### One-pager Group 1 Final Approach

Your one-pager needs to answer the following questions:

* What elements (technical and user experience) make a chain reaction a chain reaction?
* What elements (technical and user experience) make an incredible machine an incredible machine?
* What is the value proposition of your product?

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| Chain reaction / The incredible Machine | |
| General description:  (what elements are commonly used) | The most popular Chain Reaction type is the Rube Goldberg Machine, where you accomplish a simple task using a massive variety of items. Rubegoldberg.com(n.d.) Taking out of the way and non-obvious routes to achieve something is very important. One thing needs to trigger the next thing, which triggers the next thing, etc, until you finally use this massive chain to arrive at your (usually stupidly simple) conclusion. |
| Technical elements:  (What techniques are necessary to create this) | You need a lot of random parts and motions to push, pull, throw, hit, etc things around until it finally reaches the end. Strong forces are very important for this. |
| User experience related elements: | Often these machines make a lot of noise and include very satisfying things, but usually it shouldn’t be immediately obvious how the machine actually ends up working as kind of a puzzle/surprise. |
| What is feasible considering the team’s skills | Mostly physics-based chain reactions, we don’t have a lot of mechanical and electrical skills. |

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| The incredible Machine | |
| General description:  (what elements are commonly used) | The Incredible Machine is basically a Rube Goldberg machine simulator/puzzler, according to Wikipedia(2019) it shares most of the elements, with the most important part being the physics-based puzzles where you can place parts and create your own puzzles. |
| Technical elements:  (What techniques are necessary to create this) | Physics and being able to place parts that affect the puzzles/contraptions. |
| User experience related elements: | A nice UI to be able to place objects, It needs to be clear what the objects are supposed to be and the physics at least need to appear real. |
| What is feasible considering the team’s skills | With our engineer there’s a lot of things we can do, but within a two-week time constraint basic physics(Such as gravity, air flow) as well as some more advanced stuff like magnetism and ropes are possible. There’s also the opportunity for good and satisfying player interaction. |

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| Value proposition | |
| Our project is a fun experience for kids to see a fascinating chain-reaction which continues into a fun little game where they use physics to solve a simple puzzle. After the puzzle an awesome robot rolls out ready for shipment! | |
| Analyse your Chain reaction / The incredible Machine | |
| functional values: | Have children learn about physics |
| emotional values: | Inspiration for young engineers to be |
| Summarize your value proposition in one sentence: | Have fun while making a robot! |

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| Inspiration analysis | |
| Look for inspiration for the chain reaction and the incredible machine | |
| chain reaction 1 | <https://www.youtube.com/watch?v=nORRgU8sGdE> |
| chain reaction 2 | <https://www.youtube.com/watch?v=Av07QiqmsoA> |
| chain reaction 3 | <https://www.youtube.com/watch?v=0lz8_aaKNXA> |
| chain reaction 4 | <https://www.youtube.com/watch?v=RBOqfLVCDv8> |
| chain reaction 5 | <https://www.youtube.com/watch?v=QmOxqhEuBUM> |
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| the incredible machine 1 | Eve from Wall-e, especially the friendly and cute robot together with the general grunge aspects from Wall-e are inspiration for the physical/digital parts. |
| the incredible machine 2 | <https://store.steampowered.com/app/241240/Contraption_Maker/> |
| the incredible machine 3 | <https://en.wikipedia.org/wiki/The_Incredible_Machine_(series)> |
| the incredible machine 4 | Kids toys in general, especially the big shapes and bright colours. |
| the incredible machine 5 | Factory aesthetics, the machines and the metal as well as the common colours used there. |
| Most of the gameplay is taken from the Incredible Machine, with a focus on simplicity and obvious simple shapes and colours that you often see in kid’s games. A more simplified kid-friendly version of a real factory, really. | |

Literature List:

Rubegoldberg.com (n.d.). All about Rube Goldberg Machine contests. Accessed on May 7 2019, from <https://www.rubegoldberg.com/all-about-rube-goldberg-machine-contests/>

The Incredible Machine(Series). (n.d.). In *Wikipedia*. Accessed on May 7 2019, from <https://en.wikipedia.org/wiki/The_Incredible_Machine_(series)>