For elementary and secondary education students across the country, summer is typically a time to hit up the pool for an afternoon of swimming, participate in summer reading programs at their local library or venture away from home on a family vacation. For many students in the Cedar Valley, though, a part of this past summer was spent on UNI’s campus participating in a UNI STEM Summer Camp. Of the hundreds of kids who participated this summer, though, one of them hails from a little farther south; Florida to be exact.

Willie Brown is a high school student from a small town in Florida. When he was given the opportunity to spend part of his summer in Iowa with his aunt, Stacey Hannigan, he couldn’t refuse. While his time in Iowa was short, Brown and eighteen other campers spent a week participating in the Mastering Multi-players camp, directed by Dr. Paul Gray, Associate Professor in the Department of Computer Science. Dr. Gray’s camp gave campers the opportunity to learn about setting up computer servers, security for the server and how to manage an online game.

“Campers were given a year-long access to a server on the cloud to host their site,” explained Dr. Gray. “This server access was funded by NSF EPSCoR and served as a place for the camper’s online gaming to exist.” Brown, like the other campers around him, spent the week in Dr. Gray’s camp learning how to set up his server and begin building his own world in the game, Minecraft. Minecraft is an online, multi-player gaming system that enables players to build constructions out of textured cubes in a 3D world. Players can then explore, gather resources from other worlds, and engage in combat to defend their world.

“The campers weren’t just playing the game though,” said Dr. Gray. “They were using the operating system, Linux, to administrate their Minecraft world and their server. As an administrator to their world, campers could control the game on both the front end through an administrators interface in the Minecraft game, or, they could control it from the back end with coding and programming.” This meant learning to use open source software, upload, download, program a server and maintain server security.

Over the past few months, most of the campers who participated in Dr. Gray’s camp have halted, or have only sporatic activity on their server and the construction of their world. The exception to this being Brown, who has since returned to Florida but remains in contact with Dr. Gray through e-mail to continue building and enhancing his Minecraft world.

“Willie does most of the building of his world and only contacts me when there is something that he just can’t figure out.” Dr. Gray said. From administrative add-ons such as ‘World Edit’ and ‘No Cheat’, to playability add-ons such as ‘Double Jump’ and ‘World Guard’, Brown has truly mastered this multi-player game and has found a passion for coding and programming thanks in part to a UNI STEM Summer Camps.