DSA Project

Wakeel Furqan Ahmed 01-134212-192

**Intro**:

I’m using Trie data structure in my Project which is a Boggle Game. In this game the user has to find words from Letters laid out on a 4x4 grid.

The Graphics is done using SDL2.

**Main Working on how Trie is being used:**

Every Time user pressed a letter/button. (A data member of contains a Temp Node), Incase temp is null its assigned to root otherwise it moves one step down(to its child) and updates that temp Node. Incase that Node(Trie\_Node) bool is\_word is 1(true) **then hint it given to player (orange buttons**). Now If user pressed any of these Orange button, It is accepted as a word.   
  
I’ve also used the same TIRE tree for **storing registered word(User found words**) by using another custom bool is\_registered.

In case the user presses a button -> then the parent of previously pressed letter is assigned to temp.

Due to extremely large Debug file and relevant data. All code and debug is Uploaded on GIthub

(thanks for ur coperation).

[Wakeelfahmed/Boggle-Game-DSA-Project-SDL-GUI (github.com)](https://github.com/Wakeelfahmed/Boggle-Game-DSA-Project-SDL-GUI)