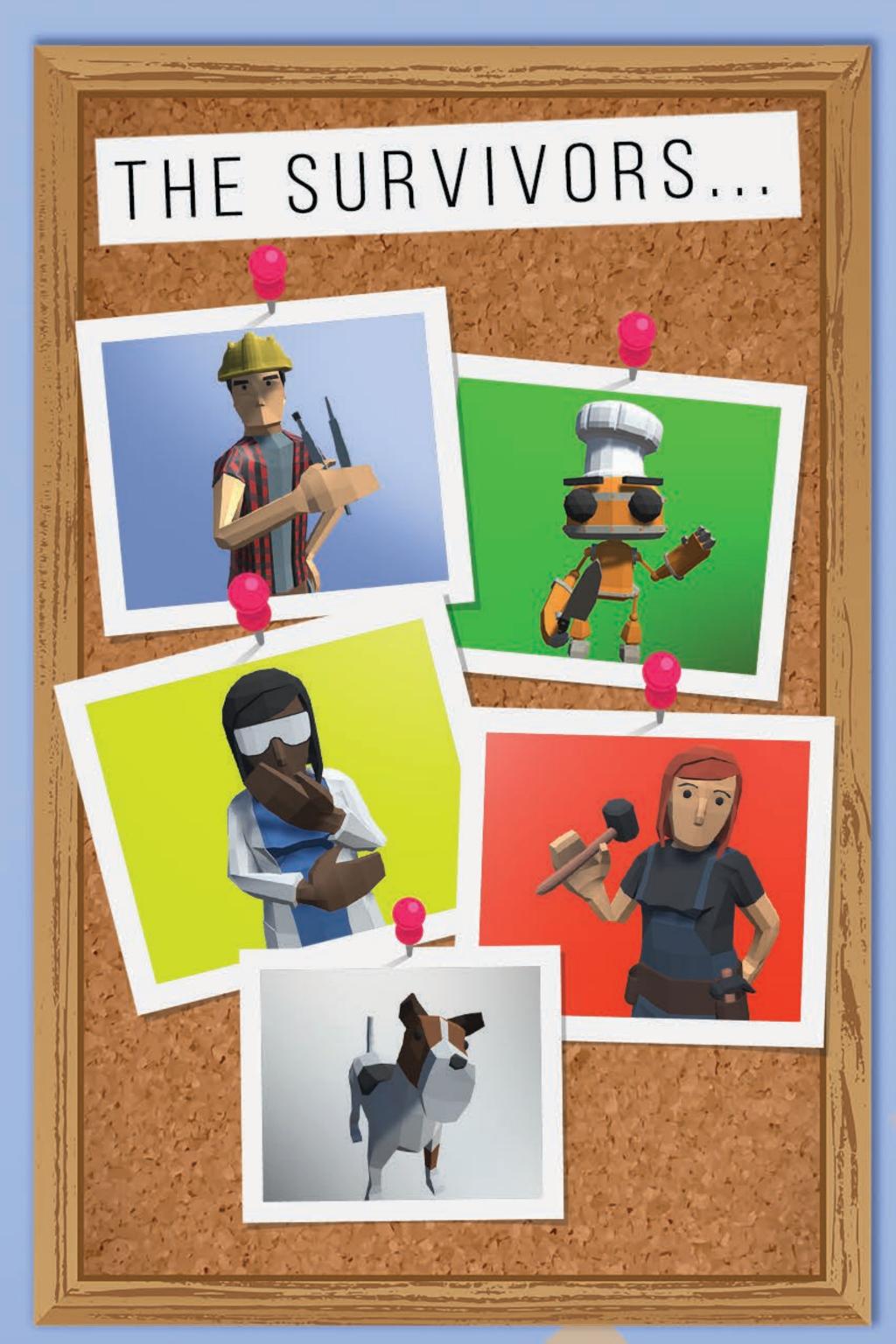
The Sequel to K'tah!...



K'TWO

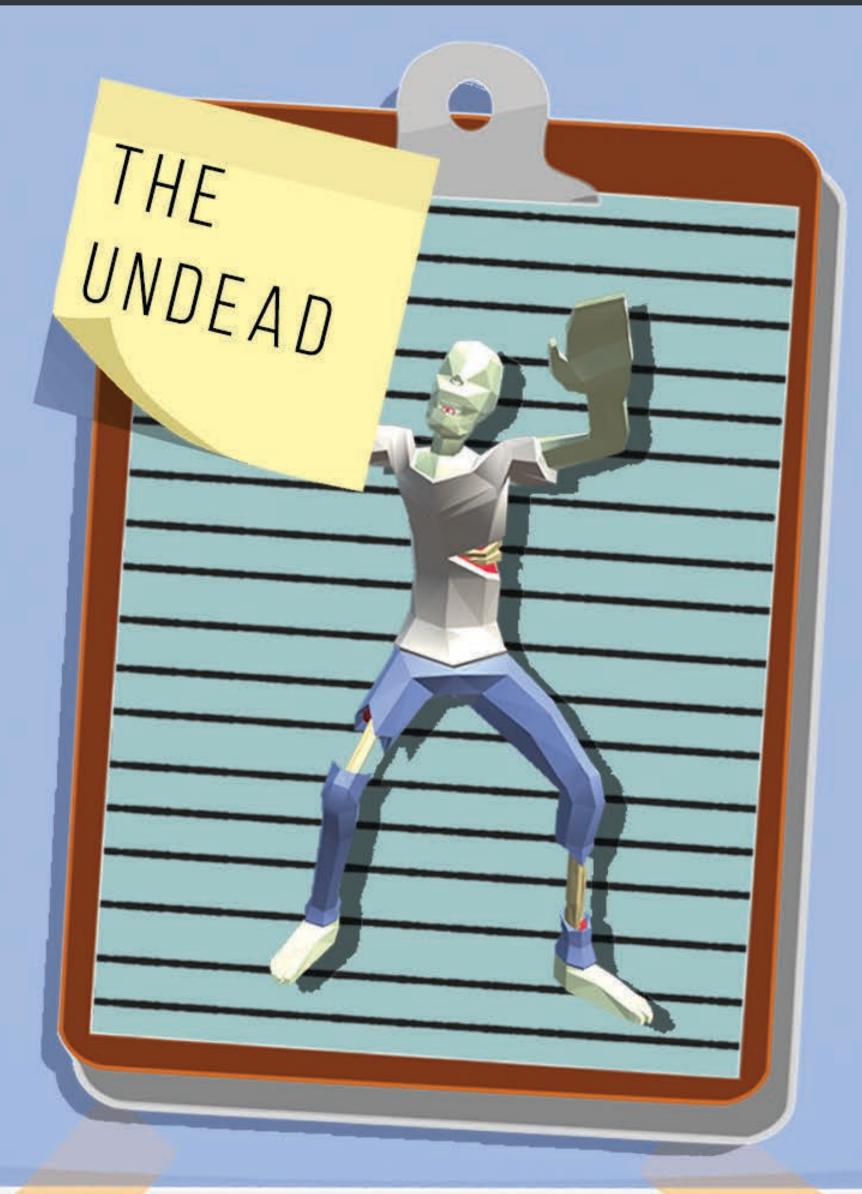
https://github.com/jtorre39/ktwo

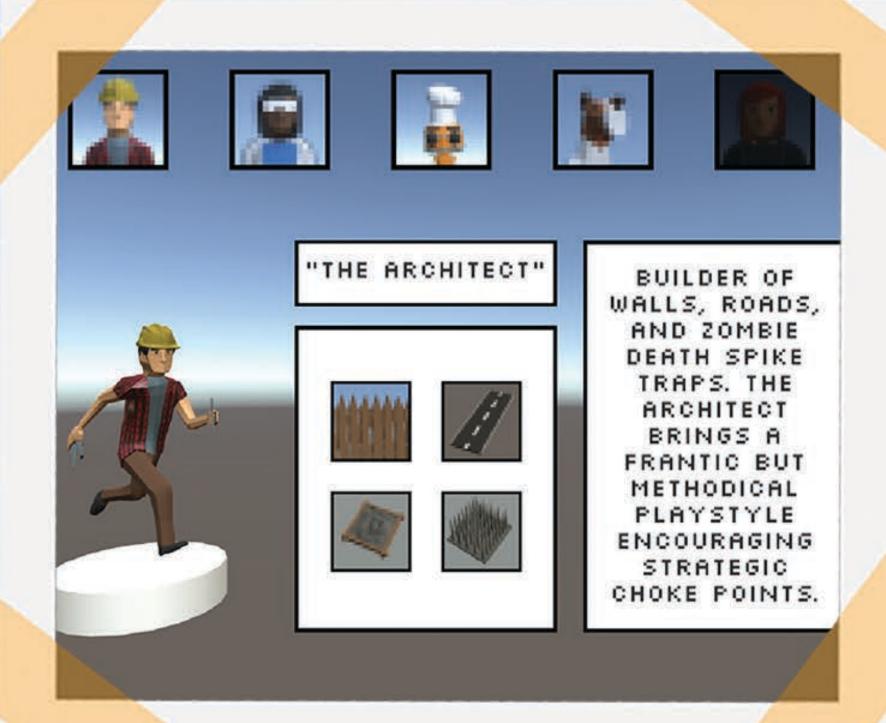
Teddy Chu Justin Kyle Torres Alejandro Zapata Acosta











MOTIVATION

Dr. Andrew Forney, member of the LMU CS senior project behind K'tah! (2011), sought a group to pass on the torch to and create a worthy sequel. We accepted the challenge and became his chosen students. With great expectations upon the three of us, we set off to create a 1-4 player, online zombie-survival game worthy of its predecessor. We call it K'two.

CHALLENGES

Unity's (now-deprecated) networking library encourages tightly-coupled code between server and client representations of the same object. This made testing slow and inefficient, and invited messy architecture that scaled poorly. It was difficult to maintain the codebase without increasing technical debt. Technical debt made it challenging to debug, design, or implement new features as we worked on K'two. This minimized the time were able to put into testing and balancing the game design aspect of the game.

THE GAME

K'two is a third-person zombie-survival game where a group of 4 survivors are dropped into a map to fend off endless waves of zombies that want nothing more than to feast on the living. Survivors are equipped to fight back; each character comes with their own unique set of abilities ranging from damaging, healing, and even turning zombies against one another. Characters can synergize with one another, enabling unique and fun cooperation. Once all survivors have succumbed to K'tah, the game is over and the team's current wave count is recorded as their score.

RESULTS

By the end of the semester we produced working server and client builds with four playable characters, allowing up to four players to connect on one server to vie for a high score as they survive the waves of zombies together. We want to continue iterating on K'two, implementing cut features such as "The Tinkerer" character and a proper lobby system. Additionally, we would love to dig into more advanced game network ideas such as prediction and lag compensation. Overall, we feel we have built a worthy successor to the original K'tah!







