Team Organisation PAM3
Mobile Hardware Sampler

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1 Specified rules and techniques

In order to keep a decent project structure and organisation we decided on the following:

- Using a platform to keep an overview over the whole project, individual tasks and time everyone spent working on them
- Structuring the project into the following parts and preliminary subtasks

project part	**people**	**subtasks**
MIDI and MIDI circuit	Lena, David	soldering and testing MIDI plug/circuit
Audio	Lucas, Dennis	reading/writing from/to RAM and flash storage, playback
Display	Alex, Dennis	display controls and user interface

Table 1: first project structure

- First early draft/ideas on how to put things together (fig. 1 and 2)

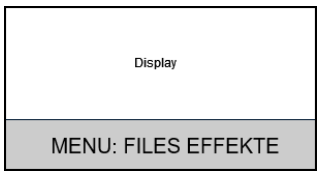

Figure 1: display draft

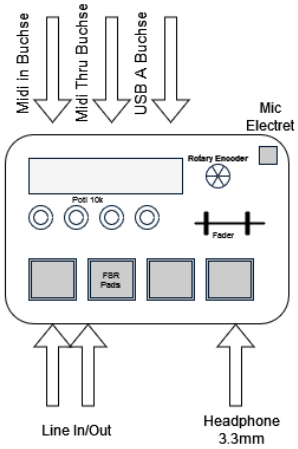

Figure 2: First draft

2 Things that are still unclear

2.1 Documentstyle

Are there any specific requirements for the documents that are to be uploaded in ILIAS? Do they have to fit a specific formatting, do they all have to be equally formatted and match some style guide?

2.2 Order of hardware parts

This will hopefully be discussed in another meeting with Mr. Reiter but there have been some problems in finding the parts at the given stores as well as some considerations on how to split the order in order to keep the costs low.

3 Problems

Most problems will come with further progress of the project. For now the biggest challenge we face is to get the signal processing and computing performance of the teensy right.

Furthermore the challenge will be to design a proper interface (in terms of what the display shows and how to place and assign the buttons) and to make a basic version of the sampler work as described in stage 1 of our project goals.

4 Possible approaches to solve them

In order to balance signal processing and computing load of the teensy we will test different approaches of parallel programming with the multithreading library of the teensy.

The people working on the display will examine the possibilities we have depending on the hardware parts

and in particular the display size. The other subgroups will work on making the midi interface work and handling data flow and playback on the teensy chip accordingly.