Progress Report: Texas Hold'em Poker Game with Misty Robot

1 Progress Update Relative to Project Timeline

Our project is currently on track according to our original timeline. We have successfully completed the development of the core game logic, user interface, and Misty robot integration components as scheduled in weeks 4-5. The simplified Texas Hold'em poker game now functions with all the planned features, including the predetermined hand outcomes, robot deception modeling, and proper data collection mechanisms. We've implemented the voice gender switching functionality and completed the post-game questionnaire for data collection. Our IRB application was refined again and submitted on schedule and was waiting for approval.

2 Accomplishments Since Last Deliverable

- Developed a fully functional user interface with proper card display, betting controls, and gameplay flow
- Integrated Misty robot API for facial expressions, voice output, and physical movements and implemented the robot deception model with bluffing cues in both verbal and non-verbal channels
- Created data collection and storage mechanisms to track game statistics, player behaviors, and research metrics
- Developed a comprehensive post-game questionnaire based on our research constructs (trust, deception detection, risk assessment, etc.)
- Updated our IRB application based on feedback
- Fixed several data integrity issues to ensure both predetermined and actual game outcomes are accurately recorded
- Conducted a testing session on May 12th with our friends, gathering feedback on Misty interactions and UI functionality

3 Unexpected Roadblocks Encountered

- **Data Model Inconsistencies**: Discovered inconsistencies in how game outcomes were being tracked, especially when players folded versus playing through a round.

This required refactoring the data storage logic to ensure both predetermined outcomes (for research) and actual outcomes (for gameplay) were properly recorded.

- **User Interface Feedback**: During our May 12th testing session, users reported confusion about the thinking time countdown and betting options. Some users also noted that Misty's verbal expressions were sometimes difficult to hear or understand, especially in a noisy environment.
- **Robot Voice Gender Perception**: Some test users had difficulty distinguishing between the male and female robot voices, requiring us to create more distinct voice profiles with clearer gender characteristics.

4 Updated Timeline

Week	Task	Status
Week 4	Develop study protocol, questionnaires, consent forms, etc. Complete the training and submit the IRB application.	Completed
Week 5	Program the code for the online game. Program the code for Misty's behaviors. Write a literature review.	Completed
Week 6	Finalize the content questionnaire with Professor Sebo.	Completed
Week 7	Implement improvements based on pilot feedback. Update and resubmit IRB application with clarifications.	Completed
Week 8	Pilot testing with small group (May 12th). Awaiting IRB approval. Continue refining the game implementation and preparing for participant recruitment.	In Progress
Week 9	Begin recruiting participants and conducting experiments (if we get IRB approval). Start preliminary data collection.	Planned
Week 10	Complete data collection, analyze results, prepare final presentation and report.	Planned