# Disconnected: An Interactive Edutainment Game Concerning Influence And Use Of Social Media

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*Abstract*—With social media having greater relevance in modern society, people should be encouraged to understand the problems that lies within it. Problems such as misinformation and negative impacts on mental health are but a few of the problems, and we have therefore developed an edutainment game to try and spread awareness of these issues. The game has taken basis in design methods within the field of Interactive Digital Narratives (IDN) to structure the story and the interactive elements that users will engage with. The design has then been implemented in Unity, creating a game that looks and feels like a social media platform at its core. From this a story emerges that highlights the issues existing in today's social media platforms influencing modern society. The use of a hidden algorithmic score is calculated by subconscious use of a feed that impacts the narrative arc. A text-based dialogue driven narrative is created to explore these themes.

*Index Terms*—Narratology, Interactivity, Interactive Systems, IDN, Interactive Digital Narratives, Edutainment, Social Media, Unity

## I. INTRODUCTION

Social media has an increasing presence in today's society, with the number of users increasing each year [1]. While social media platforms allow for large-scale communication between people across the world, they still promote an assortment of problems that require more attention. One of the more concerning problems regarding social media platforms is the fact that they have no gatekeepers, meaning that a large amount of misleading, distorted, or false information can be easily and quickly distributed online [2]. Combining this with facts such as people generally finding it difficult to distinguish between misinformation and facts [2]–[4] and rising technologies such as AI slowly impacting the media space with fake news [5], we are looking at a potential future where misinformation perceptions on social media increase to a point where there no longer is any trust in traditional media [6]. While misinformation already is a very big problem within the social media world, another problem worth mentioning is the fact that social media has been shown to negatively impact teenagers and young adults in regards to mental health [7]. These problems emphasize that social media has flaws that needs to be addressed. Therefore, we have created an initial prototype for an edutainment game, that highlights these various issues within a short, self-contained story. The following report will firstly present the story of the game, detailing the events and characters, before discussing the design based on terminology within IDNs (Interactive Digital

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Narratives) and Narratology. Afterwards, the implementation of the prototype will be described, specifically highlighting how the interactions that affect the narrative have been created. Lastly, we will evaluate the final prototype by discussing elements of the design and how well the implementation captures the intent of the narrative, before exploring future additions to the game that would make it more immersive, and make the premise even clearer for the user.

## II. THE STORY

The following section will describe the story of the game, mentioning the characters present in the story, as well as the events that take place. The section also gives an explanation for choosing the societal topics being discussed in the story and describe the characters in relation to what they represent. A more in-depth look at the story is explored in section III-E where it is described in relation to the dramatic arc.

### A. Summary of the Story

*Act 1:* The story begins with the player joining a new social media platform called YapChat (a playful nod to Snapchat). After creating their account, the player receives a message from Sam, a school friend who convinced them to try YapChat so that they could keep in touch. Sam introduces the platform and its features through a casual chat but has to leave abruptly, encouraging the player to explore the app on their own. Left to browse the feed of YapChat, the player interacts with different posts until they receive a friend request from someone named Riley. Being new to the platform, the player decides to accept this request.

*Act 2:* The next day, the player logs back into YapChat, curious about Sam's absence since their last conversation. However, their attention shifts when Riley initiates a conversation. Depending on the player's interaction on the feed previously, this dialogue delves into one of three topics. The topics include the anxiety-inducing sensationalism of news media, the pressure of body image perfection on social media, or the relentless demands of grind culture and its toxic ideals. After an engaging exchange, the player logs off for the day.

*Act 3:* More time passes and the player revisits YapChat and finally gets to reconnect with Sam, who explains their recent silence. At the same time, Riley messages the player, referencing a negative post the players has been tagged in.
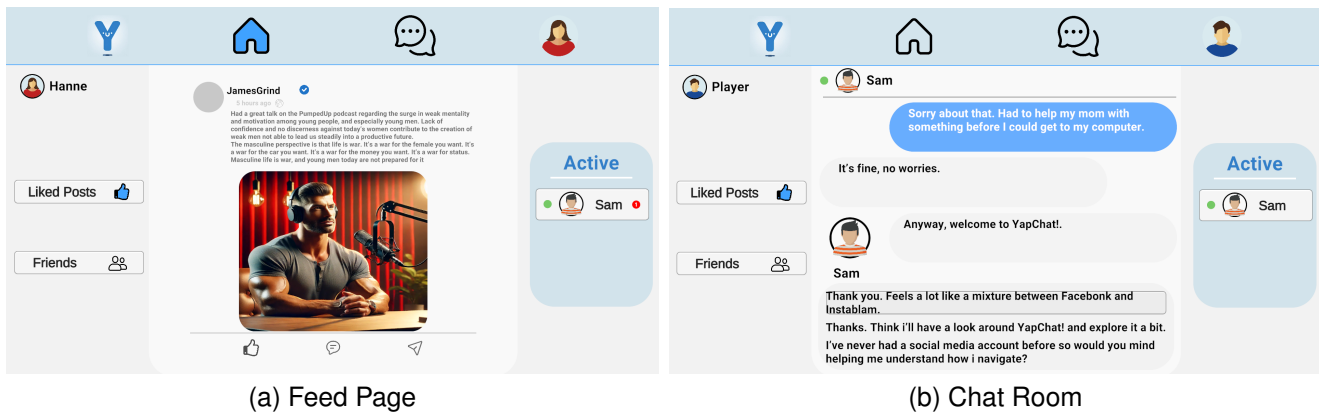
(a) Feed Page      (b) Chat Room

Fig. 1. Overview of the prototype application - an interactive Social Media edutainment game that incorporates a algorithmic feed of posts and a chatroom with friends to explore how social media negatively influences the users' perspectives and sense of reality.

The player must now choose which conversation to prioritize. Responding promptly to one risks leaving the other party feeling ignored or upset. Prioritizing Sam underscores the importance of real-world relationships, leading to one ending. Conversely, prioritizing Riley reflects a greater focus on online connections, resulting in another outcome.

### B. Riley Topic Discussions

The three topics of discussion with Riley are a few selected topics with basis in things that we currently see as affecting people negatively on social media. There are other topics that might have just as much or even more impact on certain people, but for the sake of scoping the project, we selected these as we thought of them to be the most relatable ones.

### C. Riley vs Sam - Online vs Real World

The characters of Sam and Riley were meant to represent this dichotomy between the real world and the online world. Sam is a friend the player knows through real life while Riley is someone they met online. The interactions with them has therefore been made with the intent of showing these aspects as part of their character. Sam experiences real issues that the player should be able to relate to and offer support to. Riley on the other hand focus' on these topics that have been presented, but is based on the negative side of those. This means that Riley (in the case of the topic being grind culture for example) will have this idea that everyone should work hard without any breaks and that you are less worthy if you do not put all your energy into "the grind". The player should be able to understand that their is nothing to gain from engaging with these people, and should instead focus on connections that actually matter. This should then make them reflect on their own use of social media. How much do they engage in these meaningless conversations (or beliefs). Do they let themselves get manipulated into believing these things that generate attention on social media and if so, how can they begin to move away from that.

## III. DESIGN

The following section will explore the design of the edutainment game. The section will firstly describe the *goal of the narrative*, as well as the *goal of the system*. The choice of interactive narrative structure is then explored, before an explanation is given for the type and form of interactivity. The substance and form of the application will then be detailed in regards to *the dramatic arc*, and afterwards the relationship between *Intelligibility* and *Closure* will be explained, in conjunction with the *Author-Audience Distance*.

### A. Goal of the Narrative

The key points we want to get across with the narrative of our edutainment game is that: **your engagement on social media affects you and the people around you subconsciously, and that it does not accurately represent the real world.** More specifically we want to bring attention to so called "Echo Chambers" and the underlying "Algorithm" that affects us when we use social media applications. The algorithm on social media was made to understand what you are interested in, and use said data to provide targeted content for you that you like [8]. The result of this is that you are slowly locked into a certain belief or a certain view of the world (echo chamber), which might not necessarily correlate with how the world operates [9]. You are therefore being misinformed/misguided into a belief that misrepresents the world that you live in, making you susceptible to making uneducated decisions. We hope that by revolving our narrative around this algorithm, people will get more aware of how they engage on social media platforms. They can then begin to think more critically about the information they are presented with on these platforms, as well as consider their interactions with other people or forums when engaging online.

### B. Goals of the System

To compliment the goal of the narrative, the system is created with the intent and goal of mimicking a real life social media application. This means the ability to browse a feed, where different types of posts are inserted, as well as having a chat room that allows for communication with friends. While social media applications have many other features to explore, these two features have been prioritized for the sake of scope. The features will work in conjunction with a replication of a
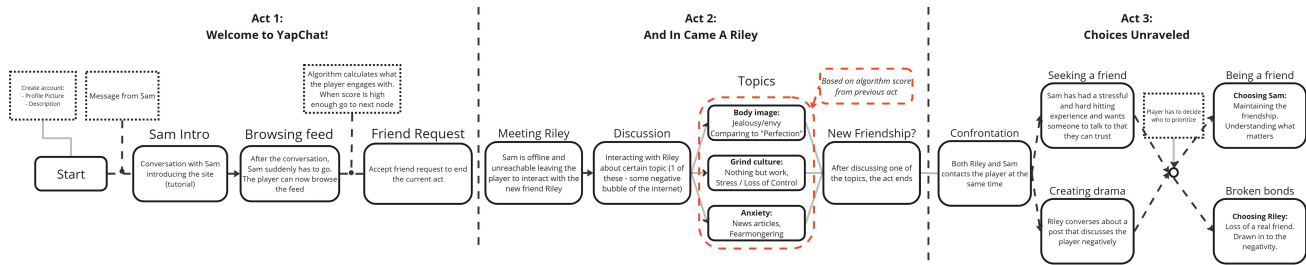
Fig. 2. Narrative Structure - how the narrative is structured into three distinct acts utilizing the directed network for creating interactivity while reducing too many branches

simpler version of a social media algorithm that changes based on the user's interactions. This means that the type of content the user would see on their feed would change based on what they look at the most and what they like, and the people they engage with will concern themselves with the same topics within the engaged content. For the sake of usability, the aesthetics of the system will imitate an already existing social media platform (in our case Facebook), to make it easier for users to get into the game, without much need of a tutorial. This should also make it easier for the user to understand the intention behind the narrative.

### C. Choice of Interactive Narrative Structure

*1) Control of the narrative:* We have chosen to divide the narrative into acts, each separated by a certain amount of time. By doing so we are able to create a dramatic narrative where the events are written by the actions of the user, but where coherence is a result of us (as system designers) being able to foresee possible actions of the user and streamline them towards our desired emotional and reactionary effect. Each decision given to the user could be a potential threat to the global design of the experience and the quality of the user experience. Therefore, it is important to keep the user under the impression that their actions determine the course of the plot, when in actuality some choices are set up by the system for this effect to seem richer. An example of this is offering multiple dialogue options for the user, even though some options may lead to the same outcome (despite of variations in character responses).

*2) The directed network:* For structuring this interactive narrative, the design therefore takes basis in *the directed network*, as it represents the best way to reconcile a reasonably dramatic narrative with some degree of interactivity. This type of structure eliminates the negative experiences of running in circles, and the risk of running into dead ends. It offers the user the illusion of choice, allowing control of the narrative to a degree that allows the message of the narrative to come across (preserve a level of narrative intelligibility - see section III-F), without making the user feel stripped of agency.

### D. Types and Forms of Interactivity

*1) Types:* Regarding the type of interactivity, the game makes use of selective interactivity, but makes use of both

the purposeful and the random selection aspect of this type of interactivity. The purposeful aspect is part of the dialogue system presented in the chat room. The user decides what they want to say to the characters within the narrative. They have an idea of how the conversation will evolve based on their selected choice. The random selection aspect is however reflected in the algorithm within the feed. Just like real social media applications, the work of the algorithm is invisible. How the users engage with it is therefore reflected in our game, in that the outcome from how users engaged with the feed is unknown to them. They do not know that liking or looking at certain posts for an extended period affects outcomes within the story.

*2) Forms:* As for the forms of interactivity, the game is a combination of the *Internal* modality with *Ontological* interactivity. The perspective of the game is from within the story-world where the user embodies an avatar within this world. The Ontological interactivity then comes from the fact that the users actions shape the path that they go on. Their dialogue choices and their interaction on the feed, provides the user with a set path, where the feed and conversations adapt to their interactions. Their interactions shapes their story.

### E. Substance and form of application

*1) The Dramatic Arc:* To discern the structure of our narrative, we have chosen to build the narrative upon a dramatic arc structure. This can give a good sense of progression of the narrative and help manage the Author-Audience Distance (AAD). In the following chapter, we will explore the different parts of the dramatic arc and its effect on intelligibility and closure.

*2) Exposition:* In the first act the user must feel a sense of normalcy, since the user needs to be introduced to the system, its interactable capabilities and its potential influence on the narrative. The user creates a profile on the social media YapChat followed by a friend request from their "real-life" friend, Sam.

*3) Rising action:* The inciting incident that causes rising action is the unexpected element of the character Riley sending you a friend request at the end of the first act. This is followed by your friend Sam suddenly being away, leaving you all alone to navigate this online world in the second act.

You becoming online friends with Riley is the innocent action that influences your online feed algorithm to direct you more towards these internet echo chambers, which results in your feed being filled with common non-nuanced idealizations, also seen online today, of things such as money, fame and work. Which posts the user spent most time looking at and interacting with, will influence which internet echo chamber their narrative will further derive from.

*4) Crisis:* After the second act, the user has gotten closer with Riley and their obsessive way of thinking in terms of their chosen echo chamber. Now in the third act, your old friend Sam returns. Sam has experienced some problems regarding his family and therefore reaches out to the user to find comfort in a tough period. Meanwhile, Riley is also chatting up the user but the conversation is based on a post regarding the user and how other people on YapChat perceive them. If the user is observant, they will notice that their chat writing field has been transformed into a countdown bar. If this bar depletes in Sam's chat, Sam will feel as if you are neglecting their conversation and disregarding the personal things they are trying to tell you. Same is true for Riley if their chat-bar depletes, even though what Riley is conveying to the user is not nearly as personable.

*5) Climax:* If the user decides to primarily focus on Riley, then Sam will pick up on this and Sam will become disappointed and frustrated with the user. On the contrary, if the user chooses to focus on the conversation with Sam, then Riley will also pick up on this and become frustrated, hence the climax element of this narrative section.

*6) Falling action:* Falling action in our dramatic arc comes into play when either Sam or Riley clearly expresses their discontent with the user, based on their choice between focusing on either of them. When this is done, the user reaps the outcome of their choices in the course of their narrative, and the user has now gone beyond the point of no return.

*7) Denoument:* Depending on the course of the user's narrative, and thereby their choices throughout the narrative, they will be presented with a screen that has faded to black, that displays text that is in coherence with the user's experience (echo chamber, choice of friend e.g.).

Hopefully, the user will have experienced something they can relate to in coherence with the way social media is used today, becoming more aware of how they should regulate their online presence in their own life.

*F. Intelligibility / Closure*

*1) Author Audience Distance (AAD):* The Author Audience Distance is described as being the degree in which the narrative is interpreted by the audience as intended by the author. Our narrative was designed with a relatively small interpretation gap in mind, since we wanted the user to finish the narrative with a feeling of closure regarding their potential new-found aspect on social media's impact on their life.

The narrative intelligibility is designed for a level of abstraction that requires the user to interpret elements in the narrative that does not directly explain its intention (the social media posts), and relate them to relevant societal issues (e.g. grind culture, anxiety, low self-esteem/body image). The narrative should nevertheless still remain didascalic enough to extract a sense of understanding of the narrative, whether the user can relate to the presented narrative or not. The user should, however, still be able to derive our intended message that; social media does not represent the real world accurately, and in most cases will cause you to compare yourself unfairly with others.

The abstractness of the narrative derives a lot from the posts the user is exposed to, since each of them are categorized as being primarily leaning to a particular societal subject that has to be interpreted as such. For example, posts in which people flaunt their physique and indirectly shame people for not being as fit as them are categorized within "self-esteem/body image".

Since the posts are presented with an image, it adds to the narrative being more didascalic since the posts have high intrinsic pictorial, figurative and narrative representational power in relation to what they are supposed to reflect about their aspect of modern social media. This is intended for higher intelligibility and a lower AAD.
Furthermore, intelligibility is further increased by the fact that all communication and most of narrative progression is derived from chatting in chatrooms without excessive use of slang or symbolism, which makes both the narrative and the system more intelligible, decreasing the AAD.

*2) Closure:* Since a high level of narrative intelligibility can be present without necessarily having a high level of closure, it was important for us to constitute a high level of closure by utilizing our choice of a directed network structure.
In the last act, the user can heavily affect their ending due to a time-counter mechanic, in which the user has to respond within a time limit to either Sam's or Riley's messages. This can turn the tides in terms of which ending the user will receive, and either of the two outcomes will still make sense in terms of the narrative intelligibility. This is due to the lack of abstract elements found within the medium of written responses that either Sam or Riley will deliver to the user. The user can choose to interpret their actions and their consequences as they like, but they will not be unsure as to which impact it had on the characters in the narrative and the available dialogue options to the user, which can represent the shift in their own character.
YapChat

*G. Immersion*

Regarding immersion aspects of the prototype, numerous considerations were made throughout the process.
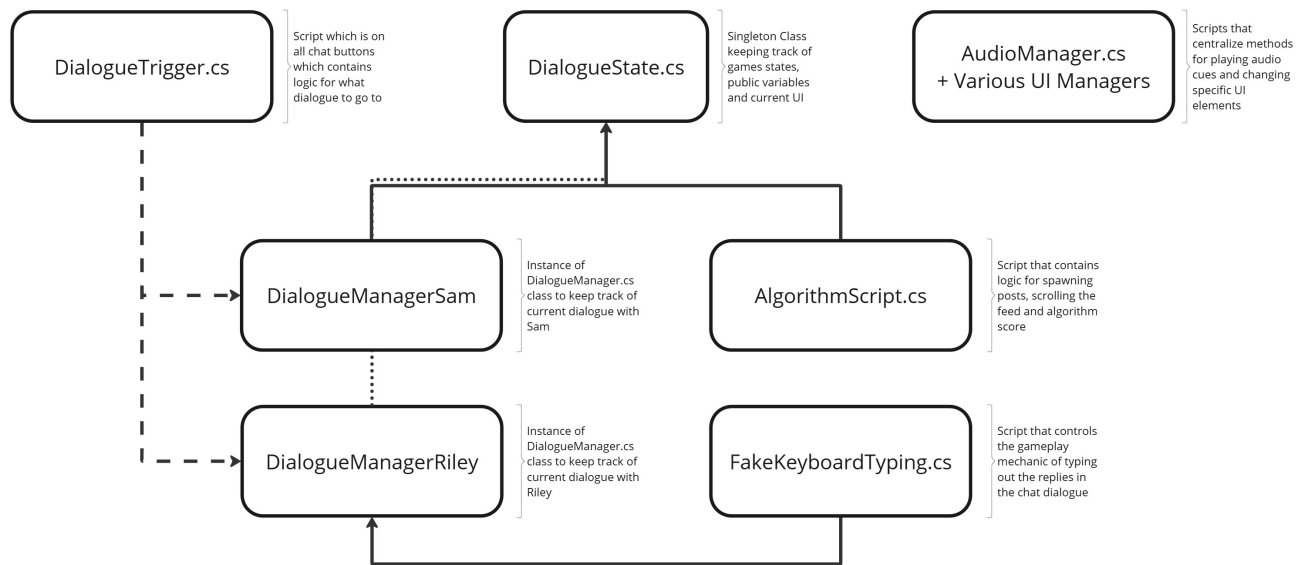
Fig. 3. Implementation Overview - All of the most important scripts and classes that controls the implementation of the different elements of the experience

*1) Spatial Immersion:* With spatial immersion in mind, the prototype leans towards being more didascalic than abstract as mentioned in the previous section. This is due to to our setting being designed to complement the narrative by replicating a social media aesthetic. To support this spacial immersion aesthetic, diegetic mechanics also are included to help with the mental idea of a social media to users. Those mechanics include being able to type messages with your friends, getting notifications or friend requests and scrolling a feed that changes what you view based on your interaction with said posts. The chosen setting focuses primarily on supporting the narrative more than the characters. While said characters play an integral part, and are justified within the narrative context, they are not essential to the setting.

*2) Emotional Immersion:* In the emotional immersion aspect of our edutainment game, the two supporting characters primarily are drivers of the emotional investment for the user. Starting with Sam, which represents the familiarity and comfort from the main characters real life. Their presence grounds our main character in not straying too far out from reality and into internet rabbit holes. The absence of Sam in act 2 is then what begins to make Riley the one carrying the emotional aspect. Riley is an unknown entity, representing characteristics from internet communities. Riley is comfortable online, but generally also shaped by online culture and inadvertently wants to pull the main character into said sphere too. This difference in worldview from these two characters (in terms of goals towards the player) is also what leads to emotional conflict in act 3. The main character cannot appease both characters.

*3) Temporal Immersion:* For the temporal immersion, the suspense building is relatively light early on with a few key events happening such as Sam leaving you on read, the user getting a friend request from Riley and starting a conversation

with them and then lastly having to juggle both conversations by the end of the story. Though in terms of surprise elements, the narrative is a bit more undefined in each category:

- **What:** Until act 3 it is not explicitly hinted at what will happen in the narrative. The only thing the user is clued in on is meeting a new person in Riley on YapChat and that your first friend is not online currently. But otherwise the surprise of the conflict ends up showing up suddenly and emotional stakes also appear abruptly to catch the user off-guard.
- **How:** The how of the narrative is experienced by playing through the edutainment game. The user is led to the main conflict by interacting with the system, getting comfortable with it and getting introduced to Riley and forging a friendship. Just as Sam comes back, wanting a genuine conversation with the main character.
- **Who:** As for the who, it revolves back to the actions of the player. The player is the person with the agency available to choose which of the characters that should be "sided" with and conclude how the story will end for the main character.

*4) Type of narrative and immersion used:* Reflecting on the game with different levels of narrativity, shows a growth on each level. Observing the narrative on a sequential level, the story only takes place in a 1 to 2 weeks timespan, where the main character creates a YapChat account to Sam coming back after a brief while. On a casual narrative level, the feedback from both side characters give more interpretation for those events and what feelings are intended for the user to feel. Then for the dramatic narrative interpretation, the acts (see II-A) and design section (see III-C) explains pretty thoroughly the intended structure of the plot.

For the perceptual immersion types used, the most prominent sense the game uses is perception. Both in terms of talking to the different characters, receiving and choosing

appropriate dialogue in conversation, but also when interacting with feed related posts. Other perceptions used are sound during dialogue when getting notifications, alongside typing out replies to each of the characters. This prompts immersion via realism by mimicking the act of typing out message replies.

## IV. IMPLEMENTATION

In the following section we will be detailing the implementation of our interactive digital narrative in relation to the game engine used, and the use of UI elements to realise our fake social media within the narrative. The implementation of the social media algorithm, and the dialogue options will also be explored.

### A. Overview

The game is a functioning prototype created in the game engine Unity. The implementation is structured as seen on figure 3 which shows the most important scripts and how they communicate with each other.

The game is 2D in nature and is therefore purely UI based consisting of different pages that are activated and deactivated. This is controlled by the DialogueState singleton class which acts as a kind of database for the other scripts to access the same variables that are important for the overall structure, such as the current page, current act and algorithm scores.

### B. Social Media Algorithm - Feed, Score

To simulate the interaction with an endlessly scrollable social media feed, the script AlgorithmScript.cs was created. This script instantiates a sequence of pre-designed posts randomly, which are categorized into three themes (anxiety, low self esteem and grind culture). When on the feed page, the script keeps track of how long you look at each post and updates a score variable based on the three themes mentioned. When one of these scores reach a certain threshold, that score is used to decide what dialogue gets chosen in act two of the narrative arc.

The posts are based on a prefab representing the layout of a post which then utilizes a database of connected images and texts that are inserted into their respective UI elements. Between each act, the posts' frequencies are updated based on themes to correlate with the frequency of the players interaction score during the last narrative act. This is done to simulate the echo chamber effect of algorithms and slowly overwhelm the player's feed with certain posts that grabs the player's attention.

### C. Chatting - Dialogue Manager, ink files

The main part of the narrative implementation is done through the use of the dialogue chat room. To make this work the script DialogueManager.cs script was created which runs two instances in parallel for Sam and Riley respectively. The script of the different dialogues are written using the open source narrative scripting language "Ink" by Inkle Studios,

which is a markup language that helps keep track of dialogue lines, player choices, outcomes and different user specified tags (as seen on figure 4). The DialogueManager scripts then uses the Ink Unity integration package to translate the files into interactable stacks where methods interact with the narrative based on the players choices.



```
1   INCLUDE GlobalVariables.ink
2
3   -> RileyAct3
4
5 = === RileyAct3 ===
6
7   // Intro
8 = =stitch1
9   VAR timerEnabled = false
10  VAR timerDuration = 20.0
11  VAR rileyIgnored = false
12
13  Hey! #speaker:Riley #portrait:riley #layout:left
14  So… I just saw something. Don't freak out, but you might want to know. #speaker:Riley #portrait:riley
        #layout:left
15  Did you see the post mentioning you on YapChat!? #speaker:Riley #portrait:riley #layout:left
16
17  * No, what did they write about me? Is it bad!? #speaker:Player #portrait:player #layout:right
18      -> stitch2
19  * What post? #speaker:Player #portrait:player #layout:right
20      -> stitch2
21  * I don't care, leave me alone. #speaker:Player #portrait:player #layout:right
22      Are you sure? #speaker:Riley #portrait:riley #layout:left
23      What could be more important? #speaker:Riley #portrait:riley #layout:left
24      ** Ok, sure tell me more #speaker:Player #portrait:player #layout:right
25          -> stitch2
26      ** I REALLY Don't care about your internet drama. Leave me alone. #speaker:Player #portrait:player
            #layout:right
27          -> IgnoreStitch
28
29  // Start of timed responses
30 = =stitch2
31  ~ timerEnabled = true
32
33  Okay, okay. It's just… this post about you. #speaker:Riley #portrait:riley #layout:left
34  Someone tagged you in this thread, and it's blowing up. #speaker:Riley #portrait:riley #layout:left
```

Fig. 4. A Screenshot of the "Inky" script editor and the structure of the Ink files used to structure the dialogue system

Specifically for act three, a timer is implemented as part of the narrative decision making. To make the conflict more intense and to make the player choose between either Sam or Riley. The timer works to escalate the tension and starts when displaying choices to the player, and if it ever runs out, a bool is switched to indicate that the player ignored them. This bool then triggers a new dialogue indicating how they felt you let them down, leading to one of two endings based on either engaging / ignoring Sam or Riley during act three.

## V. DISCUSSION

In the following section we will be discussing our final implementation and whether we have successfully fulfilled the goals of our narrative and system through our design. Furthermore we will be outlining good and aspects of our design choices, and what influenced said choices in terms of time constraints and scoping. Lastly, future potential implementations that would improve the experience will be discussed.

### A. Assesment of Implementation

In our implementation we focused upon core functions and implications of being on social media, in the sense of the player being able to browse a social media feed and engage in chat with other users. The desired implications of these functions was the user feeling a sense of anxiety/dread in navigating social media with all its self-comparison and potential for worrying outside the scope of your own real-life environment. Like a modern social media, we have a hidden algorithm making decisions for the user, which will influence the narrative and thereby what the user primarily spends their attention on, but not necessarily what is best for their own

well-being. This is to draw a parallel to what many mention today, that modern society has shifted to an attention economy.

Furthermore, we conveyed the stress-inducing Fear Of Missing Out (FOMO) when the player has to navigate multiple chats at one time that both require their immediate attention, forcing the user to spend the majority of their attention on either of the chats. This is one of the implementations that reflects the lack of effective and immediate social communication on social media (facial expressions, body orientation, tone of voice etc.) that will leave much communication open for interpretation by the receiver, which can result in unnecessary controversies. This effect is often amplified when communicating with people that do not know you personally, which is seen with the character Riley in our narrative. If you are someone who is susceptible to what people say about you, this can nevertheless impact your thought-process greatly.

There are many more aspects to engaging with social media, such as sharing posts, commenting on posts, being in internet groups, group chat rooms, etc., which could individually be their own edutainment game, but our focus on the core aspects of social media is with the intention of encompassing as many players as possible to be able to relate with our narrative. However, this lack of common social media features could alienate some players that primarily only use social media features not available in our edutainment game. The addition of said features could therefore add to the immersion aspect and present emergent narratives. An example would be if users could make their own posts and have in-game characters react to them.

Furthermore, the hidden algorithm mechanic is also only used in coherence with what the user is interacting with in the first act of the game, but could be used further in coherence with guiding the user into internet echo chamber group chats.

### B. Time Constraints and Limitations

Due to time constraints and the scope of our project we had to be selective in our implementation of internet echo chambers for the user to end up in, and also in social media features to implement. In spite of this, we have created a directed network branching narrative that will vary in its narrative representation, with the goal of the narrative still being conveyed to the player that their engagement with social media affects them subconsciously whether they want it or not.

The goals of the system have supported this well, in terms of us having designed a simplistic social media that resembles a modern social media in its core form, which was within the scope of our time-constrained implementation.

### C. Future Implementations

To make our fictitious social media, *YapChat*, feel more as a complete social media it would be beneficial to add more features present on modern social media. For instance, being able to comment on posts, thereby making the player receive notifications from other people reacting to/discussing their comments throughout the game, could enlighten the player to the fact that they are spending an excessive amount of attention and energy on something that does not affect their immediate real-life situation or influences them positively. Being able to share specific posts with narrative characters could also give a higher sense of narrative control to the player, while making the environment feel dynamically responsive to the player's actions.

Being able to access individual profiles of posters in the player's feed could also help build a broader sense of narrative cohesion, since the player could get hints to these fictional characters' agendas and biases, effectively decreasing AAD. A very relevant implementation would be the inclusion of closed online spaces (groups and chatrooms), represented as internet echo chambers with like-minded individuals. Many aspects of modern society and media could be represented here, such as political-oriented groups or groups able to derail your sense of empathy for fellow human beings not in the same economical or geographical categorization as oneself. In correlation with these closed online spaces, a hidden algorithm could then be utilized individually for each online space, calculating your involvement and agreeableness with them, which can further affect your narrative branching.

## VI. CONCLUSION

In this project, we presented a prototype for an interactive digital narrative (IDN) edutainment game called "Disconnected", which purpose is to highlight the subconscious impacts of social media and algorithmic feeds on the youth's perceptions of the world and themselves. Through the use of an interactive narrative arc that questions the player's relationship with social media, a simulated social media called "YapChat" has been created. The narrative mainly focuses on the relationship between the player's real life friend "Sam" and to someone the player has never met in real life called "Riley". Sam represents the players grounding in reality and their meaningful connection to their friends and family, while Riley symbolizes the negative aspects of social media, trying to distance the player to reality through anxiety, low self esteem and grind culture. In the end the player has to choose between Sam or Riley to define if they have gotten hooked into the negative cycle of social media or are still grounded in reality. The game consists of an interactive scrollable feed and a chatroom that interacts and changes the direction of the narrative based on a hidden algorithm score tracking the user's interactions during the game. Future work could be done to further realize the social media landscape, including group chats, commenting, sharing, etc. to further highlight the narrative goals by exploring how themes like echo chambers and online bullying affects the mental health of the youth.

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## APPENDIX
### GITHUB REPOSITORY LINK

https://github.com/MatDevelopment/SocialMedia_Narrative