

Reading guide

Glowie was shining

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Study-route: ICT & Media Design

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Graduating in:	ICT & Media Design
Project period Glowie:	27-08-2018 to 22-11-2018
Project period Meeting rooms:	17-12-2018 to 25-01-2019
Total internship period:	27-08-2018 to 25-01-2019
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The company

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1. The assignment

Company

[Greenhouse Group](#) is the umbrella organization of five innovative and trendsetting digital marketing agencies. Those are; We are Blossom, Bluemango, PubNXT, Fresh Fruit Digital and LemonPi. Within the Greenhouse Group, there's the Labs department. Labs is the creative and innovative department, which has the goal to keep the company at the frontline of the digital landscape. Labs undertakes experimental and innovative projects, for example Blockchain and video AI. My project is one of these; a conversational project called Glowie. Glowie is a chatbot and was aiming to perform on Glow 2018. In the last weeks of my assignment I'm building the project Meeting rooms individual.

Issue

Glowie was an experimental project, based on conversational technique. Greenhouse Group was asked to perform with an installation on Glow in 2018. This request was turned into an experimental project to build an installation around this technique, and which needed an eye-catching overall design. The main goal was to impress the crowd of Glow 2018. The second goal was to let the visitors of the Glowie project get a positive experience of talking with a chatbot.

Target audience

The primary audience for the Glowie project is the visitor of Glow. This audience include a very wide range of people. This type of audience wants to be impressed and experience a great show free of charge, which is a bit compared to the shows in the Efteling. This year, the Chinese delegation is also included in the target audience, which have to be approached with different tactics.

Assignment

Greenhouse Group has got the opportunity to perform on Glow Eindhoven in 2018 with their own project. The project was started to make people more familiar with voice recognition technology. When I joined the project, the project only existed in a conceptual form. It was already decided that a chatbot would be on the inside, where a user can conversate with and talk about their feelings, while the outside of the installation would be covered with LED-screens showing relevant visuals of what's happening on the inside. All other aspects of the project would be decided by the team as the project progresses.

My assignment is to create visuals to express what happens at the inside of the installation during a chat with a visitor, where an intimate conversation about their feelings happens. What happens on the inside will be expressed with visual art on the screens at the outside.

The main goal is to perform on Glow Eindhoven in 2018 successfully, which means that the visitors will love it.

Dependencies:

- Stakeholders: Sahara, Stakeholder X (Note: Involved with the designs)
- Greenhouse Group
- Delivery time of orders
- The team

The primary research question for this assignment is;

“What is needed for the audio/visual design for the crowd, so they will be attracted to it and getting amazed.”

2. Approach, implementation and results

Approach

At the start of the Glowie project, the team adopted the scrum process. Together, we made a [backlog](#), which was based on the knowledge of that moment. The intent was to fill this during the sprints, when new tasks were needed to accomplish the goals. I maintained a personal [planning](#) alongside the [scrum board](#) for my personal sprint goals, since I had a different field of expertise than the other team members. The backlog and the personal plan were updated every week, based on dependencies, previous results and new insights. For example, I needed to make new sketches for the design of the installation, because of delay of the screens.

Implementation and results

1. What visuals are needed to express the emotion of the user of the chatbot?

Library strategy: SCQA analysis Glowie

To understand the purpose of the Glowie project, and to get an impression of the stakeholders and the target audience, we made a [‘situation and complication’ analysis](#). Based on that, we determined the [pains and gains](#) of three separate groups: the target audience, Greenhouse Group as a whole, and the stakeholders.

Field strategy: Questionnaire and interviews

To validate the assumptions made in the “pains and gains” analysis about the target audience of Glow, I worked out a questionnaire for the new- and frequent Glow visitors. I combined the questions in one Google Form, which got 80 respondents. [The results validate](#) many of the [initial assumptions](#).

I’ve interviewed an involved member of the Greenhouse Group, to get an understanding of their interests. This interview was face-to-face. The results are documented in a [research document](#).

Field strategy: User tests

To research and validate assumptions I formed in 2 iterations user tests. [The first user test](#) was served to give direction to the designers in order to form abstract patterns for visualization of an emotion. There were 3 main emotion layers, which were; happy, sad and angry. The patterns which received unanimous results were selected for further development and research. The second user tests ([Happy and Sad](#)), ([Angry](#)) included the designs which the senior-designer has made based on the outcome of the first user test. [The results](#) indicate which emotion fits best for each of the designs.

Library + workshop strategy: Visuals

On a [“wheel of emotion”](#), which I’ve decided to use after research, I’ve placed the colors provided by Stakeholder X. Then I made a [reference guide](#), so the senior designer and I could easily locate the desired colors during decision making and implementation.

To provide the senior-designer and myself a general guideline of the use of colors, patterns and shapes, I’ve created 9 mood boards which forms this [guideline](#), based on the three main emotions; Happy, Sad and Angry, and layered with three intensities of these emotions.

The senior designer built the first visuals in After Effects, with my assistance. When the Dutch Design Week started, Stakeholder X decided that the designs needed to be overhauled. From that point I wasn’t involved with the design process anymore. This meant that on the Glow event, the outcome of the design process was not based on my research. These motion design ([Happy](#), [Sad](#) and [Angry](#))

are based on my research and is built by the senior designer, which is [shown](#) at the Dutch Design Week.

Showroom + lab strategy: DDW event

The Glowie installation was set up at the DDW event where I gathered [feedback](#) from the visitors. Iteration 1 was finished after the event. Iteration 2 started with processing [feedback](#) from the DDW.

2. What UX choices are needed that the visitor of Glowie immediately knows what he can expect?

Field strategy: Location

To obtain the best visual outcome of the installation, I've investigated the possibilities and restrictions of our [location](#) at the Heuvel. The best outcome was to hang the installation, so it could give the feeling of a floating installation. On the second hand the position of the installation had to be set. It was needed to circulate the crowd and the best visual appearance of the screens, but also for the whole installation-view so photographers get a good symmetrical image.

Workshop strategy: Brainstorm sketches and user stories

Based on the floating design, made by the senior designer, I've made several sketches to make it practical. To accomplish this, I brought up to use a Truss-system with a circle-shaped top.

To get a better understanding of how the user will experience a visit to the installation and chatbot, I've written multiple user stories in [this document](#).

Workshop strategy: Installation design

After making [several sketches](#), we've built the installation using a truss system as a base, based on the [design of the senior-designer](#). For the area on which the user experience was located, I used [36 floor mats](#), cut and arranged in a circular shape, aligned with the circle shaped truss. After [calculation](#) and taking [measurements](#), the theater cloth was cut and [placed](#) onto the truss, perfectly hiding the equipment from view. I've designed and soldered a [laser](#), using the [cardboard-technique](#).

Showroom + lab strategy: Glow event

During Glow, we had the installation set up at the Heuvel, nearby the Catharina Church. I guided the visitors towards Glowie, during which I have observed what people experienced about the installation all the time. This provided direct feedback about the target set by the team; "We want to give the visitors a great experience, where they come out the installation even happier." 70% of the visitors indicated they really liked Glowie. In addition, [Omroep Brabant included Glowie in their top 7 highlights of the Glow event](#). I've made a [schedule](#) and a [script](#) to provide the team a planning during Glow. The Glow event marked the end of iteration 2, and also the end of the Glowie project.

3. What is the best outcome of the design of Glowie, so that the user of Glowie will understand what happens?

"What is the best outcome of sound- and motion-design so that the average of the visitors of Glow will like the project?" This was the original sub question. It has been changed because of the influence of Stakeholder X, since the senior designer took over this task.

Workshop strategy: Brainstorm and sketches

To form ideas for the visual identity of Glowie the chatbot, I did do a brainstorm by research on [Pinterest](#) and making [sketches](#) where I formed design ideas, such as; a [visual appearance](#) on a screen, [light behind straws](#), [UX-shapes](#)(like a speaker, text balloon or loading icon) and ideas based on the [LED circle](#). The LED circle is chosen by the whole team. This needed a light-pattern to improve

the User experience of the chat with Glowie. To accomplish that, I made [sketches](#) of possible patterns and intensity of light. The LED circle needed a design, because the [circle](#) itself was too small in comparison with the installation. This wasn't carried out and user tested at the DDW, because the LED circle suddenly went missing. We decided to hold a brainstorm-session with the entire team to find a good visual appearance of Glowie. I formed a [requirements list](#), based on a good [User experience](#), about the must-haves and the won't-haves of the identity of Glowie, as a guide-line to the team.

Library strategy: UX-design chatbot

What UX-designs will fit the knowledge of the multi-disciplinary team about the technology behind the designs, was a question I set. From this question I formed an idea for visualization of the identity of Glowie the chatbot. I wrote a [user story guided by a mock-up](#), to [describe](#) what Glowie could look like. Together with the team, we chose to use the LED strip to visualize a light going to the center as one of the UX elements. This was combined with a lightbulb, which represented Glowie itself.

Showroom + lab + workshop strategy: Advisory report Glowie

To exchange knowledge about the decisions the whole team made, I setup an [Advisory document](#), with a perspective of a UX-designer. This document includes an [inventory list](#) of the Glowie project.

4. [What are the cultural differences in the aspect of light art between China and The Netherlands?](#)

Field strategy: Hosting the Chinese delegation

To get a better understanding of the Chinese culture, I've been to China in 2018 to learn the language. I was able to use this knowledge during this project, where I've been invited to be a connector and host of the Chinese delegation. I've visited [several meetings](#) where I was able to use my Chinese knowledge. I gave them a tour of our installation and made a [concept-movie](#). Despite that the installation didn't work properly at the time, I managed to convince them to include it in their light festival.

5. [Project Meeting rooms \(replacement for "What is the difference in \(design or color\) emotions between China and The Netherlands?"\)](#)

Library strategy: SCQA Analysis Meeting rooms

Within this assignment, a little version of the [SCQA steps](#) were needed, so it was mapped out what the [pains and gains](#) were about the meeting rooms within the company.

Library strategy: Tool research

Because RGB LEDs were used, which needed specific voltages for each color component, a specific programming language was needed. With the [JavaScript library Johnny-five](#), it wasn't possible to control these voltages.

Library + workshop strategy: Tool Arduino C

After research and experimenting with Node.js and JavaScript, the language C is chosen to control the [Adafruit RGB-LED](#) lights, because of its reliability with these lights. I've [written this code](#) in the tool Arduino. To show the full process, this [time-lapse](#) shows the progress.

Result

The result of the installation Glowie is written down in this [small Advisory report](#). Within this report, essential parts are included about what choices are made and to get an overview of all products are owned, I've included the [inventory report](#) that I managed.

3. Reflection

Judgement

At the start of the internship I've set up a project document with assignment-based head- and sub questions. I approached these questions, aimed on a new and experimental implementation. I focused on the UX-design of the whole installation. Because this was an experimental based assignment, I have put my main focus on the UX design of the installation. Because this subject had such experimental character, I noticed less on the pre-set head and sub questions, but with these questions in my mind, I worked with the DOT-framework technique. The next time I would bring the research questions to the front, so I can reflect better on these. This provides better insight of the steps I need to make as a media designer. This improvement would make that colleagues and myself see clearer what the steps are I made.

Communication

During the development of Glowie, I wrote my tasks clearly on post-its during scrum-sessions. With every daily stand-up I gave the team an update of the tasks I've done for the project. At these stand-ups I was the only designer within this multi-disciplinary team. Being the only designer in this team, I often felt mis-understanding for my type of field as a designer. The communication between me and the technical team members wasn't great because of that. Because of the loss of my mother earlier this year, I couldn't give extra strength onto this, where the problems could stay small and limited. However, I stayed calm and despite receiving disrespectful jokes I tried to make the best out of it. Although it was a very difficult period for me, I have learned a lot. It would have been better if I had told my story in the beginning of the collaboration, so co-workers could have taken this in mind. I thought I handled things right by keeping personal affairs outside, but in the end, it turned out it was better to express this. The next time I would have to deal with a heavy circumstance, I will talk about it, so I will come to different insights and can act to that. This ensures that my way of communication will stay open, which is important for a good way of collaboration.

The communication with Jo-An, my supervisor, was very clear and mainly went by mail. I made a few appointments as well to receive feedback about my progress and my portfolio. The communication with Bas was clear, especially after I had revealed what has happened in my life earlier in 2018.

The communication between me and the Glow organization was very clear, and it was a very pleasant collaboration. Along with the Glow organization, I was allowed to be a host to the Chinese delegation. This went very well. I gave the Chinese delegation a VIP-tour and I was the contact person to them whereby I by showing Glowie actively, I convinced them to let Glowie perform in China.

Learning-ability

At the end of my study ICT & Media Design, I'm able to say that my experience and skills are grown in the past 4 years. I've grown in this wide field, where User Experience is always the central point. I'm capable of making websites, set up a media campaign, carry out diverse design assignments and I'm even able to program an Arduino, which I work on in the last couple of weeks of my graduation internship and I learned to program in the language C for Arduino. During my study I had the opportunity to perform twice on Glow, where I'm very proud of, because the specific field of light art is a field where my passion lies, and I want to grow even further in that field.

Evidence

	Assessment dimension	Evidence
1	Knowledge and insight	<p>Glowie: I've made the UX-design for the installation of Glowie</p> <p>Meeting rooms: I'm building a visual system to show available meeting rooms in GHG. The short for Meeting rooms will be MR.</p>
2	Apply Knowledge and Insight	
2a	Manage	<p>Scrum: During the whole Glow project the tool was Scrum, which had sprints of one week. I made a planning and script for the Glow team during Glow.</p> <p>Tool research: After some research and testing, I chose to write in the language C for Arduino, because with this language the voltage can be controlled.</p> <p>Tool Arduino C: To control the RGB-lights with the Arduino, based on my knowledge, I wrote the software in the language C, because this is the best compatible way. I used my knowledge of C# and JavaScript and experimented a lot.</p>
2b	Analysis	<p>SCQA Analysis Glowie: I went through 2 workshops to analyze the assignment and their target group by describing the Why-How-What of the assignment and a MoSCoW-analysis.</p> <p>Questionnaire & interviews Based on Situation, Complication, Pains and Gains, I set up a questionnaire in Google Forms and interviewed Barry of Greenhouse Group.</p> <p>Project document Glowie: In the Project document I explained the initial problem and goals. With that I formed 2 main questions and several sub questions.</p> <p>SCQA Analysis Meeting rooms: In this document I clearly defined the problem. Then I analyzed and made a clear conclusion.</p> <p>Plan of approach MR: This document is for replacement of the third iteration in the Project document of Glowie. This gives me the opportunity to proof the development competences.</p> <p>User tests: To make designs which matches with the emotions of the target group and verify the outcome with the targetgroup, there were usertests needed in 2 iterations. The first user test and the second user test (Happy and Sad), (Angry), with its combined outcome.</p>
2c	Advise	<p>Emotions list: To advise the copywriter, I sorted out the emotions.</p> <p>Advisory report Glowie: To exchange my knowledge as UX-designer I wrote a short Advisory report for the next group.</p> <p>Advisory report MR: At the end of this project, I will write an Advisory report.</p>
2d	Design	<p>Brainstorm, sketches and userstories: To get insight and make problem solving decisions, I made sketches of the whole installation, including the chatbot's visualization.</p> <p>Moodboards: I've made several moodboards; Happy, Happy cosy, Happy eplosive, Expressions, Expressions & shapes and a moodboard to</p>

		<p>visualize Glowie the chatbot.</p> <p>Mock-up: To illustrate a first idea for the motion-designs, I made a first mock-up in Illustrator.</p> <p>Visuals: After research, I made a style-guide of matching colors and a style-guide for colors & shapes per emotion stadium, which is based on the color-wheel of emotions.</p> <p>UX-design chatbot: To give the user a better experience, there was a design needed to give visual feedback of the chat to the user. During a concept presentation, this design is discussed.</p> <p>Installation design: Based on the sketches and research, I've designed the floormat, truss-setup, wooden planks, theater-cloth and the laser-sensor which fitted together in a total construction.</p> <p>Image: I made photographs and took videos at the DDW and Glow to provide it to the stakeholders and the company itself.</p>
2e	Implement	<p>Meeting rooms: This project is still in process. At the moment of writing this Reading Guide, I managed to control 5 individual RGB LED lights with the intended colors Red en Green.</p>
3	Judgement	<p>Project document: In the project document I've formulated 2 research questions based on the problem with sub-questions. I made a replacement document for research question 2, which is about visualizing Meeting rooms. I also referred to the DOT-framework which I've used.</p> <p>Involving of international, social and ethical aspects: I've involved social and international aspects by researching to form visuals which represent emotions.</p>
4	Communication	<p>Sprint meetings: Every Monday my team and I gave a presentation to the company and I showed what I did do in that sprint. These meetings were based on showing the experimental work I did with the whole team and getting review from the product owners.</p> <p>Hosting the Chinese delegation: during the way to Glow and during the event, I became the host of the Chinese delegation. Because of my actions, China was very interested in our installation and we got a request to ship it to the light festival in Nanjing. Because of lack of time, we're not going to perform at the next edition of the Nanjing light festival, but the project can perform on Glow in 2019 with a 2.0 version.</p>
5	Learning ability	<p>Reflection: In a reflection (at the down-part of the webpage) I reflected on my learning moments within the assignment, IMD-domain and professional skill. I reflect on myself and describe the feedback that I received.</p>