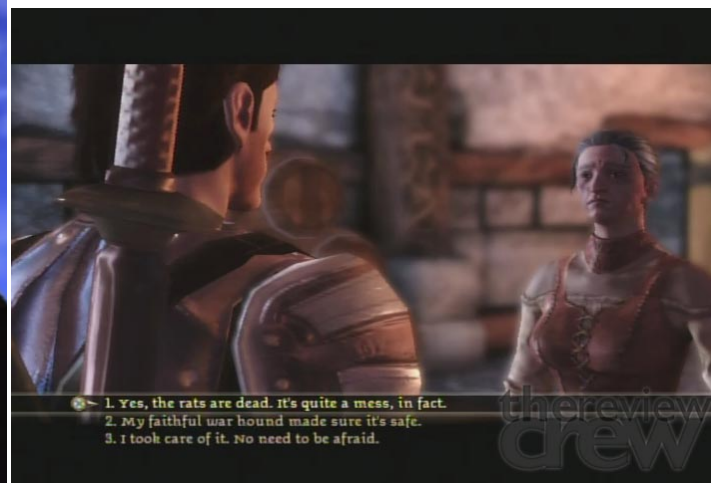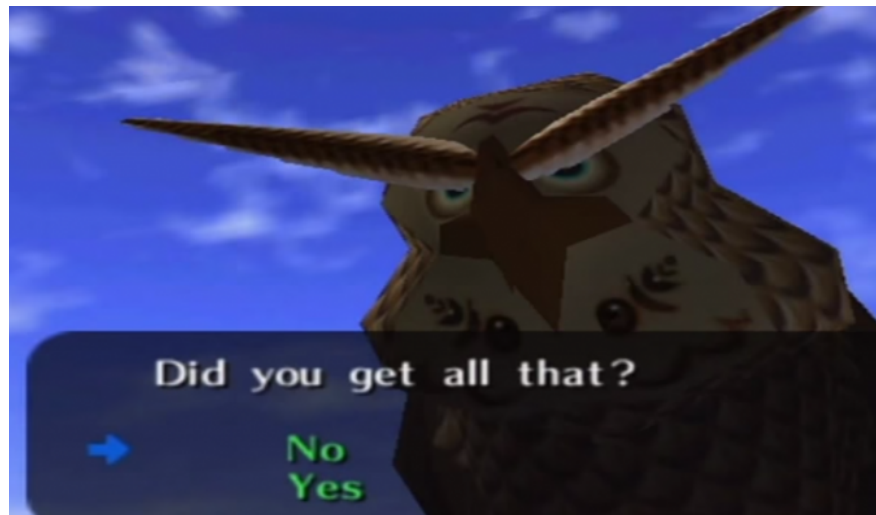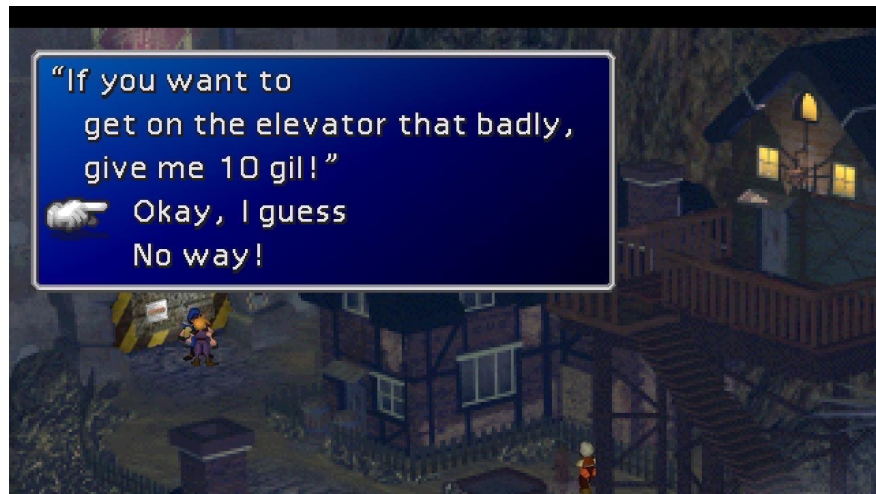# Glass Houses: Player Personality and Preferences in Video Game Dialogue Interaction
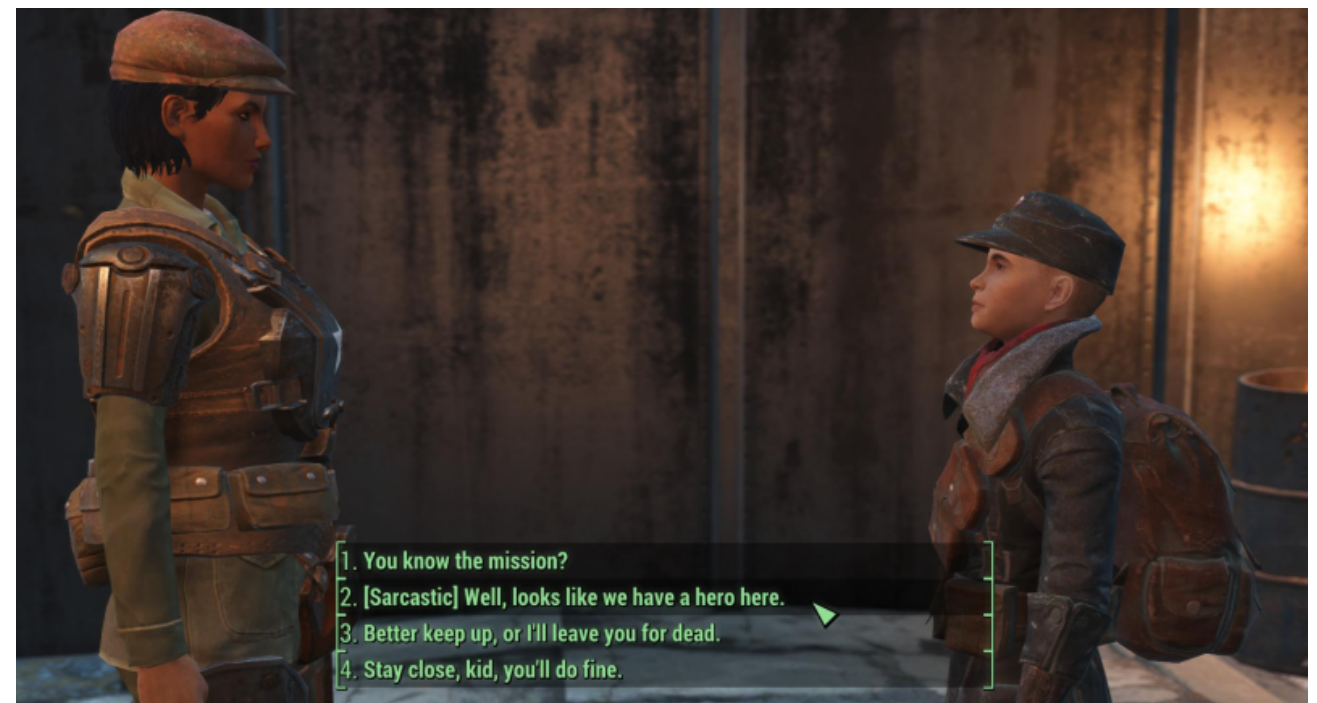
Hannah Glazebrook

The Problem: Dialogue Interface and Loss of Agency

From left to right: Final Fantasy VII (1997)[1], Final Fantasy VII (1997)[2], Final Fantasy VIII (2000)[3],
Bottom: Legend of Zelda: Ocarina of Time (1998)[4]

Player Dialogue Solutions: Mods (Fallout 4)

Research Questions

- Does player **personality** correlate with **in-game habits/preferences**

- Is there an **ideal** dialogue interface for all?

- Is there an **ideal** dialogue interface for **specific player personality** types?

Hypotheses

- Correlation between the **types of games** players preferred to play and **personality traits**

- Correlation between **frequency of gameplay** and **personality traits**

- Player **personality traits** correlate with **in-game habits and preferences**

- More **conscientious** players would prefer **dialogue interaction styles** that were clearer and allowed more **agency/control**

- Players with higher **openness to experience** would **not have a strong preference** for interaction styles
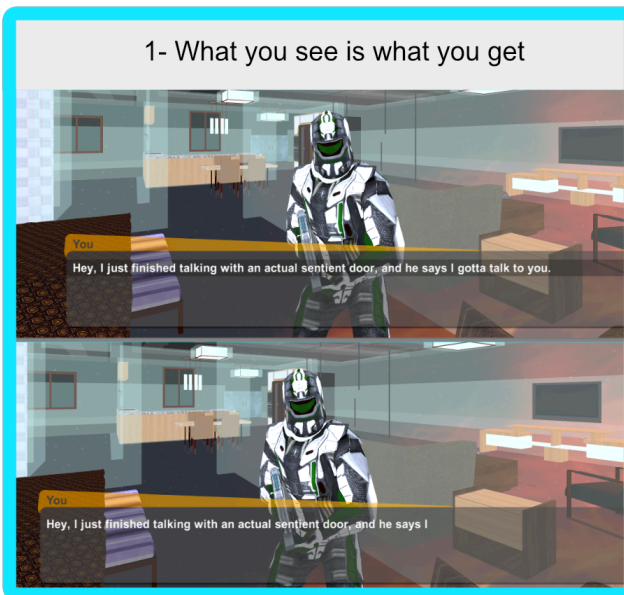
Unsure:
- Do players play like themselves, or role play?

Interaction Styles

1- What you see is what you get
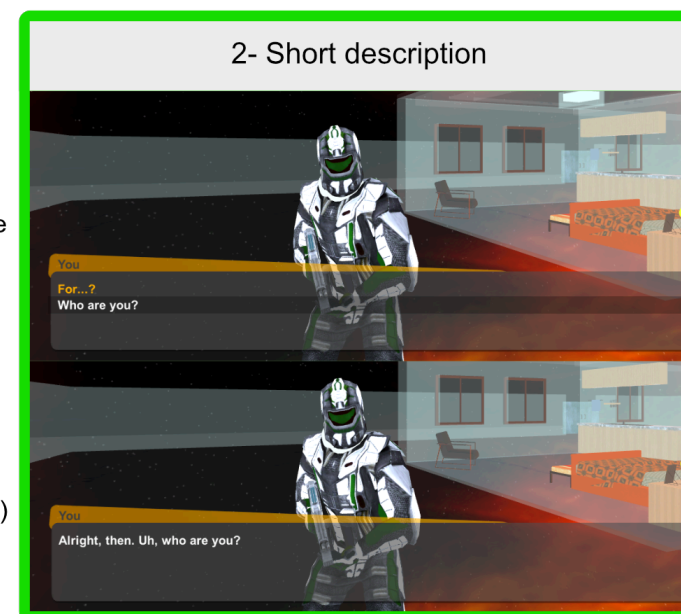
Dialogue Menu (Choices you are given)

You — Hey, I just finished talking with an actual sentient door, and he says I gotta talk to you.

Dialogue Text (Subtitles/ What you actually say)

You — Hey, I just finished talking with an actual sentient door, and he says I

2- Short description

Dialogue Menu (Choices you are given)

You — For...? Who are you?

Dialogue Text (Subtitles/ What you actually say)

You — Alright, then. Uh, who are you?

3- Description of Intention

Dialogue Menu (Choices you are given)

You — [Apologize] [Make a joke (mean)]

Dialogue Text (Subtitles/ What you actually say)

You — Ooh, right, a tiny fur ball with a BMI of 300 is gonna come take me down. I'm so s

4- Emotion

Dialogue Menu (Choices you are given)

You — [Sarcastic] [Confused]

Dialogue Text (Subtitles/ What you actually say)

You — Riveting conversation so far. Yes, I woul
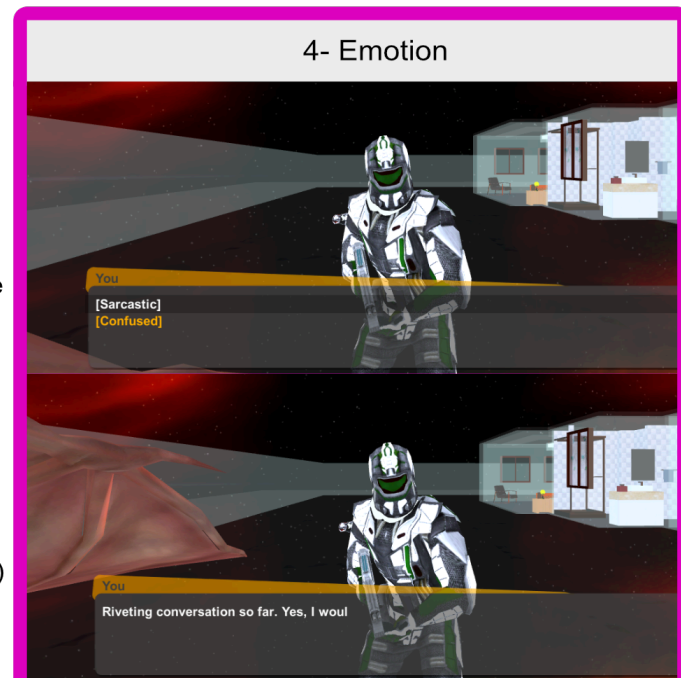
User Considerations

User Characteristics
- Video game players
- Variety of ages, races, genders
- Variety of media for gameplay (phones, consoles, PC, tablet)
- Variety of lifestyles (students, employees, unemployed, parents, non-parents, married, single
- Variety of ability levels (hand-eye coordination, eyesight, mobility, reading ability)
- Variety of languages spoken
- Possibility of users not understanding colloquialisms and idioms from particular societies

Design Considerations
- Simple Instructions and Procedures
- Intuitive Gameplay
- Does not require users to be PC gamers (use basic controls like clicking, rather than hot keys)
- Appeal to gamers with humor and gaming references as an aside
- Game should be fun to novices and gamers alike

Plan of Action and System Requirements

- Build a game in Unity 3D that allows me to answer this research question by:
  - Demonstrating 4 different dialogue interaction styles to players
  - Providing the option for players choosing the wrong or "rude" dialogue interaction choices
  - Providing slight consequences for players choosing the wrong or "rude" dialogue interaction choices
  - Demonstrating the interaction styles in a way that is as close to a real video game as possible
  - Avoiding the introduction of anything else into the game that might confound the results (keep the game as simple as possible)
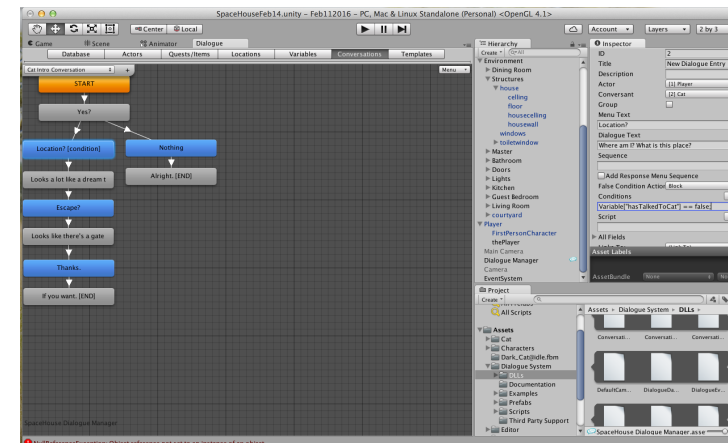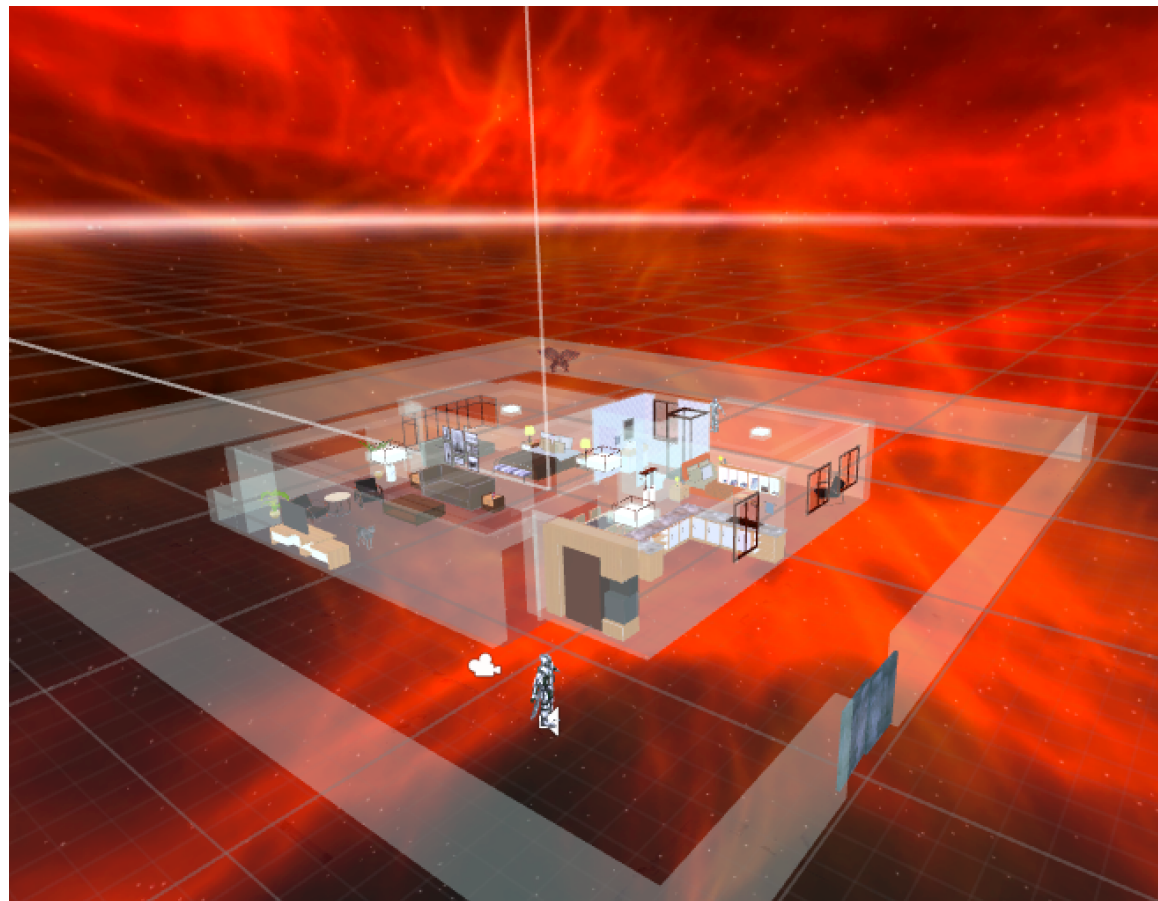
Design Process: Original Concept

- 4 Side Quests, modify interaction style between quests

Take 2: Glass Houses

- 4 NPCs, modify interaction style by NPC (also, use github this time)

Formative Evaluation

- 7 rounds of testing with video game design classmates and peers to fix bugs, resolve errors, and improve game

  Between the first version and the last version, the major changes were:
  - Added a visible player character rather than a first-person bodiless player
  - Changed the mouse look script to make the camera use the center of the screen as the cursor
  - Created custom cursor/reticle images in illustrator and imported them
  - Created custom camera angle objects to make sure the camera pointed at the speaker at the correct times
  - Changed the appearance of the UI and skybox so that it was more clear what was menu text vs subtitles and who was speaking, and text was more readable

Custom cursor/reticle images
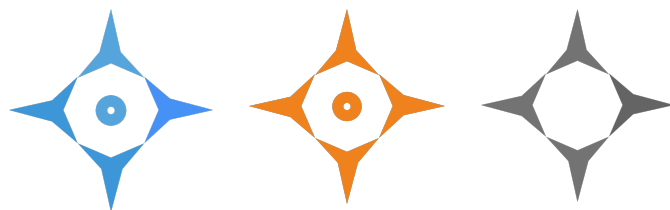
Dialogue Menu Style Before and After

Gameplay Video

https://www.youtube.com/watch?v=AsOSDHgIlJ8
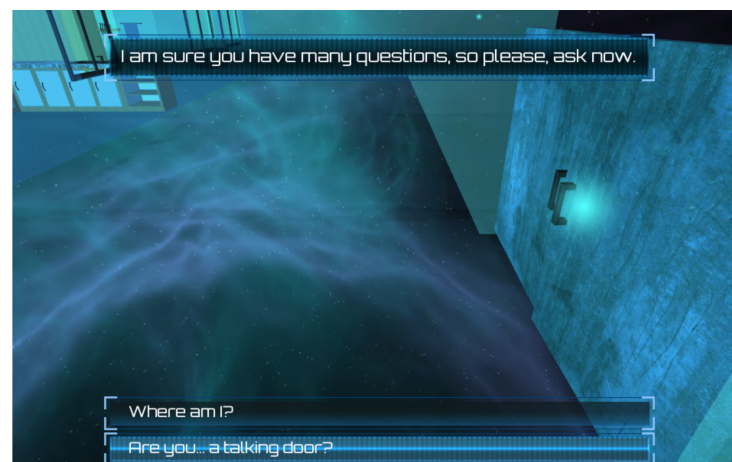
Research Study

- Using Google Forms: Users

  - Took Hexaco-60 Personality Test

  - Answered Questions about gaming habits and preferences

  - Played the video game on the web (hosted)

  - Answered follow-up questions

Participants (N = 44):

- 31 male, 13 female

- 23-40 years of age

- 80% play games a few times a week or more

- 73% full-time employees

- 16% students

- 9% part-time employees

Qualitative Results

NPCs Players Preferred Talking To		
NPC	**# of Ppts who preferred this NPC**	**% of Participants who preferred this NPC**
the Cat (Description of Intention)	20	45%
the Solider (Short Description)	5	11%
the Gate/Door (WYSIWYG (control))	10	23%
the Dragon (Emotion)	6	14%
the Girl (WYSIWYG)	3	7%
TOTAL	**44**	**100%**

Reasons for Preferences		
Reason	**# of Ppts who listed this reason**	**% of Participants who listed this reason**
Personality	29	66%
Dialogue Clarity	4	9%
Plot Importance	7	16%
Dialogue Content	6	14%
Appearance	2	5%

Results
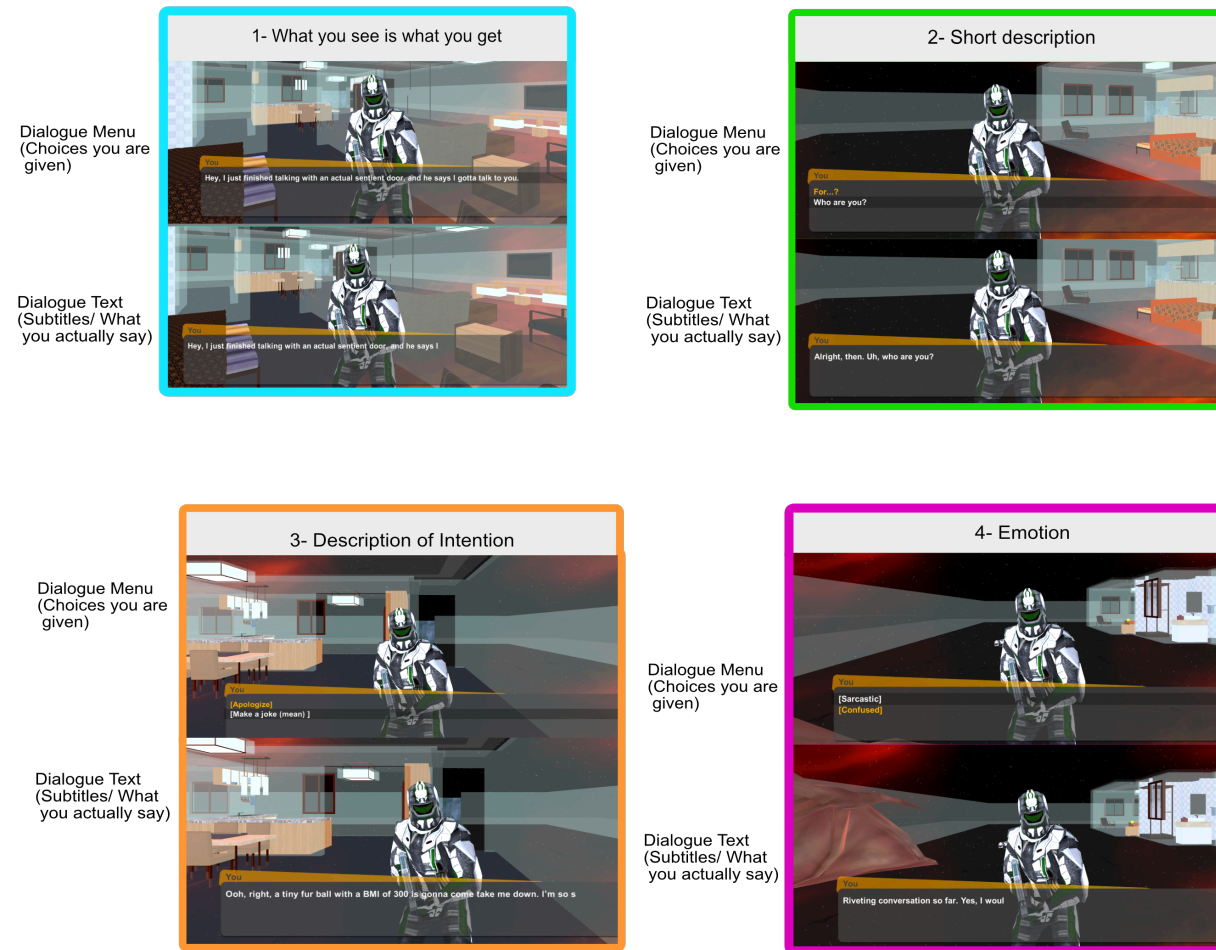
	What you see is what you get	Short description	Description of intention	Emotion
% Rates Highly	45%	68%	59%	27%
% Rates Lowly	55%	32%	41%	73%

Significant Correlations

Type	Variable 1	Variable 2
Positive	Conscientiousness	Likes RPG Games, feels the need to complete all missions and side quests in a game, returns to previous game saves and replays sections to get things right, and enjoys competing with friends
Positive	Openness to Experience	Likes puzzle, adventure and strategy games
Negative	Emotionality	Likes survival games
Negative	Extraversion	Likes fighting games, plays video games more often, likes to be the bad guy
Negative	Agreeableness	Tries to make all correct choices in games, plays games over again to try all the options
Positive	Extraversion	Tries everything in the game to see what happens
Positive	Emotionality	Plays character in game like they personally would behave in real life

Conclusions

- N is fairly small for correlations, and sample likely does not represent the population very well

- Results should inform future studies (where to look)

- Future studies should have:

    - More participants

    - Longer personality scale

    - Multiple questions assessing the same variable for reliability

    - Randomize which characters get which interaction style to reduce possible bias

Questions?