

Report: COMPANAIN | Combating Social Anxiety

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1. Overall Goal Assessment

Goal of the Design Fiction:

Introverts often face significant challenges in public places and social interactions, leading to feelings of anxiety and discomfort. The pressure to engage in direct social interactions can be overwhelming. This discomfort often results in missed opportunities for connection and personal growth. The fiction introduces an AI-powered virtual pet named Dave with features like real-time conversational prompts, comfort zone identification, and emotional support. Through this immersive narrative, the project envisions a future where introverts can navigate social environments with confidence and comfort.

The project creates a relatable narrative by depicting a real-world scenario through the perspective of Cat, an introverted user navigating a bustling street. Using point-of-view (POV) clips, the story immerses viewers in Cat's experience, making it easier to empathize with her challenges and see the potential impact of Dave's support. The narrative effectively sparks conversations and imagination by showcasing Dave's features in action: prompting Cat through an initially daunting conversation with her manager Tom and guiding her to a quiet comfort zone after the interaction. These elements illustrate how the design can transform public spaces into more inclusive environments. Examples of conversations and imagination sparked include Dave's guidance enabling Cat to ask thoughtful questions during her conversation with Tom, the visualization of Dave's UI directing Cat to a calming space, and the broader discussion on how technology could be adapted to support diverse needs in social settings.

2. Tools Identification

List of Tools Used:

1. **ChatGPT:** Generated the dialogue for the characters and structured the narrative script.
2. **MidJourney:** Created visual assets for Cat, Tom and the Street background.
3. **Openart.ai:** Created images for AI pet(Dave)
4. **SUNO:** Developed Background music.
5. **Premiere:** Used for video editing and creating the UI.
6. **Runway:** Used for image-to-video animation, generating character audio, and syncing dialogues with animations.

Connection of Tools to the Narrative:

- **ChatGPT** ensured the dialogue felt natural and relatable, reflecting the anxieties and support experienced by the protagonist.
 - **MidJourney, Openart.ai, Adobe Premiere** provided visually appealing assets that enhanced the narrative's futuristic aesthetic.
 - **Runway** brought the AR concept to life with seamless animations, contributing to the narrative's understandability
 - **Suno's music** helped add an emotional layer to the clips, making them more engaging and immersive.
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3. Prompt Engineering and Fine-Tuning

- For the overall style of the scene, we aim to achieve a balance between realism and artistic processing, so as to avoid the unnatural and flaws brought by the 'realism' of AI-generated images. In terms of style, we refer to "The Witness" from "Love, Death and Robot", and incorporate "hyper-realistic character, brush strokes, soft blending with rough edges, matte finish with subtle reflections" as style prompts, and widely apply the satisfactory scene images as image prompts during character and other scene generation to ensure consistency.
- For character generation, we created base characters and then fine tuned them and added and removed certain features of our characters to better suit their personalities and roles in the video. For example, we had to fine tune the character of Tom to better suit the Image of a talkative manager, to give off a more authoritative initial impression. When it comes to Dave, we avoid using prompts like "owl" when generating images and videos, even though it looks like an owl. Because this can lead to a too realistic and non-sci-fi visual effect. When using the prompt "pet" for Dave in Runway, there is a high probability that it will turn into a winged puppy. We went through multiple iterations to achieve a satisfactory result.
- For voice generation, we primarily experimented with NaturalReader, ElevenLabs, and Runway's Generative Audio. After comparing them, we ultimately chose Runway's Generative Audio. One main reason was that its voices best fit our characters, and it offers more variety and spontaneity in tone.
- We discovered that by adding interjections, specific words, and punctuations, we could fine-tune the dialogue's tone and achieve different results through multiple attempts.
- Our scripts initially featured generic dialogues but were fine-tuned using ChatGPT to reflect real-life scenarios and make them more natural.
- Initially it was difficult to animate the AI pet and POV clips, but we were able to do this by layering tools and images and adding elements in prompt by prompt over a single frame.

Overall,

Refinements across tools resulted in a cohesive and emotionally engaging narrative that effectively communicated the design fiction's intent. This process ensured that the elements felt natural and more visually understandable.

4. Challenges and Limitations

Challenges Faced: One significant challenge in the design fiction process was achieving visual and narrative cohesion. While tools like Runway effectively animated our characters, the generated backgrounds often displayed unrealistic elements, such as cars driving on sidewalks or inconsistent street details, detracting from the narrative's immersion. Another challenge was ensuring the characters' interactions, particularly Cat and Dave, felt natural and realistic and less robotic. Fine-tuning dialogue and visual timing to match characters' personalities required multiple iterations.

Limitations of Tools: Many AI tools, such as Runway and MidJourney, operate on paid models, creating financial strain as we frequently needed to purchase additional credits for higher-quality results. Moreover, while these tools excel in creating visual assets, they sometimes produced erratic outputs, requiring significant manual adjustments. For example, Runway's animations occasionally failed to integrate characters smoothly into their environments, disrupting the flow of the story.

Possible Solutions and Alternative Approaches: To overcome these challenges, one approach is to combine AI tools with traditional design methods. For instance, using manual post-production techniques alongside generative outputs could refine the animation and background consistency. Crowdsourcing affordable or open-source tools, such as Blender for custom animations, may also help alleviate financial constraints. Additionally, developing pre-visualization storyboards before generating assets can minimize redundant iterations and improve workflow efficiency requiring lesser credits and experimentation.

5. Ethical Considerations

Identified Ethical Considerations: During the creation process, one ethical concern was the reliance on AI tools trained on pre-existing datasets, which may embed unintended biases in the visuals, scripts, or audio outputs. For instance, generative AI might produce stereotypical representations or language that inadvertently reflects societal biases. Additionally, the use of paid AI tools like Runway and MidJourney raises questions about accessibility and equity, as not all creators can afford these resources, potentially limiting diversity in creative outputs. Another consideration was the transparency of the generative process; the use of AI can blur the line between original creativity and tool-driven automation, which could impact the authenticity of the work.

Potential Impacts or Consequences: Biases in the tools may result in outputs that lack inclusivity or inadvertently reinforce stereotypes, undermining the narrative's intention to represent diverse perspectives. Furthermore, audiences might question the depth of the work if AI contributions are involved, potentially affecting trust or "novelty" in creative work.

Proposed Mitigation: To mitigate these issues, regular manual review and adjustments should be applied to AI-generated outputs to identify and address potential biases. Leveraging open-source or freely available tools can ensure greater accessibility for creators with limited budgets and may also help in providing larger datasets which would in turn make it more inclusive and free of bias. Transparency can be enhanced by documenting the role of AI tools in the creation process and clearly attributing their contributions and the depth required in creating work with AI or maybe even giving it a separate category within creative work.

Conclusion

This project showed us the creative possibilities of AI and also revealed its role as a critical tool for exploring ethical, social, and technical possibilities in the development of future scenarios. By fostering imagination and dialogue, it contributes to shaping a future where technology enhances human experiences in thoughtful and meaningful ways.