

SCIENCE FICTION • 88677-UE2088 • (CANADA \$3.95) • U.S. \$3.50



DAW SUPERSTAR

HUGO NOVELIST

SCIENCE FICTION
BOOK CLUB SELECTION

C.J. CHERRYH

SERPENT'S REACH



NAU
NORTHERN
ARIZONA
UNIVERSITY

School of Informatics,
Computing, and
Cyber Systems

SS

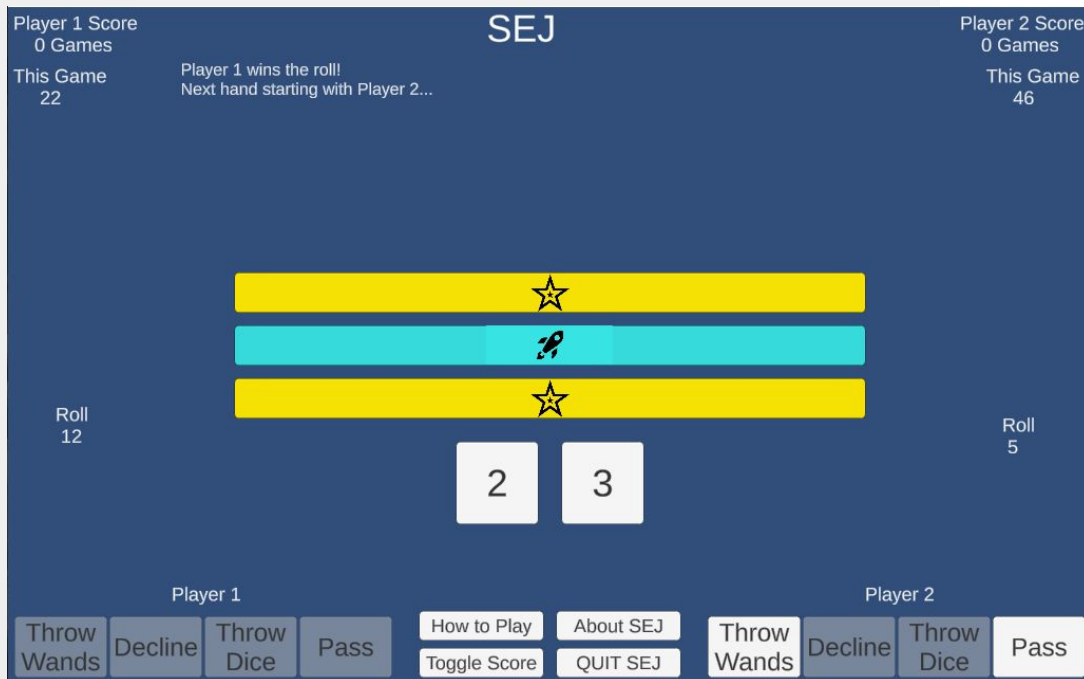
Sej Online

Design Review 3

David Hermann, Johnathan Ray, Nickolas Maxwell,
Tyler Morales, Nick Shugrue

Mentor: Italo Santos

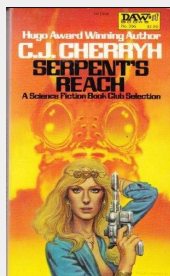
The Problem



- UI lacks critical game information
- No persistent scorekeeping
- Only supports local multiplayer

1. Implement Sej Rules

- Author Defined Rules
- Developer Written Algorithms



2. Improve Graphics and UI



3. Network Connected Two-Player Mode



4. Persistent User Data



Requirements



MVP

- Sej Rules Implemented
- Network Connected two-player mode
- Simple but attractive UI
- Persistent cumulative score-keeping for opponents

Performance

- Engine Capabilities
- Network Search times
- Security



Stretch Goals

- Tournament Play
- Side-by-side play
- AI opponents
- 3D game graphics & animation
- Audio
- Multi-platform

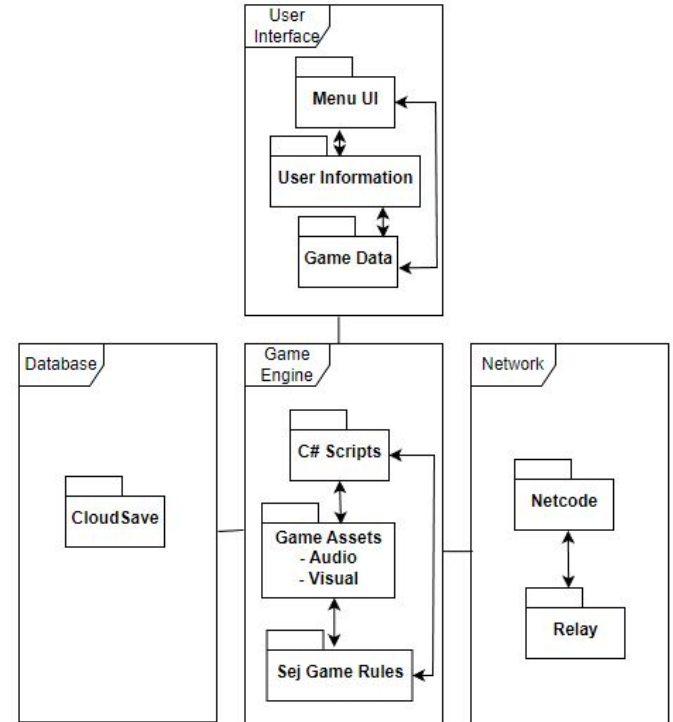
Environmental

- Legality
- Accessibility

Architecture & Implementation



- Unity as the game development engine for better graphics/UI
- Database integration for persistent scorekeeping
- Unity Netcode library implements network functionality



Prototype Review



SEJ ONLINE

Press any key to begin...

SEJ ONLINE

PLAY

PROFILE

OPTIONS

QUIT

Player: temp

Games:

0

Wins:

0

Win Rate:

N/A

Losses:

0

Change
Username

Enter text...

Submit

BACK

OPTIONS

RESOLUTION

1920 x 1080 @ 144Hz

FULLSCREEN



QUALITY

HIGH

VOLUME

MUSIC

BACK

ONLINE

JOIN

HOST

BACK



HOST SCORE
0 POINTS

Host's Turn

CLIENT SCORE
0 POINTS

White	1
White	1
White	1

Match has begun...
Host should begin by throwing the wands.

[Out](#) [How to Play](#) [About SEJ](#) [Throw Wands](#) [Throw Dice](#) [Decline](#) [Pass](#)

Join Code: PB7WN7

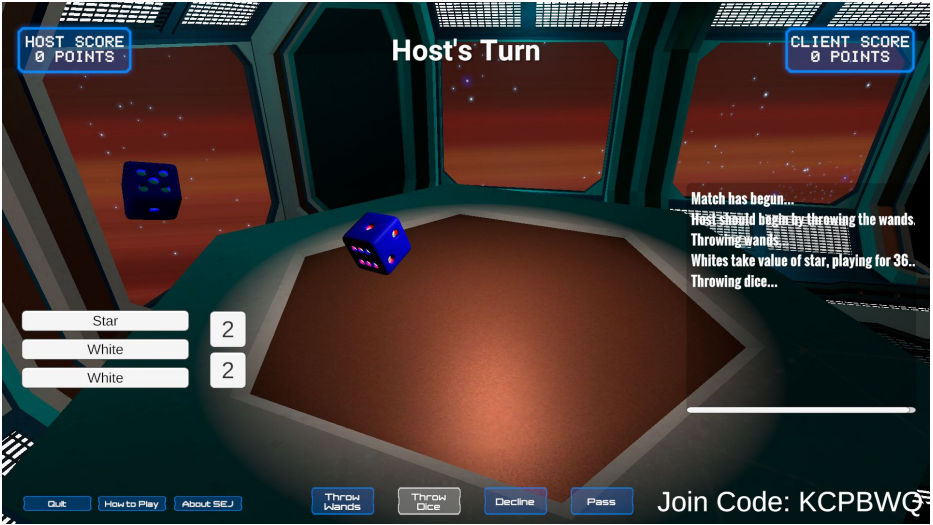
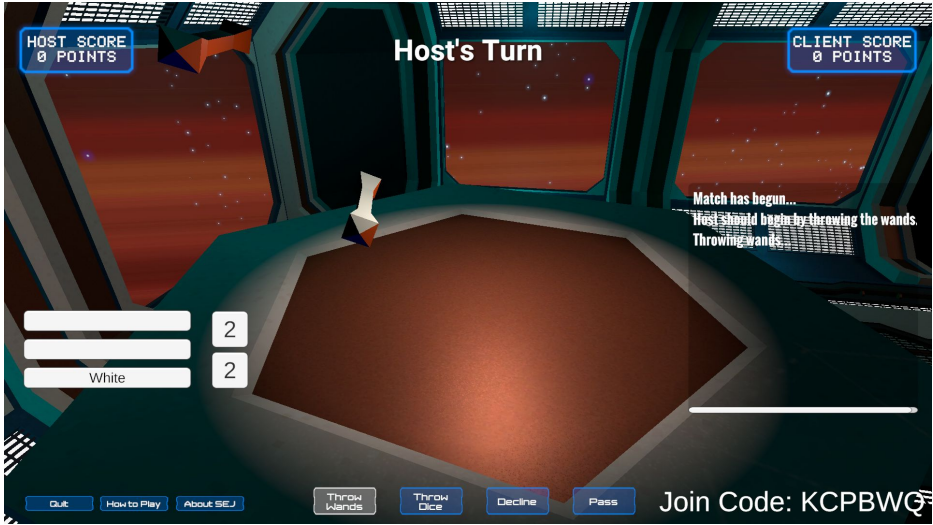
ONLINE

JOIN

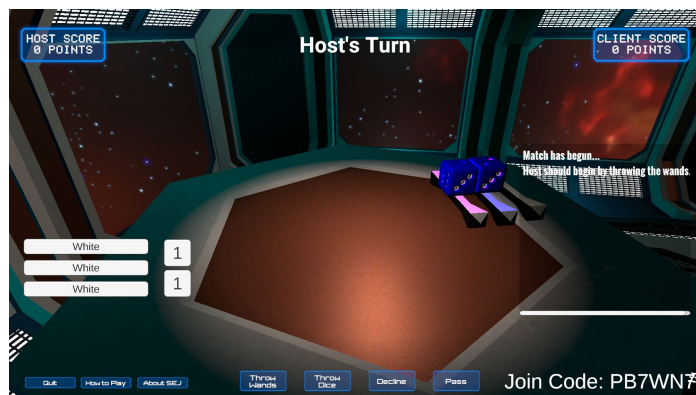
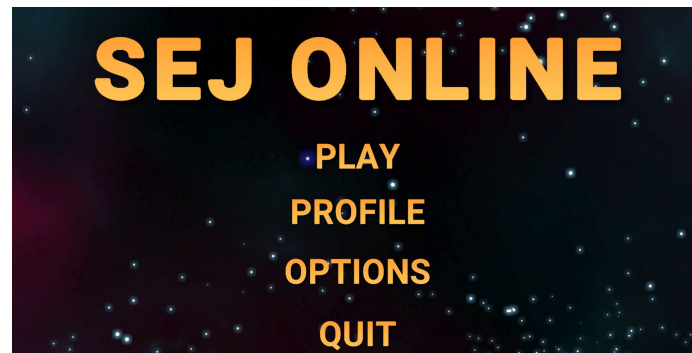
HOST

Enter a join code: [Submit](#) [Cancel](#)

BACK



- Melding projects
- Collision issues
- Syncing data
- Controlling UI
- Designing assets



Testing Plan



- Ensuring that each individual part of the modules work properly with unit testing
- Check that the interactions between modules functions as intended with integration testing
- Observing how our users interact with the different modules with usability testing

Improving the intelligence of in game AI



Conclusion



- **Bringing fiction to life, extends its legacy**
- **Standout features: Enhanced level design/gameplay and smooth multiplayer networking**
- **New features and capabilities of our product were met with satisfied results
We plan on sending a copy/demo video to the author**