

Codenames Word Association Game

Charlie Moder

Codenames is a turn-based, multiplayer, word guessing game designed by Vlaada Chvátil in which teammates try to get their partner to efficiently guess a specific subset of words given limited clues. This project was to create an online interface for people to remotely play the game together, with an experience that is both authentic and more intuitive than the original board game. This involved iteratively creating and assessing designs with users before finally reaching a design to take into the implementation phase. And even now, the game continues to develop as user feedback comes in.

The implementation is a Node.js application with real-time communication between the server and client using socket.io. It is designed and tested to support thousands of simultaneous games, and has accessibility features for colorblind users who cannot rely on the color-coding that the game uses to differentiate between teams. Rules are enforced with regular expressions and user input is sanitized to protect against web vulnerabilities such as javascript injection. Finally, an online word net is used to computationally create and probabilistically judge word associations so that users may play with any number of computer players.

The game can be found at <https://spy-words.herokuapp.com>