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CSE 510 Milestone 2

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Geurilla CS Education

Our project is coming together. From initially considering Captchas as a medium for teaching mini-CS lessons, we moved to microlearning in general. After brainstorming and considering a number of formats in the microlearning problem space, we decided that we wanted to work on creating examples of such microlearning opportunities. We chose to focus on casual games of short duration that we envision could be played while waiting on line or to take a break from doing other activities. We have been consulting with Andy Ko since the beginning of this project, and he has been a great resource in considering how to think about the design of such activities and how considerations such as ease of play, extrinsic and intrinsic motivation, and learning theory all come in to play in this project.

When we decided we wanted to make short games, I think we were both a bit daunted by the prospect, as neither one of us is much of a gamer. However, both os us were interested in learning some JavaScript, which was recommended by both Andy and Rahul Bannerjee from the Center for Game Science, who also met with us and gave us some pointers on how to get something functional quickly. We both were attracted to the concepts of modulus and counting in binary. During several brainstorming sessions, we realized we were having an easier time coming up with potentially doable ideas for binary counting. Given our short timeframe to get familiar enough with JavaScript to create some prototypes, we decided to focus on binary counting, as our ideas for modulus tended to have more complicated graphics and potential game moves.

We decided to work separately on two disctinct games, but shared code and plans on gitlab and consulted with each other and with Andy frequently. We created very low fidelity (almost completely non-functional) prototypes about 2 weeks ago, and have been working to get them (close to) fully functional. There are still features we’d both like to implement in our games, and we’ll see how successful we are in those efforts, as each new idea generally requires learning how to create that feature and often requires redoing our existing code. In addition, both Andy and Rahul, as well as several patient “game testers” have pointed out certan of the less engaging features of our current games. Of primary importance among these is that both our games lack clear instructions and explanations of the various features already incorporated. Some of this lack of clarity could be addressed through attention to good design, such that the functioning of the game became more intuitive, but that is also one of the areas we still need to work on.

Before our final reports are due, we are planning on moving away from just having our friends and family try our games, and get more impartial and representative users to try them out. Most of our friends already understand the concept of binary counting, and thus it is not easy to judge how out game will generalize to the public at large, where most people will likely be unfamiliar with the concepts.