

## Abstract

Doll House Central is a social networking website based around user created fictional characters. Users design characters and dialog trees associated with those characters using a custom interface with the ability to write statements, questions and create branches with choices that the user can respond to. Users manage their fictional characters and available dialog trees. Users can also converse with characters created by other users once they have been published publicly. Doll House Central is built with web technologies including HTML5, CSS, and JavaScript for the front-end, with the backend built on NodeJS, Firebase and ExpressJS. Frameworks like SASS and Handlebars are used for development. The site also uses the web media API for voice recordings that are optionally available with dialog trees. The site includes an interface for designing dialog trees, recording sound and saving the dialog to the database without the need of other software. By creating fictional characters, the social network enables real time interactions for users to perform and practice social interaction without the social risks often associated with online interactions. Once Doll House Central's primary functionality is completed it will be released as a website for user testing.

## Use Cases

- Practice social skills by chatting with fictional characters.
- Character design benefits from the creativity of the user base.
- Build fictional character bond connection to mitigate loneliness by chatting to a fictional character you like regularly. It's not meant to replace human connection.
- Hosting an automated customer support mascot characters that can easily assist people.
- Original characters from media franchises can be created and maintained on to enhance world building and interactions with audience.
- Practice social interaction with lower social risks.
- Designing character dialog for text based interactive stories and games (such as role-playing games and visual novels).

## What is Doll House Central?



DialogueTreeLine1  
No voice over  
Hello, got anything to say to me?

Example from dialog editor interface.

### Doll House Central Features

- Manage many fictional character from user account.
- Simple to use dialog editing interface.
- Simple dialog voice over recording interface allows users to add audio within the application and without prior technical experience.
- User controlled privacy settings for characters and dialog trees.
- Chats organized as conversation between two fictional characters with intersecting dialog trees.
- Users can chat with or as their own characters or characters created by other users.

## Web Technologies Utilized



Doll House Central was built for the web in order to be accessible on all platforms and devices with a separate application download process.

## Inspirations

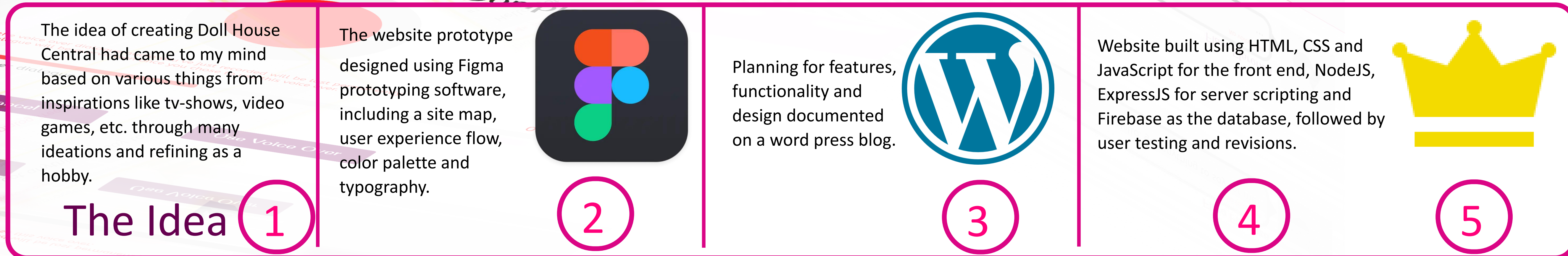
- This project was inspired by observations of play involving dolls and performed scenes with roleplaying and imagined character attributes and personalities.
- Roleplaying games like Roblox Royale High that were popular during the COVID-19 pandemic.
- Existing dialog tree editing software such as Chat Mapper and Dialogic (Godot plugin).
- Games like Animal Crossing and Replika that involve automated chat bots for dialog with fictional characters.
- Prototype design software like Figma.



## Future Features

Fictional characters interaction via video gaming, gamification, real time voice chat as a fictional character, etc.

## The Design Process



The idea of creating Doll House Central had came to my mind based on various things from inspirations like tv-shows, video games, etc. through many ideations and refining as a hobby.

The website prototype designed using Figma prototyping software, including a site map, user experience flow, color palette and typography.

Planning for features, functionality and design documented on a word press blog.

Website built using HTML, CSS and JavaScript for the front end, NodeJS, ExpressJS for server scripting and Firebase as the database, followed by user testing and revisions.