



Data Protection Moot Court (DPMC) Case

Variante 2: Controller Teams

31 October 2022

Knighthade Knighthade, where's my Stormblade?

In March 2022, and almost half a year later than initially announced, *Best Games Ever Ltd.*, a company based in the EU Member State Randomistan finally releases *Knighthade*, a massive multiplayer online role-playing game. In this game, players interact in a medieval fantasy world where they can solve quests in a multitude of storylines, find items, fight NPCs (non-player characters) and other players and level up their characters.

As the CEO and lead developer of *Best Game Ever*, Ahmed is excited about the release of *Knighthade* and is understandably on edge on the day *his* new game is to be released. It has been almost 10 years since Ahmed founded *Best Game Ever* in his parents' garage. Back then, it started as just another small independent game studio fiercely trying to distinguish itself from global competitors. For Ahmed a good computer game has always been more like a sport than just a game. Right from the start, his mission was to put the players in the spotlight and to provide them with exciting and competitive multiplayer games.

In the beginning, *Best Game Ever* faced all the typical struggles of a young company. *Best Game Ever* started to become successful and profitable only in 2018 due to the launch of its own distribution platform, *BGE-Games*, and the release of *Battle666*. *Battle666* was a competitive multiplayer ego shooter that quickly became a hit among not only casual gamers but also a favorite in the pro-gamer scene of 2018 and 2019. Soon there were even official tournaments with staggering prizes and plenty of *Battle666* streamers on *Blob* -- the most popular video game streaming platform. At that time, *Best Game Ever Ltd.* had grown into a company with 20 employees. One of them was Thomas, a part time in-house legal counsel who drafted the **Terms and Conditions** for the *BGE-Games* platform that every user needs to agree to when registering. In addition, Thomas drafted the first **Privacy Policy** that users have to acknowledge (see excerpts in the attachments).

With the great success of *Battle666* the first problems arose as well. More and more people managed to hack the game or cheat in a variety of ways. For example, many people used a widely available aimbot that made it almost impossible to miss an opponent. The high incidence of cheating meant professional players lost interest in the game, causing serious problems for *Battle666*. Ironically, Ahmed had originally wanted to implement an algorithm that screens every gaming session in order to find potential cheaters. He had even made sure that Thomas incorporated a clause addressing the issue in the **Terms and Conditions**. But due to his high workload, Ahmed had been forced to concentrate on core functionality of the game and did not finish his work on the planned algorithm. He soon regretted this decision as the only anti-cheating mechanism actually in place was to manually inspect and block suspicious accounts that were reported by other players. A process far too slow to cope with the rising numbers of cheating players. Ahmed decided to do things better when developing the next game. He would make sure that *Best Game Ever's* next game would not suffer the fate of *Battle666*.

Therefore, before the launch of *Knighthade* – by far the most elaborate game by *Best Game Ever* so far –resources were invested to actually develop the envisaged algorithm, named “Fairness and Balancing Algorithm” or “FBA”. The programming of the FBA turned out to be a complicated affair because *Knighthade's* game logics and mechanics were much more complicated than those of *Battle666* – or any other game by *Best Games Ever*. This was mostly because of *Knighthade's* ladder mode, a system that ranks all players in the game based on their playing time, questing progress, their character level, their lose/win ratio in hostile encounters with other players and NPCs as well as several

other factors. The entire developing team agreed that for such a system to work properly, the FBA would have to be capable of handling and detecting all potential cheating strategies as well as problems with individual players that arose in the past. To Ahmed's delight, this time the progress on the FBA was promising. Maria, a developer and data scientist specifically hired for that task, developed an algorithm that monitors gaming sessions and is able to find suspicious players with extraordinary precision. Not only is the algorithm able to detect the use of banned supportive software such as aimbots, it can also detect when players make highly unrealistic or unreachable progress – regardless of whether this was done with the help of external software or not. The FBA's machine learning abilities should even detect new ways of cheating to always stay one step ahead of unsportsmanlike players. The first part of the FBA – the part that finds the use of supportive software – can be used for all games available on the *BGE-Games* platform and even go through all the records of past gaming sessions of individual players. The second part of the algorithm by contrast is very specific to *Knightshade* and cannot easily be used for other games.

Despite the fast progress due to Maria's hard work on the FBA, it is not ready at the time *Knightshade* is released on *BGE-Games*. This delay is because the FBA still shows an error rate of over 10% in internal tests. Nevertheless, Ahmed wants to warn the players that *Best Games Ever* will not tolerate any cheating in *Knightshade* and intends to deploy the FBA. So, he makes sure that all players buying *Knightshade* receive the following notice before they can play the game's ranked ladder mode. To give the notice a more personal touch, he includes a variant for players whose records show long *Battle666* gaming sessions:

Dear [Username],

Before we let you embark on your journey into the exciting realms of Knightshade, we would like to draw your attention to our improved Fairness and Balancing Algorithm (FBA). [1: In case you ever played // 2: As a fierce player of] Battle666, you surely have heard of the problems we unfortunately encountered with cheaters (aimbots and triggerbots, disrupting network communication for artificial lags, etc.). Therefore, we have refined the FBA to analyze Knightshade game sessions for suspicious behavior. For details, please check Point 11. of our Terms and Conditions. If you do not wish your gaming sessions to be subject to the FBA, please play Knightshade's unranked mode. Otherwise, we kindly ask you to click "Read, acknowledged and accepted" below. This being said, we hope you'll love Knightshade as much as we do!

Your BGE-Games Team

The game becomes a massive success, with more than 300.000 active players on the European Ladder only four weeks after its launch. As expected, it is not long before the first reports on cheating players reach *Best Games Ever*. Fortunately, Maria's team has made sure that *Best Games Ever* records all data necessary for detecting cheaters for every gaming session in the ladder mode. Ahmed is confident that all cheaters will be tracked down, once the FBA has reached the required precision.

On 08 August 2022 (almost half a year after *Knightshade* was first available on *BGE-Games*) the new FBA has finally passed all tests and is ready for deployment. At 1:00 am the algorithm starts running and relentlessly begins to suspend suspicious accounts. Whenever such an account tries to log in again, the account holder automatically receives the following message:

Dear [Username],

Unfortunately, your account has been flagged by our FBA due to suspicious activities and will remain suspended for a cool down period of 20 days. During the suspension, you are still able to play unranked modes on all games available on the BGE-Games platform (unranked modes do not feature a ladder system and do not support unique items). We will investigate the FBA report during the cool down period and notify you of our final decision on [date +20 days].

Thank you for understanding!

Your BGE-Games Team

About 0.5% of the hundreds of thousands of players receive such a notice. One of these players is **Claire Weinberg**, a *Knightshade* player that registered on *BGE-Games* back in 2019. Ms. Weinberg reacts like most players after they find out about the suspension of their account: she writes an angry email to fba_support@knightshade.fiction. Her email reads as follows:

Subject: Account suspension?

Hello Best Game Ever,

Why are you suspending my account? I haven't cheated or anything!!! Please restore my account immediately, I'm not playing unranked, unranked is for noobs. If you keep me suspended this is seriously going to fuck up my ladder position! I wanted to do Fires of Annihilation today and that's only open till Thursday! I am sure this is an error!

Thx, Claire

Best Game Ever expected that some of the affected players would reach out to them and prepared an automatic reply. All such players receive the following answer from noreply_fba_support@knightshade.fiction:

Subject: Ticket #[Ticketnumber]

Dear [Username],

Thank you for your request (Ticket #[Ticketnumber]). We aim to handle all requests as soon as possible. Due to the high number of requests, the current handling time is approximately 11 days.

Thank you for understanding!

Your BGE-Games Team

Best Games Ever also provides a customer support hotline operated by a small external call center. The customer service agents of this call center are able to answer general and recurring questions but are urged to seek advice from qualified *Best Game Ever* employees in case of more complex complaints/queries from unsatisfied customers. In case of account suspensions, the customer service agents were instructed not to answer any specific questions but to truthfully state that the FBA has a very high (above 93%) accuracy rate.

Some of the suspended players even reach out to the data protection officer of *Best Games Ever* – a role assigned to Thomas, the employee in the legal department who accepted this responsibility in addition to his usual workload. One of the messages he receives in the aftermath of the first few thousand account suspensions is from Ms. Weinberg on 19 August 2022:

Subject: Ticket #21699

Dear Data Protection Officer of Best Game Ever,

I demand my account (BGE-Games Tag: ClaireOfDespair) to be restored with immediate effect. Under the GDPR, it is unlawful to suspend an account without any explanation. I request information why you suspended my account in the first place.

If your FBA suspended my account because I used the glitch of the respawning skeleton king in "Shadows of death", then I object to that. If Knightshade has glitches, that is your fault and it is up to you to patch a glitch. You cannot hold that against me. You must also delete or correct all datasets that say that I have been cheating!

I urgently await your reply, which I was promised to receive today (see email below).

Kind regards,

Claire Weinberg

>>email by noreply_fba_support@knightshade.fiction, dated 08 August 2022<<

Like all other messages regarding the suspension of accounts, Thomas forwards Ms. Weinberg's message to the customer support department of *Best Games ever*, where an employee reviews her case:

The data extracted by the FBA shows that Ms. Weinberg indeed cheated. The FBA went over all of her previous gaming sessions and gave each one a probabilistic value between 0 (no likelihood of cheating) and 10 (extreme likelihood of cheating). Two periods stand out. In winter of 2020 during several gaming sessions of *Battle666*, the likelihood is extremely high (between 8 and 10) – something that only happens when the player uses external supportive software like an aimbot. In April of 2022, the scores for some *Knightshade* gaming sessions are between 6 and 7. These scores suggest a progress that is not achievable with normal means. It could mean someone found and exploited one of the rare bugs in the game before it was fixed or aborted an unusual high number of games during an active session – a method some players use to make certain fights easier, as the composition of NPCs is randomized for some quest. The other gaming sessions are inconspicuous.

Normally, FBA scores in *Knightshade* below 8 would warrant an automated suspension. Rather the FBA would only send out a warning notice to the concerned player. However, an automated suspension will occur if there is an extremely high indication that the player had already cheated in the past – such as in Ms. Weinberg's case.

After a temporary suspension, the account is always unlocked but to discourage the player from further cheating or conducting unethical behavior, the FBA suggests resetting the player's progress in to an "alternate timeline" status. This means, that the FBA calculates (based on all available data), which character level and ladder position the player would have if he or she had not cheated or conducted any unethical behavior. Ahmed insisted on this sophisticated mechanism because he had learned from the mistakes of competitors who lost many players when applying severe anti-cheating measures.

For Ms. Weinberg, the FBA suggests (1) to lower her character level from level 82 to level 75, (2) to reset position on the European Ladder to 7,068 and (3) to remove the unique (i.e. existing only once in the game) item "Stormblade", one of the most powerful melee weapons in *Knightshade* from her inventory. The reset would also lead to Ms. Weinberg losing her status as a top 100 player in terms of ladder position (a so-called Alpha Player), which allowed her to participate in premium in-game events where she could solve quests not available to lower ranked players, fight extremely strong NPCs and other high-ranking players, and win unique items.

The customer support employee briefly looks at the Data Sheet for Ms. Weinberg (see excerpt in the attachment) and the data collected and created by the FBA and clicks on

confirm and reset account to alternate timeline

and not on

decline and fully restore account.

After this short review, the customer support employee replies to Ms. Weinberg on 31 August 2022 from email address (fba_support@knightshade.fiction):

Subject: Ticket #21699

Dear Ms. Weinberg,

Our DPO has forwarded your email dated 19 August 2022. We apologize for the late reply. It took us a while to review the dataset that led to the FBA flagging your account as suspicious. We are happy to inform you that your account will be available again for the ladder mode.

Your game progress achieved by unethical behavior has been removed from your account. Please see attached the log files recorded by the FBA.

We hope you understand that we cannot provide any further information on the reasons for your suspension as this information could be used to facilitate cheating in Knightshade.

Please let us know if you have any further questions!

Kind regards,

Your BGE-Games Team

In order to make the decision comprehensible to Ms. Weinberg, the customer support employee attaches the logfile with the information about her gaming sessions. This file contains the time and duration of her gaming sessions for *Knightshade* and *Battle666*, her ladder position, and the level of her character at the start and end of each gaming session as well as the FBA score for each session.

Immediately after receiving the message from the customer support department, Ms. Weinberg answers as follows:

Subject: Ticket #21699

Okay, this is my final message! If you do not restore my account to exactly how it was before the suspension, I am going to hire a lawyer and take legal steps. This includes my character level, my ladder positions and my items. I haven't cheated, so it must be exactly as before the suspension. And even IF I had cheated (which I HAVEN'T) you can't just mess with my inventory and level progress. I am an Alpha Player, my character is level 82, not 75 and I have the Stormblade sword.

Claire Weinberg

It is quite common that upset players threaten to take legal steps, but so far no one has followed through with that. To everyone's surprise, on 06 November 2022, *Best Games Ever* is served with a complaint lodged by M. Weinberg with the data protection authority of Randomistan. The authority requests *Best Games Ever* to issue a statement to Ms. Weinberg's allegations no later than 27 November 2022.

Ahmed comes to your law firm and asks for help in the matter described above. Your team is assigned to help Ahmed and prepare a statement to submit to the data protection authority. Please note that you will receive the complaint on 13 November 2022. Take the time until then to familiarize yourself with the case above.

Please note the following:

- **The case brought to you must be reviewed exclusively based on the GDPR and your statement must be drafted accordingly.**
- **The national data protection law of the state Randomistan and other legal norms (e.g. other EU-norms) which could be applicable to the claim must be disregarded.**

ATTACHMENT 1**Terms and Conditions for BGE-Games (Excerpt)**

I. Intro

1. PLEASE READ THESE TERMS AND CONDITIONS ('TC') CAREFULLY. BY PARTICIPATING IN THE GAMES OFFERED BY BGE-Games, YOU AGREE THAT THESE TC ARE ENFORCEABLE LIKE ANY WRITTEN CONTRACT SIGNED BY YOU.

2. These TC together with any applicable Licensing Agreements ("LA"), Privacy Policy, and their amendments, together with any published rules regarding a particular activity, poll, or other offering, govern your participation in the games offered by Best Games Ever Ltd ("we"/"us") on the platform BGE-Games.

[...]

II. Account

6. Only natural persons are allowed to establish an account. By entering into this TC and creating an account, you represent that you are an adult and have the legal capacity to enter into a contract in the jurisdiction where you reside.

III. Ladder Mode

[...]

11. Fairness and balancing

We strive to provide our players with a fair and balanced environment that enables a competitive and fun experience to all players. It is strictly prohibited to participate in any activity that could be regarded as cheating (e.g. use of unauthorized aids, unethical behavior or any other kind of behavior that grants the Player a disproportionate advantage). You understand and expressly accept this prohibition. Should you participate in any such activity, we are entitled to set your account back to any status before the malicious activity occurred or to delete the account entirely. We are entitled to use our Fairness and Balancing Algorithm (FBA) in order to analyze your gaming behavior in any game featured on the BGE-Games platform for suspicious behavior. The FBA might collect and analyze personal information about the Player. Information about the processing of personal data is available in our Privacy Policy.

[...]

IV Termination of BGE-Games Account & Services

[...]

14. Violation of TC

The following activities are prohibited:

[...]

- Publishing, supporting, facilitating, positing or, distributing illegal content of any kind.

- Activities that might threaten or embarrass another user, such as sending unwanted messages in a continuous way.
- Trying to obtain a password, account information, or other private information from another player of BGE-Games.
- Performing an illegal activity like hacking, cracking or any other kind of activity endangering the integrity of any service offered on BGE-Games.
- Using or distributing software programs, macro software programs or other “cheat utility” software program or application.

[...]

We reserve the right to suspend or terminate your account and to prevent your use of any service offered by BGE-Games if your account is used in breach of any of the prohibited activities listed above.

ATTACHMENT 2**Privacy Policy for the platform BGE-Games provided by Best Game Ever BGE-Games (Excerpt)**

The protection of your data is very important to us. This privacy policy explains which data we (**Best Game Ever Ltd** or “**BGE**”) collect from you in the context of the **BGE-Games** platform provided by us. This privacy policy also explains how your data is processed and what rights you have in connection to this data processing.

[...]

What data do we collect about you?

Registration information: information provided by you in order to register for the BGE-Games platform (e.g. name, date of birth, contact details and BGE-Games tag);

Information about your playing progress and behavior: this includes information about the games purchased by you on the BGE-Games platform and information related thereto (e.g. duration of play, interactions with other players, achievements, etc);

Information regarding fairness and balancing: depending on what games you play on the BGE-Games platform, various information in connection with unfair, fraudulent or unethical gaming (cheating) could be collected.

[...]

What is the purpose of the processing by BGE?

We process your personal data for the following purposes:

- Identification and age verification (some of your games are not feasible for players below a certain age).
- Communication with you.
- Advertisement and promotion of our products both within the BGE-Games platform and via email.
- Providing you with our games as set forth in the BGE-Games terms and conditions and in the license agreements of the games you play.
- Maintaining a balanced and fair gaming environment in any kind of ranked or sanctioned games or events (such as games featuring a ladder mode).

What is the legal basis for the processing by BGE?

Consent: In certain cases, we ask you to accept a specific data processing operation. In those cases, the data processing for that data processing operation is based on your consent in accordance with Art 6(1)a GDPR. You can withdraw your consent anytime. Such withdrawal does not affect the lawfulness of processing based on consent before its withdrawal.

Contractual Necessity: We process your personal data in order to perform our obligations set forth in the BGE-Games terms and conditions and in the license agreements of the games you play. Legal basis for those processing is the contractual necessity in accordance with Art 6(1)b GDPR.

Legitimate Interest: We process your personal data when it is necessary for our legitimate business interests. In these cases, we perform a balancing of interests and take your interests, fundamental

rights, freedoms and your reasonable expectations into account. Examples for such data processing are the communication with you and improvements, extensions and customization of our services as well as the prevention of fraud or other malicious activity on the BGE-Games platform. Legal basis for those processing activities is our legitimate interest in accordance with Art 6(1)f GDPR.

[...]

Automated decision-making and profiling

You are not subject to any automated decision-making, including profiling, referred to in Art. 22(1) and (4) GDPR.

How to lodge a complaint with the competent data protection authority.

You have the right to lodge a complaint with the data protection authority in case you consider that the processing of your personal data by BGE infringes data protection law. The competent data protection authority in Randomistan is the Randomistanian Data Authority (RDA), Dataprotectionstreet 1, 679 Randomia, Randomistan.

How to contact us.

The data controller for the data processing in connection with the BGE-Games platform is Best Game Ever. Our contact information is:

Best Game Ever Ltd

Gamestreet 12
679 Randomia
Randomistan

You can also contact us with any question concerning the processing of your personal data via the general support address or by reaching out to our data protection officer (dpo@bestgameever.fiction).

ATTACHMENT 3**Data Sheet Claire Weinberg (Excerpt)****PLAYER INFO**

First name	Claire
Last name	Weinberg
Date of birth	11.04.1999
Email	claire@clairestreams.fiction
Phone number:	+XX123456789
BGE-Games tag	ClaireOfDespair