# section 1: Project identification

Boggle is a game that dates back to the 1970s. Back then, it was much easier to play similar games on a physical board, but nowadays the trend has been to play such games digitally, such as on a computer or smartphone. However, not everyone enjoys a text-based version of a game; it’s too boring, and the black-and-white (or black-and-green) color scheme is irritating to the eye. So, the goal of this project is to create an upgraded GUI version of Boggle, with many upgrades to the initial rules of the game for fun.

# section 2: user stories

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| Name | ID | Owner | Description | Implementation Details | Priority | Effort |
| Multiplayer Text-Based | 1.1 | Sultan | As a physical board game “boggler,” I want to be able to play with friends on my computer so that I don’t have to manually check for valid words and memorize scores. | Implementation in backend:  -Add multiplayers in engine  Implementation in frontend:  -Change console prompts | 3 | 1 |
| Text-Based | 1.2 |  | As a solo player, I want to be able to play a text-based version of boggle against the computer, so that I have “someone” to play my favorite game with. | -Nothing | 0 | 0 |
| GUI | 1.3 | Emzy, Kev, Hassan | As a boggle user, I want the board to be displayed using a GUI so that it can be easier for me to play the game (as opposed to the text-based version). This new GUI should still allow me to play either with a friend or against the computer. | Backend:  Event handling  Frontend:  Buttons, board, colors, etc. | 3 | 3 |
| Audio-  Only Mode Against Computer | 2.1 | Kevin, Sultan | As a blind person, I want a UI that allows me to interact with the board without visual elements, but rather only with audio so that I can play the game in the same way that non-blind people play. This new audio-only mode should allow me to play against the computer. | Backend:  Event handling to speak letters  Frontend:  Options to toggle blind-mode on, etc. | 2 | 3 |
| Audio-Only Mode Against a Friend | 2.2 | Mustafa, Hassan | As a blind person using the audio-only mode against the computer, I want to be able to play with a friend (who may or may not be blind). |  | 2 | 1 |
| Powerups | 3.1 | All | As a boggle user, I want to get a little something extra when I find a large word (money would be appreciated).  Powerups: Score multiplier, hints, etc. |  | 1 | 3 |
| Timed Boggle | 4.1 | Kevin, Sultan | As a competitive boggle player, I want to set a timer so that I can challenge myself. |  | 2 | 2 |
| Undo | 4.2 | Hassan, Moose | As a Boggle player who makes errors when choosing words, I don’t want to have to restart choosing my whole word. |  |  |  |