Problem Space

As information technology develops, the exciting field of video games has been emerging. With an estimated value of 20 billion dollars in the United States in 2020 [1], the industry generates numerous job opportunities, attracts billions of gamers, and inspires community developers to create modifications that have potential commercial values. However, as in many other technological fields, we still observe an evident gender inequality in gaming culture despite the effort to increase female-participation over the past years. In terms of demographics of gaming industry and community, less females involve as developers, students, and players [2]. Consider the entertainment and education values of video games, we believe that gender equality is vital to the healthy growth of the gaming world. In this project, we will explore the reasons of gender inequality and current problems that need to be solved. Our primary target population will be female game players, but we will also conduct research with male gamer players, computer science students and game developers.

Research Plan

Gender inequality of the gaming field may involve different aspects like the gaming design itself and environment within gaming community. We will observe the current game market using online platforms like Steam to grasp an overall impression of the relation between user demographics and features of various games. Ideally, we will contact employers in game companies to discuss their opinions on the gender difference within the field. We will interview with female game players regarding their gaming experience and how they want it to improve, and we will also interview with non-players or male game players about their thoughts on female gamers. Since we are university students, the most accessible targets will be university students, which may fail to represent the gaming community. To increase the generalizability of our research, we are planning to distribute questionnaires online to ask about the gender equality issues in gaming community. The next stage of our project will be research paper review. The aspects that each of us will be covering are shown in the following chart.

Siqi Yang	Gender Differences in video character roles and how they are portrayed
Jinyue Feng	Sexism in gaming community and female gaming experience [4]
Xinze Zhao	Female players' experience in online gaming
Fukun Li	The stereotypical gamer and reality
Xingyue Dai	The impacts of stereotype threat on females' gaming performance

Reference

[1]V. Facts, "Topic: Video Gaming Industry", www.statista.com, 2018. [Online]. Available: https://www.statista.com/topics/868/video-games/. [Accessed: 14- Jan- 2018].

[2]S. Fisher and J. Jenson, "Producing alternative gender orders: a critical look at girls and gaming", Learning, Media and Technology, vol. 42, no. 1, pp. 87-99, 2016.

Research papers for Secondary research:

[1] B. N. G. Easpaig and R. Humphrey, ""Pitching a virtual woo": Analysing discussion of sexism in online gaming", *Feminism & Psychology*, vol. 27, no. 4, pp. 553-561, 2016.

[2] L. Kaye and C. Pennington, ""Girls can't play": The Effects of Stereotype threat on females' gaming performance", Department of psychology,Edge Hill University,Ormskirk,Lancashire,United Kingdom, 2016.

[3] McDaniel, M Allison, "Women in Gaming: A Study of Female Players' Experiences in Online FPS Games", *Honors Theses*, p. 427, 2016.

[4] M. C. R. Burgess, S. P. Stermer, and S. R. Burgess, "Sex, Lies, and Video Games: The Portrayal of Male and Female Characters on Video Game Covers," *Sex Roles*, vol. 57, no. 5-6, pp. 419–433, 2007.

[5] J. Bryce J. Rutter. "Killing Like a Girl: Gendered Gaming and Girl Gamers' Visibility," *in Proceedings of Computer Games and Digital Cultures Conference*, 2002, pp. 243-255.