-based presentation platforms like e.g. Prezi charge a load of money for insight through analytics. Offering analytics functions could be a really successfull unique feature for SlideWiki.

6.10.2 Wikipedia articles

We noticed that there's a Wikipedia Article about SlideWiki in English. There should be more availabe in various languages – think of student's or journalists research and remember the backlinks, of course!

6.10.3 App

A very simple app that enables users to open slides on their mobile device might pave the way for setting unique user features.

Users could be given the opportunity to carry on their presentations with themselves on their devices. That means that they can use (and promote) it in face-to-face situations.

In comparison to the SlideWiki platform, the app should be rather focused on improving offline communication situations than on platform collaboration and online contribution to presentations.

For the beginning, the app could just be used as a mobile device viewer for SlideWiki presentations. An optional download of presentations for in-app offline usage allows a variety of beneficial practices.

The next step in developing this app could be to improve the users' conditions of presenting by offering to them a simple-based but powerful tool, that meets current demands. [<– The root of this idea was sprousing in a team member's positive memories on his old Sony Erricson mobile phone with the cool characteristics, that he had been using it as a remote control for his presentations.]

The app could allow users to give a presentation with the help of their mobile devices, from which they can manage discretely and simultaneously both: Operating the slides and having a look on speaker notes. This function should contain a speakers mode for the mobile device and a viewers mode for the screen.

All in all, a SlideWiki app could meet current demands by unifying several media's functions in one device and would meanwhile derogate the amount of systems needed for presenting.

7 Trial Readjustment

In order to still be able to evaluate the platform with and through students, we decided to create a project seminar, as an additional format to recruit some student testers, and to design and evaluate mock-tryouts of the functionality originally planned for the seminar (i.e. trials C1, S1, S2, E1, G1 and P2), and to assist in the general platform evaluation. Through this special format, we strive to address the trials mentioned in the tender despite the technical unfitness of the platform.

In order to account for this, the trials were concentrated so far on the following topics in our proposal:

- **C1**: Migrating existing lecture slides to SlideWiki
- **S1**: Collecting and evaluating feedback regarding the search function of SlideWiki
- **S2**: Evaluation of the accessibility / findability of the migrated slides within SlideWiki
- **E1**: Evaluation of user engagement in the slides and discussions
- **G1**: Evaluation of organizational approaches of groups
- **P2**: Evaluation of user profiles

In the second phase of our trial we plan to focus on the following topics:

- **C1**: Migrating more existing lecture slides to SlideWiki
- **T1**: Translating selected (sub-)decks of the migrated material into other languages
- **T2**: Evaluation of the semi-automatic translation capability of SlideWiki
- **T2a**: Evaluation of the multi-language concept of SlideWiki
- **S3**: Testing of specific search queries, strategies and terms
- **G2**: Evaluation of how well (synchronized) multi-lingual decks work