Progress Report

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Since the first presentation, our Scrabble team implemented the entire network and game logic, as well as the game itself. Although creating all the components separately was a challenging task, merging them together to work with on and another was more demanding. Most of the time spent in the last couple of weeks went into making the different components cooperate and the entire application work together.

Regarding the progress the biggest goal was to match the all the specified requirements. Since we created a playable game, a lot of time was used to troubleshoot the application for errors and check the functionality of all the components.

First of all we tried to establish as much logic as possible before implementing all the GUI components and their respective controllers. For every GUI we had to precisely add the functionality, to make sure, all the controllers work successfully together and display the right view. The biggest challenges we had regarding the GUI was the in-game view and adding the network functionality into the player lobbies. For the game view we added a drag and drop functionality for the tiles and the options for each player to either submit, shuffle or change tiles. The AI Players also needed to be provided and work very well using a directed, acyclic word graph to search for possible words, that could be placed on the board. Regarding the network we stetted up the network itself. This contained client messages for the GUI's and also the functionality to play as long as the users are in the same network.

Another important requirement was building an easy and intuitive tutorial, which we also implemented. To continue we included the player profile with the client and with the game view, so that every player and its statistics are displayed correctly. The player profile itself also got a strong update with the functionality to upload a profile picture. The customization aspect was also something that we wanted to add in the game settings, where a player can choose letter distributions, dictionaries, and letter values. Finally, we added a calm and fitting sound for the game menu and the game as well. To ensure full functionality and a working program Various tests were implemented, which helped a lot in debugging and testing of the application.

By and large all requirements could be met, and we were even able to implement many extra features to the application. Also, we made sure the GUI looked very welcoming.