

Prototyping an Alcohol Harm Reduction Game for Adolescents



Background

No Time Wasted is a narrative, choice-based game focused on the health impacts of underage drinking. The game depicts the social norms that factor into decision-making around alcohol and provides players with non-ostracizing strategies to overcome peer pressure to drink.

Our narrative objective is to reduce player intentions to engage in risky behaviors while simultaneously increasing intentions to engage in protective behaviors. The objective for our prototype is to find a workflow to quickly create and test different iterations of the story to adhere to a variety of learning goals that promote our narrative goals.

Goal	Location in Story	Description of Delivery	Learning Content
Increase self-efficacy and skills related to: The ability to recognize symptoms of alcohol poisoning in others	Act 3, Player	The player can scan all of the characters and learn the signs of alcohol poisoning	Signs of alcohol poisoning presented include: choking, stopping breathing, dehydration, seizures, irregular heartbeat, and chills.
Bystander intervention	Act 2, Debbie	When Betsy pressures Isaac to drink, Debbie intervenes to find fruit punch to use in place of alcohol	Debbie's intervention is proactive, stopping the problems that can arise from beer pong from happening by finding fruit punch to substitute for anyone who doesn't want to drink.
Resisting peer pressure	Act 2, Helen	Chad pressures Helen to do shots, and if the correct choices are made Helen can resist this pressure	There are several ways to resist peer pressure usable by the Player/Helen. They can appeal to Helen's 2 beer rule, express their discomfort to Chad, appealing for Helen to make sure she herself stays comfortable at the party, explain the difference between shots and beers, among other methods that may give Helen the information she needs to resist Chad's pressure to do shots.
Identifying and engaging in protective behavioral strategies	Act 2, Player	The player can observe Helen's BAL and see she already has been drinking and attempt to offer her an excuse to not take shots with Chad.	Prior to shots, Helen abides by a 2 beer rule. This rule gives her a safe buzz without drinking in excess. If Helen breaks her rule, she will exceed her alcohol limit from the 2 beer rule and risk getting sick.
Peer refusal	Act 1, Isaac	Chad offers Isaac a beer, and Isaac refuses	Isaac refuses Chad's drink and reinforces that refusal by occupying himself with the N64.
	Act 2, Debbie	Chad offers Debbie a beer, and Debbie refuses	Debbie refuses Chad's drink by asserting herself as the designated driver and therefore unable to drink
	Act 2, Isaac	Betsy offers Isaac alcohol as a part of a drinking game, to which Isaac refuses	Isaac refuses to participate in Betsy's game by starting an alternative gaming tournament to remove himself from the situation.

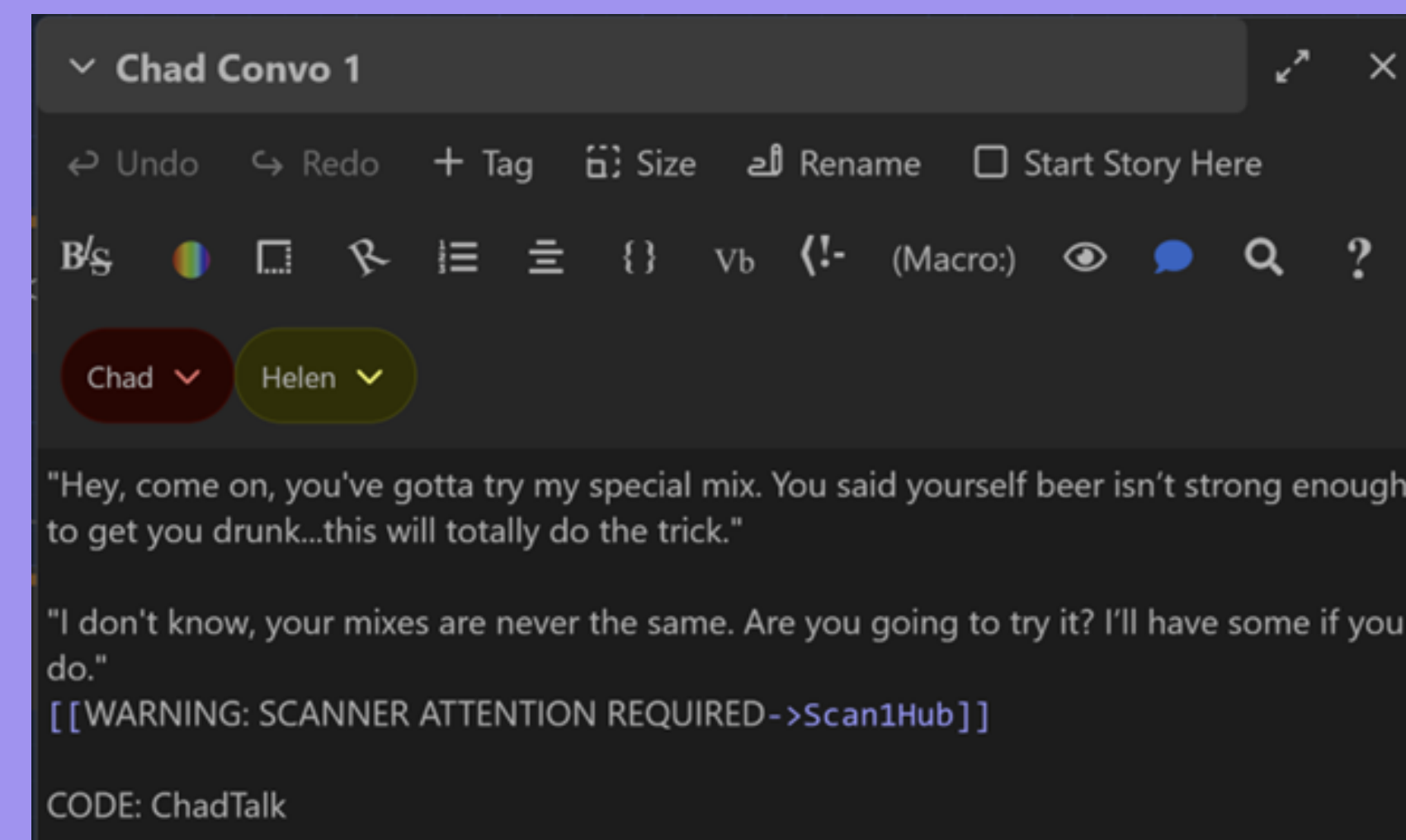
Examples of some of our learning goals and information about how we are integrating them into our game

Character	Dialogue
Brian	No fair, Isaac, you got to practice all week, whatever you claim! I don't want to keep playing this if you are going to just mop the floor with me every time. Besides, this is a party, I don't want to sit in front of a TV all night, I would rather play a real game. You might be the master of M54 games or whatever but I will destroy you in Beer Pong, I promise you are going down. Lets do this!
Brian	Alright, Who's my next victim? (long beat) Actually, we should do mixed teams. I might be the best player here but if I have to match drinks with two big dudes that's like, still way too much of a handicap. Even for me. (beat) Either that or one beer drinker and the other person is on punch. Debbie, we should make our own tournament, since Isaac's already got half the people here signing up for his in the other room. Besides, having some time away from the table between matches might mean the rest of you have a chance to recover enough to compete with me!
Brian	Hey dude, welcome to my party! Help yourself to a drink. My mom bought us some beer, but the good stuff came from my uncle's lake house...I nicked some at the last family cookout. Also, this Jungle Juice I made is off the chain. You've got to try it!
Chad	You are always saying beer doesn't get you drunk.

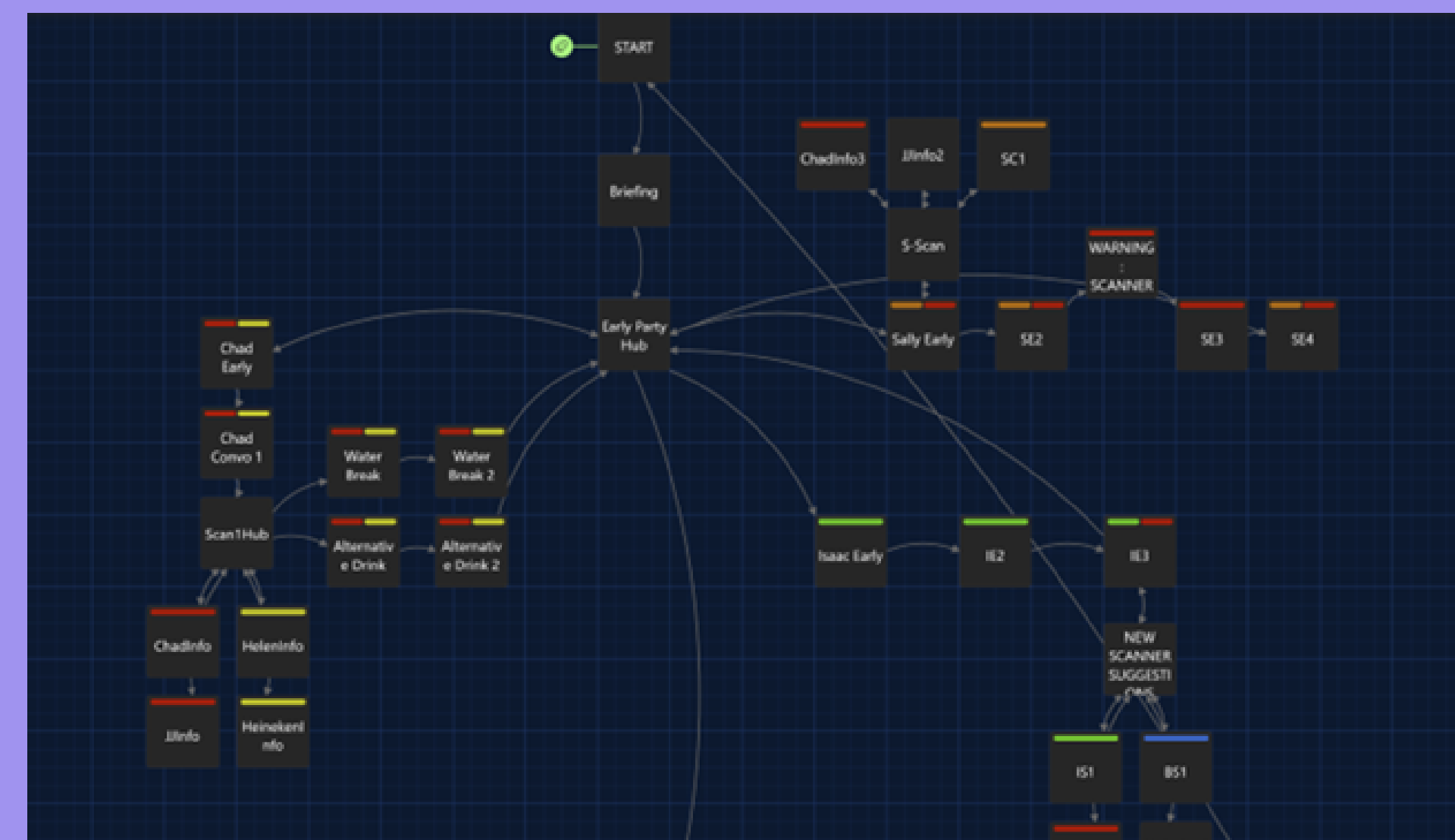
Examples of different bits of narrative from throughout the story of our game

Methods

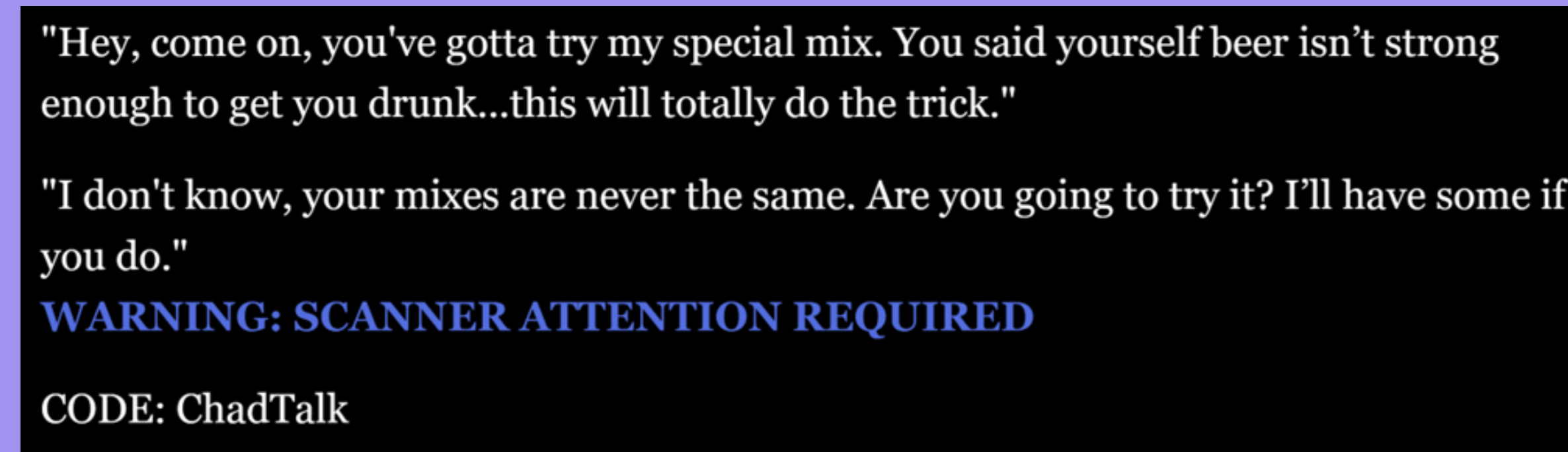
Our prototype was created with the Twine narrative game engine. Twine is a lightweight HTML-based toolset that allows for the quick creation of new content with the functionality to easily export and distribute our game as an HTML file, playable in the browser.



What a node looks like when writing/editing. From here, we can totally control what a node says and what it does.



Overview of a Twine story. Each square, or node, is a different chunk of the story that players move between.



What a node looks like from a player perspective. While simple, the appearance remains clean and easily readable. The blue text indicates a transition, where clicking will take players to the next node.

In the development of our prototypes, speed was paramount. Twine allowed us to quickly make edits and distribute the new version.

The primary benefit of developing with Twine is interactivity. Using a static script document provides the content but not the experience. Twine allows our playtesters to engage with the story and learning content in an interactive format.

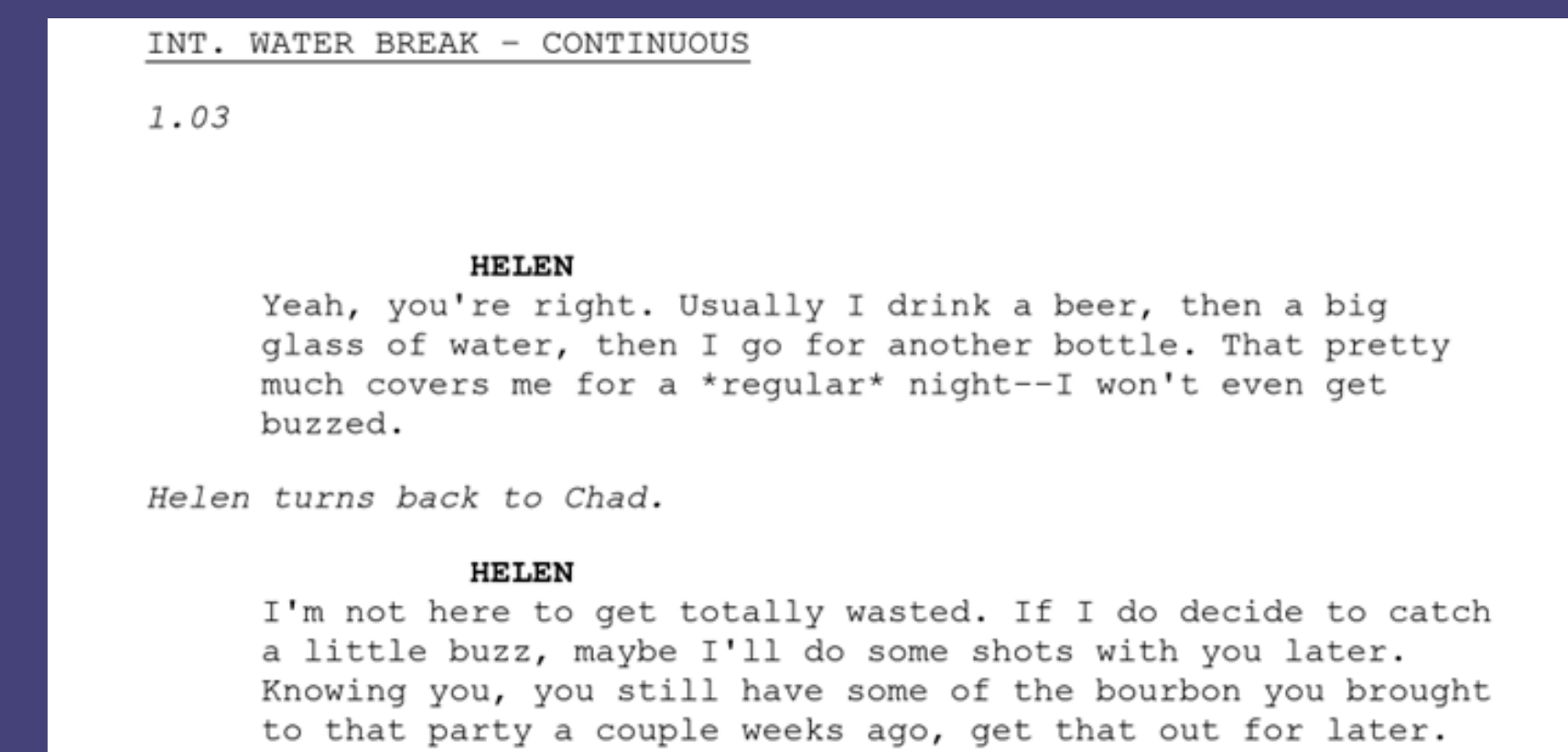
Results/Findings

We conducted several playtests with different iterations of our prototype. These playtests were met with positive reception, with some of the most frequent comments including:

- An easily understandable narrative flow
- Easy access to game files
- Understandable mechanics and methods of play.

Since conducting these playtests we have also translated the narrative format from the Twine prototype into a screenplay format. In May our team worked with student actors from Yale to record live action video for all the characters to incorporate into a later AR version of the game.

Once the AR game has been developed, our intent is to compare the effectiveness of Twine vs AR to find which medium is most effective.



A section of our screenplay iteration of our story, using the same dialogue as the Twine.

"Yeah, you're right," Helen says. She seems almost disappointed but that soon gives way to a sense of relief. "Usually I drink a beer, then a big glass of water, then I go for another bottle. That pretty much covers me for a *regular* night—I won't even get buzzed."

She looks back to Chad with a newfound confidence. "I'm not here to get totally wasted. If I do decide to catch a little buzz, maybe I'll do some shots with you later. Knowing you, you still have some of the bourbon you brought to that party a couple weeks ago, get that out for later," she says, before leaving the room.

I should see who else is here
The same narrative portion from the script, but formatted in the more traditional narrative structure within Twine.

Conclusion

The goal of No Time Wasted is to reduce risk behaviors associated with alcohol use by increasing knowledge about BAC, standard drinks, and signs of alcohol poisoning, among others. The intervention will also encourage bystander intervention and other protective behaviors in a non-judgmental and gamified manner.

Twine offers a fast and flexible toolset for prototyping and allowed us to see how our stories come together live and in an interactive fashion and has allowed us to be successful in adhering to a development plan and has put us in a good spot to develop a future AR version.



Follow this QR Code to Play No Time Wasted!

