

Portfolio

Project “Visit Berylia”

Project report:

Locked Shields is a major annual cyber defense exercise where teams collaborate to protect a fictional country, Berylia, from cyber attacks. It helps participants improve their skills in a realistic environment, enhancing teamwork and cooperation in cybersecurity. The aim of this project was to create content to help provide an immersive experience for the participants of the event. By creating content about a fictional country, Berylia, complete with online personalities, stories, videos, tweets, companies, and even a football league, the exercise is able to emulate real-world cyber defense situations more effectively by having a believable simulated environment.

For example group two had an objective using media creation tools to create specific imagery for the adware type of posts. Also creative writing and character creation. We take inspiration from other games and also from history. That content is linked with the rest of the groups who are working on similar developments in order to have connections and create even more confusion/make it more believable.

The end result would be misleading the competing teams at the NATO training exercise, creating “mayhem” among the teams to determine what information is truthful, what should be investigated, and what would indicate a direct threat and response by the teams according to the EU cybercrime legislation.

In today's interconnected world, the threat of cyber attacks is ever-present. Malicious actors continuously seek to exploit vulnerabilities in computer systems, networks, and critical infrastructure, posing significant risks to individuals, organizations, and even entire nations. The complexity and sophistication of cyber attacks require cybersecurity professionals to constantly develop and refine their skills in order to effectively mitigate these threats.

Locked Shields addresses this problem by providing a controlled environment where participants can engage in realistic cyber defense scenarios. The exercise simulates a targeted attack against a fictional country, Berylia, replicating the challenges faced by real-world defenders. The exercise encompasses various aspects of cyber defense, including network security, incident response, system administration, and strategic decision-making.

To create an immersive experience for the participants, a comprehensive approach was taken in designing the content for the exercise. The methods employed involved the development of a detailed fictional country, Berylia, complete with a rich background, online personalities, stories, videos, tweets, companies, and even a football league. This extensive content creation allows the participants to engage with a realistic and dynamic environment, mirroring the complexities of the real cyber landscape.

The present situation in Estonia - it had seen after 2007-, as well as in many other countries, is characterised by an ongoing and ever-evolving threat landscape in the field of cybersecurity. Cyber attacks targeting various sectors, including government institutions, businesses, and individuals, continue to pose significant risks to national security, economic stability, and privacy.

We do not have any additional stakeholders offering support, after speaking with our supervisor - The NATO Cooperative Cyber Defence Centre of Excellence is the only stakeholder affected by our project. Our project is designed to create materials for their wargame scenario "Locked Shields". Accordingly, we have studied their needs and expectations for us to create scenarios for them. The ownership of the project outcome belongs to the Cooperative Cyber Defence Centre of Excellence.

The work is based on the system of designing wargames and other large scale games used to examine political and social issues. Group two in their tasks have relied on information found on the European Parliament website that covers cybersecurity protocols, procedures, and also main and emerging threats.

[Cybersecurity: main and emerging threats](#); [EU Cybercrime Law Amendments](#); [Europol on Cybercrime](#); [CCDCOE: Locked Shields](#).

Project action plan:

Group two:

Pauli Nathan Jürgens - Co-team leader, content creation, media, research.

Ronald Wihhelm Rozin - Co-team leader, content creation, media, research.

Evelina Bogdanova - Further expansion/development of self-made content, linking the made content with other groups' work.

Since the beginning of the ELU project and after the first meeting - we have begun brainstorming ideas for what kind of content we would like to create and how we are going to create it. (17/FEB - 17/MAR)

(17/MAR - 17/APR) The group was collectively working on constantly brainstorming new ideas for content, creating actual content in terms of creating imagery or making written statements that are going to be used by the training program. We have not divided specific roles, but rather wish to grant the freedom for the group members to work on a variety of different solutions.

Group four:

Farid Fakharzadeh: Content creation, project management, research.

Raluca Manaila: Content creation, project management, research.

Muhammad Naguib Ahmad Kilany: Content creation, research.

Sten Martin: Content creation, research.

(FEB-MAR) For our particular group number 4, we started doing our research individually to have a better understanding of the concept of the country of Berylia, its relationship with neighbouring countries, and the major ongoing events that are affecting the country. After becoming familiar with the our tasks that will focus on creating content revolving around the Football League of Berylia (FLB), we started our work on the main football league structure, then getting into more detail focusing on each team (background, story, logos, members, fanbase, social media coverage of match results..).

(MAR-APR) In addition to finalising our work on the teams, we added fictional characters that are football fans in Berylia, created their backstories, and followed how they and people related to them were affected through the timeline of events.

Group five:

Martin Riispere: content creation, production, writer and director

Venla Rummukainen: content creation, co-production, camera operator and sound recordist

(FEB-APR) Ideation of the content and deciding to want to go for video material. Discussing about the visual style and other genre characteristics.

(MAY) Concluding the ideas. Finding an actor and the locations for the shooting day. Production of the video footage. Editing and sound post production.

Media coverage:

The content is not actual media coverage but for the fictional world of Berylia.

Logos creation

In order to create a more realistic and believable world the team of designers worked on logos for various institutions in Berylia. The examples include such logos:





Video creation:

To enhancing the immersion, the video creation team developed and executed a news-style video report showing some of the cultural aspects of Berylia with a humoristic approach.

[Visit Berylia Video Content](#)

Self-reflection report about the learning experience of each team

member:

Ronald Wilhelm Rozin: At first I had brainstormed ideas to implement specific EU laws/regulations regarding cybercrime into our group's work. That required a bit of homework and reading up on the EU regulations in order to better understand the system as a whole.

Difficulty would have been the implementation part on how to insert EU regulations into the content creation that we were doing. What type of content would have triggered or not have triggered the teams competing at the exercise to take action based off of the tweets. However, our aim was to only create enough noise and smoke and not actual attacks, so we were able to perfectly balance it.

Victory certainly was a supporting team from the entire project and my own group members who assisted us through the drought when things seemed to slow down. All goals that we took upon were completed successfully.

Liisa Kesküla: My job was to create a language and create social media content from that. One of the difficulties was to find the motivation to do the hard work and try to translate words that don't exist into two languages (Estonian and English). I put together an alphabet and took words from Icelandic, Norwegian and Swedish. I learned that creating a language is quite difficult, I hadn't even thought about the grammar. But the most important experience for me was the mid-term presentation. I had written my part of the presentation on my phone and planned to read it from my phone. When it was my turn I realised that my plan would not be the best and I put my phone away. I read from my slide and explained the pictures.

Joel Külaots: My job was to create content for a character, whose main purpose was to react to misinformation/conspiracy theories. I created replies for theories that were posted by other participants and created some miscellaneous posts to give this character more depth. Thanks to this experience, I got character building skills. The research I did for my job broadened my horizons, especially when it comes to conspiracy theories and social media. Additionally, I took an organisational role within my mid-term report group, which developed my leadership

skills. Working in a large english-speaking group gave me experiences related to my own field of studies—English Language and Culture. Overall I am happy with how my part of the project turned out, but I do not know how to comment on the whole project, since there were so many different subdivisions.

Sten Martin: I mostly created individual logos for companies and additionally, alongside three other members, worked on creating a fictional football league from scratch, including logos, a league table and club details. It is difficult to describe the achievement of the goals since the target was not set in stone, only “the more the better”. Valuable lessons were the importance of having a realistic timeline and targets, often planning to finish something by a certain date meant it got finished by that time if absolutely nothing went wrong and it is frustrating to miss self-assigned deadlines.

It also stood out to me the importance of having people who urge others to not delay working on something. Even though we worked in small groups or independently, having activity on a social platform with people reminding that there are things to be done is important.

Pauli Nathan Jürgens:

My contribution to the "Visit BErylia" ELU project was focused on creating a convincing Twittersphere, emulating a war-like scenario for the NATO cyber-attacking exercise event, "Locked Shields." This task provided a rich learning experience, blending creativity, technical knowledge, and strategic thinking. Crafting plausible Twitter accounts and posts was challenging, but it enabled me to develop a deeper understanding of the platform's dynamics and user behavior. I also became more aware of how social media can influence perceptions and reactions during critical events. In retrospect, I am satisfied with the overall achievement of the project goals. Not only did we create a realistic setting for the exercise, but we also learned valuable lessons about teamwork, communication, and project management. This experience will undoubtedly be beneficial for future projects and endeavors.

Kyla Riparip: My job, just like the rest of the other members from the conspiracy theory group, was to create a content character. We all had our characters placed in one document and tweet or reply to the other tweets tweeted by the other participants. I was doing both, tweeting and replying. As well as, I had to come up with a conspiracy theory that Crimsonia is fake. It was a struggle at first to think what kind of theory I would make but through

research and help from the other participants I was able to create a believable conspiracy theory. The idea that I got my conspiracy from was based on the Bielefeld conspiracy in Germany. Overall, this project was a fun experience, it helped me improve skills such as increase my engagement skills through teamwork and better my creativity by participating in making the powerpoint during the mid term report.

Eren Kasapoglu: In this project, for my part, I was working on three different radio stations. These radio stations are Berylia Central Radio, Radio Prophyria and Crimson news one. I chose to create these radio stations because I wanted to develop an alternative medium for spreading the news in this world and as a sound engineer and designer it's possible for me to manage the technical part of the creation process.

One of the positive parts of the project for me was the possibility of using my professional abilities. I was also totally free during the creation process. I could imagine and contribute to project without any boundaries. During this process, for me, only struggle was about editorial side of my part which was mainly about choosing the appropriate news and creating the story line. Working with different people for the voiceover recording process make me learn how to organise and communicate with people for this kind of a project in a cosmopolitan environment. I developed many positive experiences due to this project.

Kerim Sütçü: In the project, Visit Berylia, my primary responsibility was to develop a captivating narrative that would add depth and enhance the overall engagement of the players. To achieve this goal, I embarked on creating a series of social media tweets that revolved around a unique society holding steadfast beliefs in a flat Earth and other conspiracy theories. I strategically incorporated contemporary arguments and claims related to the subject matter, ensuring relevance and resonance with the audience. Drawing from my knowledge in the humanities that developed in Tallinn University, my research primarily focused on using key concepts within cultural analysis to give conspiracy groups touch of reality, which I believe that it had a significant touch for giving game some depth. By infusing these concepts into the narrative, I aimed to captivate players' interest and provide them with an immersive and thought-provoking experience that would keep them engaged throughout the project.

Urmet Lepasson: I worked on creating and developing social media narratives for the conspiracy theory genre of microblog posts. Instead of centering the theories, I strove to develop several naturalistic profiles that occasionally get influenced to engage with conspiracy theories. In the process of research, I developed an understanding of how conspiracy theories spread on microblogging platforms, and how social media bubbles in general are structured. While the scale and technical limitations of this project didn't allow me to replicate these models, it still came in useful. It also developed my general media literacy. In the process of writing, I learned to navigate a completely new genre, since I don't have earlier experience in microblogging. In the group I took on some light managerial tasks and some technical work, which are skills I'm always looking to refine.

Niilo Miikki: As a part of the project I developed a number of characters to engage in a discourse on a microblog- service. The discourses were related to rumours and conspiracy theories surrounding the state of banks and their liability in Berylia. A crisis related to the liquidity of the banks' assets allowed for a creation of multi-leveled discourse which was engaged by several different kinds of characters. The project was interesting in a number of ways, allowing for use of one's imagination and creative output as well as practice in content creation. I also had the chance to work together with people from very different fields of academia that I possibly would not have otherwise come to contact with, and to a certain degree gain understanding in how war-game scenarios are being built.

Anna Kovalenko: The project had several involvement options for me and was overall an interesting case study to participate in, and since my fields of interest and my Master programme have to do with visual arts, I decided to take part in creating logos for various institutions that are part of the world of Berylia. Firstly, we divided the distribution of various logos needed between multiple designers that were part of the project. My part was to design logos for a restaurant and for the local museum. For this I had to research the information provided to us by our mentor in the Country Book in order to understand the context of these two institutions as well as collaborate with other members of the team who were responsible for creating characters that would work/frequent abovementioned places. For example, I had kept in contact with a person who was to create a character to be a researcher in the Museum of Berylia so we would have similar vision on how the museum logo should look like. Moreover, after finalising the designs of the logos I provided a couple other team members with them upon their request so that they could use it in other activities they were responsible

for (like using the logo in the news programme etc). I believe this project was an interesting and useful experience for me as an MA student in terms of working with other students from different fields of studies as well as expanding my knowledge.

Olha Stovpivska: The project “Visit Berylia” was an interesting case which allowed me to be more creative and to do things I always wanted to try before. Because my Master Program at Tallinn University is very much theory-based, it was also a fun experience to experiment with visual parts and implement creative ideas I have in real life. For the project, I opted to design the logos for the news outlets, precisely news channels. The case I was working on had already the ground of what the channels are like, how exactly they deliver the news and the way they interact with the audience. As a part of world building, I believe the visual part is important as it supports the storytelling, giving small but important details. I had to communicate and cooperate with other team members from various academic backgrounds, to make sure that my part can be integrated with the rest of work done. This project allowed me to be more creative, as well as initiative, which I believe is an important skill for every student, Bachelor and Master alike.

Evelina Bogdanova: I am the part of project “Visit Berylia” and i’d want to share my experience about it. First of all, it was interesting for me because I had never come across this kind of project before, where you need to use your imagination so much. There were three people in our group and we were engaged in social networks for Berylia. For this we used the social platform "Twitter".

My part was making the presentation for our group and it was very useful exercise for me. Also i was written a couple of posts for Berylia social media and this exercise was quite fun, because you can use your imagination to the fullest, but after completing this task with creating posts on twitter, I realized how social media is a dangerous place in which it is better to be skeptical of any statements.

When we were presenting our presentation, I realized what a job was done and I am very grateful to my group members, who were very enterprising and original.

Raluca Manaila: In my role on the team, I focused primarily on providing visual materials and background stories for the characters involved in the conflicted world we were developing. I also contributed to the project by connecting all the events in a timeline and giving a logical polish to the overall structure of the project. Although my contributions were

focused on a specific area of the project, I was able to collaborate effectively with my team members and provide input on other aspects of the project when needed.

Throughout the project, I had the opportunity to learn many new skills related to logo design and visual content creation. Specifically, I gained a deeper understanding of the football industry and its associated aesthetics, which helped to inform my creative decisions.

Additionally, I became proficient in using new design tools and software, which enabled me to create faster iterations and streamline my workflow.

One of the most important experiences I had during the project was learning how to collaborate effectively with other team members in a fast-paced, dynamic environment. It was challenging to organize our collective ideas and ensure that everyone's contributions were integrated into the final product, but I feel that we worked well together and achieved a successful outcome.

Muhammad Naguib Ahmad Kilany: “Visit Berylia” is a unique project with the aim to increase the immersion of people in a war game. After working on the project for a while and seeing the contributions of the other team members, I felt immersed myself in Berylia, especially after working on minor details in different areas and witnessing how everything was connected in a way. It was a fun experience, I enjoyed working in various fields, learning new skills, besides enjoying the whole workflow of everyone involved. I had the opportunity to write the reactions of a few fictional characters to different events, imagine their interactions with each other, and summarise and display it through social media posts, while maintaining the correct flow of the timeline for both characters and events - which was more challenging than I thought - and coordinate that with my other team members work. On the technical side, I gained experience working on a new field of design using both tools that I am familiar with, and learning new tools.

Farid Fakharzadeh: I had the chance to contribute to the Football League of Berylia. I generally liked the group dynamic, as there were little to no conflicts, mainly due to the fact that the members had freedom to choose the work they want to do, usually not among a fixed set of duties, but they were also welcome to bring in their own ideas, no matter how different they might be. We were given the opportunity to do anything we wanted to do, with very few limitations, and I think that made the project enjoyable for our group members. We did have to sit down and decide what we wanted to do together at several points.

The teamwork experience was valuable, as we spent time on linking our works together, and how different sets of content could combine to create the whole football league discourse, as well as the factual data. I am happy with my role in the project, and with how all the pieces fit together and the content we created, albeit our challenges.

Venla Rummukainen: My role in the Visit Berylia project was to be part of the video creation team. I did the technical related tasks for the materials such as being responsible for recording the video and audio footage. I was also helping with the pre-planning of the shooting and creation of the content as well as taking other practical production related questions into account.

Already from the start the project sounded very interesting and different from any other media related projects I have had the opportunity to participate in before. I especially liked the storytelling aspect of it in the form of making materials for a fake country and the possibility to use my technical skills in the media field more creatively for such a socially significant project. I also think that despite the time constraints of other projects inside the curriculum our team managed to meet the goals.

Martin Riispere: I contributed to the Visit Berylia project by being part of the video creation team. My task was to create an idea that would open Berylia up more from the tourist angle and thus a fake travelogue show was created with a fake host to travel in it. Besides that I also helped with producing and directing everything shot.

It was very fun and interesting to try and come up with lore to add to the travelogue, not to mention creating a character from scratch and casting someone for it. Production side as well, it was a good challenge to find locations that would not resemble Estonia and fool the audience sufficiently. Despite some time constraints the project was really fun and helped me to apply my skills as an AVM student. I believe what we got by the end works and maybe adds to the humorous side of this LIFE project.