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aWall: Collaboration Support for Agile Retrospectives

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Abstract

This is a problem as it means either product teams have to either be co-located or have to be all parts of agile meetings using a third party meeting tool such as Skype. Integrating an agile retrospective method within aWall will allow users to do all agile meetings within one online agile tool.

Acknowledgments

Any acknowledgments should go in here, between the title page and the table of contents. The acknowledgments do not form a proper chapter, and so don't get a number or appear in the table of contents.

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Chapter 1

Introduction

1.1 The Problem

The objective of this project is to create a prototype application that will be used to support agile team retrospective meetings. This project is part of the aWall software project run by Dr. Craig Anslow and Professor Martin Kropp of FHNW in Switzerland.

The outcome of this project, is to build a software web system to help facilitate agile retrospective meetings using a large touch screen as an output for the software. Once this software has been built, an evaluation with users will occur to evaluate and improve on the software project. The current aWall project can be found here: `https://www.youtube.com/watch?v=fzCnjnpRiTI`

Figure 1.1: Project aWall - digital agile cardwall being used

1.2 Overview of Research Project

This project will be building off this current prototype but within its own project scope and no integration between the two codebases.

This software prototype is split into three different components:

- **Participant System:** The participant system is used for the participants to interact within the system, it is an application that will allow the participant to vote and make notes about the retrospective and directly interact with what is happening on the screen and within the retrospective. All the interactions from this system get send and stored within the database housed within the server. This system will be housed on a participants phone with a connection to the server through a socket.
- **Screen System:** The screen system is an application that the moderator of the retrospective interacts with, it allows the moderator to display and manipulate the data passed from the server that the participants have given. This system will be used on the touch screen with a connection to the server through a socket.
- **Server:** The server houses all the data storage and manipulation for the overall software system. It also houses the socket system allowing for real-time updates between the participant and screen systems. It allows the storage of data for later use in later iterations of the projects lifecycle, e.g. a later agile retrospective.

Within this prototype there will be different versions of agile retrospectives that the user can choose. The different retrospectives that were chosen were from my personal industry experience with agile and from academic literature [**?**] [**?**], these different types of retrospective are:

- The 3W's/Mad, Sad and Glad
- Timeline
- Brainstorm/Filtering
- Short Subjects

Each of these retrospective methods will be able to be selected from the screen system within the software application when creating a retrospective session. To accompany each of these retrospective methods, there will also be short sections before and after the main method, it allows for the setting of the scene within the retrospective and to wrap up the retrospective also.

The methods that I have chosen for this are: [**?**]

- **Setting the scene:** Check-in
- **Wrapping-up:** +/- or Delta

Using each of these four methods, I will be able to evaluate the best retrospective method through testing with users.

Chapter 2

Some LaTeX hints and tips

LaTeX is a very good tool for producing well-structured documents carefully. It is very bad tool for banging things together in a rush and panic.

2.1 Floats

One perennial problem with LaTeX is its treatment of *floats*. Suppose you have a figure or table which you want to include in your document. Where should it go? Traditional typesetting practice is to put these in some convenient place, such as the top or bottom of the current or next page, or at the end of the section or chapter. LaTeX adopts a similar strategy, and allows floats to "float" away from where they were defined. You can give a hint about where you want the figure, but LaTeX may move it. Sometimes this is fine but sometimes you may want to have more control and insist that a float goes *here*. Anselm Lingau's float package gives you this flexibility. For example, the following figure is an example of a non-floating float:

δ	a	b	Λ
S_1	$\{\}$	$\{\}$	$\{S_2, S_5, S_{10}\}$
S_2	$\{S_3\}$	$\{\}$	$\{\}$
S_3	$\{S_4\}$	$\{\}$	$\{\}$
S_4	$\{S_3\}$	$\{\}$	$\{\}$
S_5	$\{\}$	$\{S_6\}$	$\{\}$
S_6	$\{\}$	$\{S_7\}$	$\{S_8\}$
S_7	$\{S_6\}$	$\{\}$	$\{\}$
S_8	$\{S_9\}$	$\{\}$	$\{\}$
S_9	$\{\}$	$\{S_8\}$	$\{\}$
S_{10}	$\{S_{11}\}$	$\{\}$	$\{\}$
S_{11}	$\{\}$	$\{S_{10}\}$	$\{\}$

Figure 2.1: The transition function of an NFA with Λ transitions

On the other hand, Figure 2.2 is a floating float.

You can define different types of new floats, and you can have tables of them in the contents pages.

δ''	a	b
T_1	T_2	T_3
T_2	T_4	T_5
T_3	T_6	T_7
T_4	T_8	
T_5	T_{10}	
T_6		T_{11}
T_7	T_3	
T_8	T_4	
T_{10}		T_5
T_{11}	T_6	

Figure 2.2: The transition function of an FA to accept the same language.

2.2 URL's

Use `\url` from the url package to typeset URL's. Just using `\texttt` or `\tt` does not work:

- `\texttt{http://www.mcs.vuw.ac.nz/~neil/}`
- `\url{http://www.mcs.vuw.ac.nz/~neil/}`

Give:

- http://www.mcs.vuw.ac.nz/ neil/
- http://www.mcs.vuw.ac.nz/~neil/

If you use the hyperref package then you can produce PDF files with clickable hyperlinks using `\url`.

2.3 Graphics and LaTeX

LaTeX offers rather poor support for the inclusion of graphics. There are lots of ways to include pictorial material in LaTeX, all of which are deficient in some way or other. Look at [5] for a description of them. If your document does need to have pictures in it it is worth thinking about what is needed *before* you generate the pictures.

2.4 The bibliography

You should build up your bibliography as you go along. Trying to get the details of the bibliography correct at the end of the project is hard work. Make sure that you record all the relevant details. Beware that material on the internet is likely to change very rapidly. If you are going to include material which is only available on the internet, then you should probably include in the reference the date on which you obtained the document.

2.5 Run LaTeX, run

LaTeX builds up information about your document for the table of contents, references and so on at each run. This means that, for example, the table of contents is really the table of

contents of the previous compilation. You may need to run LaTeX two or three times to let it catch up with itself. If you have cross references within your bibliography (for example two papers from the same collection, such as [2, 3]) you may need to run BibTeX more than once.

It is also possible that the table of contents file has garbage in it, and will prevent the document from being compiled. This may happen if you have had to abort compilation, due to a bug in the source file. If this is the case then removing the `.toc` file will usually solve the problem. You will have to fix the original bug, of course.

2.6 Find out more by...

You can find out more by:

- reading any one of a number of books, such as [4, 6]. The VUW library has copies of these;
- visiting the Comprehensive TeX Archive Network (CTAN) at `www.ctan.org`;
- typing `latex` into Google.

It is *highly unlikely* that you are the first person who ever wanted to do what you want to do with LaTeX. Therefore it is likely that someone has already solved your problem: the real key to using LaTeX well is to make effective use of what other people have done.

2.7 Summary

In this chapter we explained some things about LaTeX.

Chapter 3

Proposal Review

A review of the proposal that was submitting has found that the plan for the project has had to be re-evaluated in terms of its project time line.

3.1 Changes

The changes to the project are as follows:

- **Time:** The initial timeline of the project was to have nearly all development finished by the middle of June, this goal is now unreachable, so a new timeline has been put in place. The development on the prototype will now be finished by the 27th July. This doesn't affect the rest of the timeline planned for the second trimester of work as that was planned to start in August of 2018.

Chapter 4

Work Done

LaTeX is a very good tool for producing well-structured documents carefully. It is very bad tool for banging things together in a rush and panic.

4.1 Floats

Chapter 5

Future Work

This chapter gives an introduction to the project report.

In Chapter **??** we explain how to use this document, and the `vuwproject` style. In Chapter 2 we say some things about LaTeX, and in Chapter **??** we give our conclusions.

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