Exploration
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out of control

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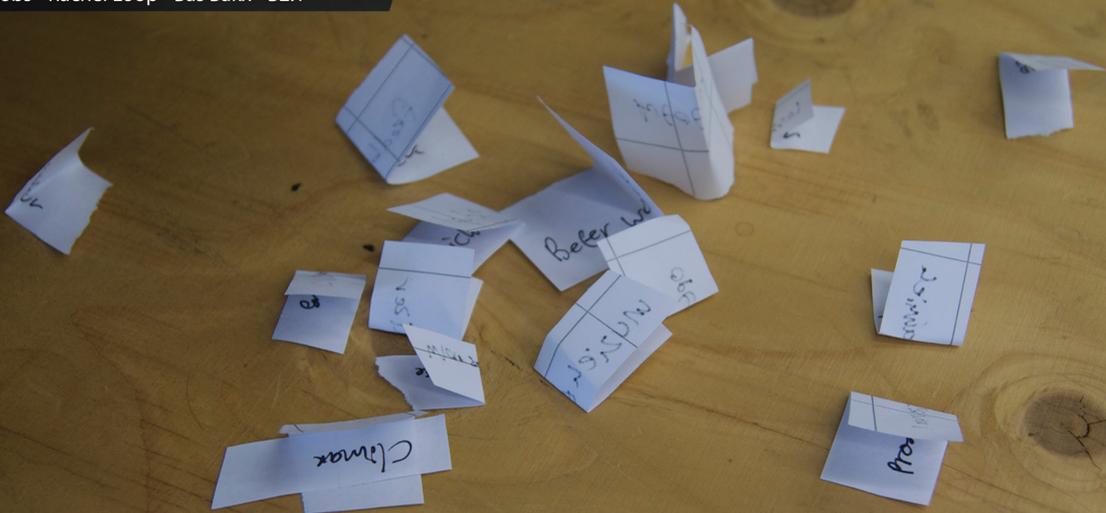
ABSTRACT

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora incidunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi consequatur? Quis autem vel eum iure reprehenderit qui in ea voluptate velit esse quam nihil molestiae consequatur, vel illum qui dolorem eum fugiat quo voluptas nulla pariatur? At vero eos et accusamus et iusto odio dignissimos ducimus qui blanditiis praesentium voluptatum deleniti atque corrupti quos dolores et quas molestias excepturi sint occaecati cupiditate non provident, similique sunt in culpa qui officia deserunt mollitia animi, id est laborum et dolorum fuga. Et harum quidem rerum facilis est et expedita distinctio. Nam libero tempore, cum soluta nobis est eligendi optio cumque nihil impedit quo minus id quod maxime placeat facere

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INTRODUCTION

The project "Group Music Improvisation System" in the out of control theme is about designing a system that lets multiple people improvise music together.

Musical improvisation is generally a group of people, each of whom is playing his instrument individually. The communication within this improvisation is only done by the people.

Musicians can look and nod to others to indicate musical changes, but they can not use their instrument to influence each other.

With this project that should be changed. The challenge is to create a musical system in which the components are able to communicate with each other and thus let people influence each other's musical improvisation.

At the end of the project all prototypes of the students in this project should somehow be connected and interact with each other.

An example of an existing musical improvisation system is the keyboards that are currently on the market, that can play musical accompaniment when you're playing, but that's not advanced, nor can it really communicate with other devices.

DESIGN BRIEF

The project "Group Music Improvisation System" in the out of control theme is about designing a system that lets multiple people improvise music together.
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The goal of this.. :
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Currently there are a lot of different music improvisation systems, and all are very different, but there are no improvisation systems for groups on the market yet.

EXPLORATION

BRAINSTORM METHODS

The brainstorm at the start of the project was divided into three sub-brainstorms. To improve the yield and productivity of the brainstorms we spread them out over three days, one brainstorm a day. The rest of the days were used to elaborate on the ideas of that day.

FIRST BRAINSTORM
In the first brainstorm words that have to do with music were written down one by one, filling up an entire sheet. Afterwards all members recieved groups of 5 words. An idea had to be conjured of these words and they should all be included in the explanation.

SECOND BRAINSTORM
The second brainstorm was held in a MCDonalds. Every individual drew scenarios that not necessarily had to do with music. These scenarios were then, using the individual vision of all group members, transformed into musical products that fit the project description

THIRD BRAINSTORM
For the third brainstorm we went outside, to "De Koe". We brought some paper and some arbitrary contexts to think in, like: animals in music, old people, blurring the lines between professionals and amateurs, etc.When an idea was invented all rules were off and they were discussed to become ideas that fit the project description.
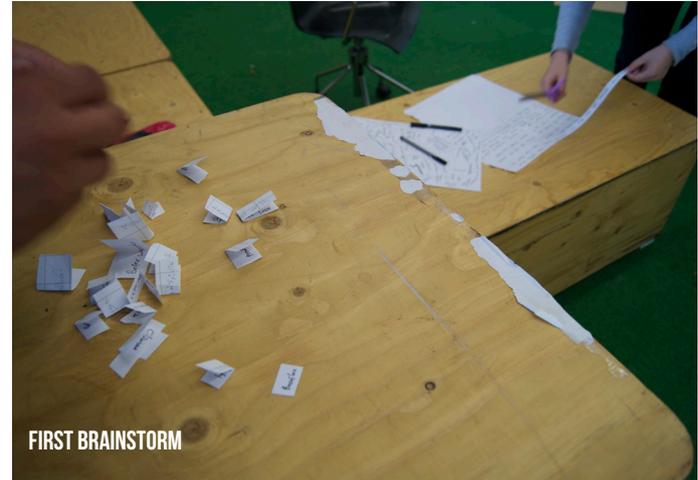
FIRST BRAINSTORM
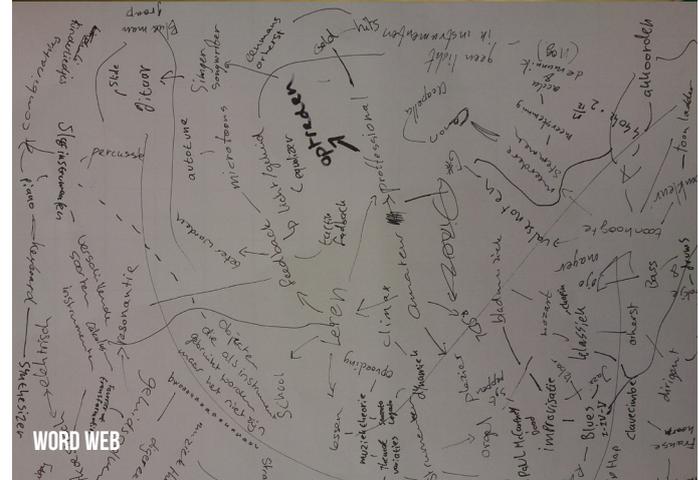
WORD WEB

BRAINSTORM IDEAS

brainstorms diverged

The brainstorm sessions helped to diverge from the research question. In this way many ideas were generated. Some of them had a relation to the research question and some not. By narrowing the ideas 30 ideas were generated. As a group we discussed every idea, we discussed the positive and negative points of each idea. This was a stage of converging ideas. The ideas were straight and to the point.[1]

The next step was diverging from these 30 ideas. Discussing the essence of each idea helped to see what concepts were created during the brainstorms. These concepts were used to generate 'new' ideas based on the old ideas. The concepts were roughly:

Creating music with the movement of peoples body
Creating music by letting people cooperate with each other

We had only experienced the ideas on paper and in our thoughts. To get a clearer view on several ideas and to generate new insights we started experimenting.
The first experiment was about projecting on water and air bubbles in water. A projector was placed in front of a box filled with water. Images from nature (with a wide range of bright colours) were projected on the water. After that a pipe was used to blow air bubbles in the box of water. No clear image was formed on the air bubbles. A whole new insight grab our attention; Whenever the box with water was pushed

1. See Appendix 3.2

the water started to making waves. These waves refracted the light of the projection, which resulted in a pattern of bright organic lines. (pictures) The insight was to use sound waves instead of water waves to visualize sound.

The second experiment was to test the concept: combine music. Multiple people walking by played a piece of music. The pieces were put after each other and played. In this way a piece of music was made by multiple different people on different times. Stickers were used to indicate pentatonic tones on a keyboard. In this way a piece of music will 'sound' no matter in which order you play the different tones.

Some ideas still had a overlap, the ideas were combined until 8 new ideas were created.
The 8 ideas were (elaborated versions are in the appendices):

Musical dance floor
Full body music

Animal music
Looping machine

Musical balls
Bubbles in water

Combined music by people who pass by
Multiple people playing on one instrument

The ideas were still a bit vague. We randomly divided the ideas. Each person in the team had to elaborate 2 ideas into detail and or create a scenario. This converging stage was necessary due to our planning. The demo days were coming closer and we had to present something to receive feedback.

8 Ideas were generated.[2]

ANIMAL MUSIC

MUSIC BALLS AND LOOPING MACHINE
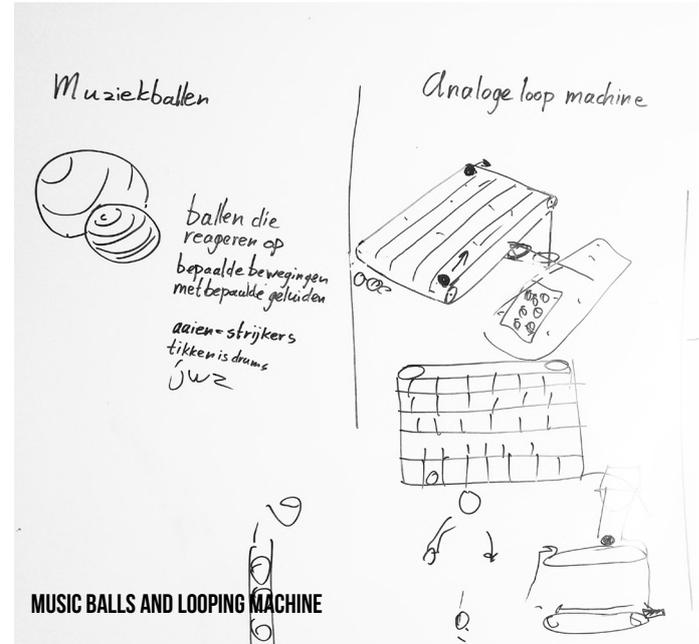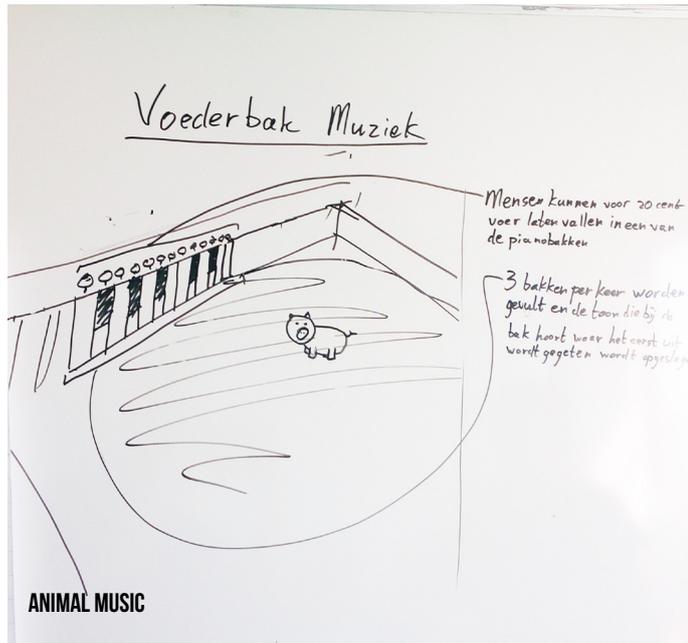
2. See Appendix 3.2B

FINAL CONCEPTS

After elaborating the concepts that were left, it had to be narrowed down to one concept. By a group discussion the concepts were ruled out one by one until only three concepts were left. The decisions were based on whether the concepts fitted the project description.

The full body music concept got excluded because it was considered superficial and already existed thus the possibilities were limited. None of the team members were interested in the concept of more people playing on one big instrument, this is already possible and it is not innovative or challenging. The musical dancefloor and combined music by people who pass by were crossed of the list because there was a possibility that the users would quickly get bored after using it a few times. The bubbles in water concept was too much influenced, there was not enough control for the user to steer the music in a certain direction.

So there were three concepts left, the musical balls, the loopmachine and musical animals. The musical animals concept went through on condition that a client could be found. Bart and Bas started working on the concept of the loopmachine, and Willem and Rachel on the concept of the musical balls and all together the animal concept would be worked out. But eventually everyone was so caught up in the work that the animal music got left out.

After working out the concepts to a further extend, the decision was made that the group would split up and Bart and Bas formed a group which worked on the loop machine, and Willem and Rachel formed a group that worked on the musical balls. This decision took place because there was a diversity in interests.