Boggle Solver (C++)

The Task

To solve, check and score boggle game.

Compilation

bbsolver: g++ -Wall -Wextra -g BogKey.cpp Dictionary.cpp
BogSolver.cpp
solverMain.cpp -o bbsolver

bbchecker: g++ -Wall -Wextra -g BogKey.cpp Dictionary.cpp
BogValidator.cpp
checkerMain.cpp -o bbchecker

bbscorer: g++ -Wall -Wextra BogKey.cpp Dictionary.cpp
BogScorer.cpp
scorerMain.cpp -o bbscorer

Design

I designed a separate class called BogKey that reads in a dictionary, reads in
a board, solves the boggle and returns the list of solutions.This class is used
by the BogSolver class and also by the BogValidator class.It stores the words
that it finds on two separate data structures that will be more suited to the
solver and the checker. Since the solver has to be able to return the list of
solutions word in BogWordList format, the BogKey also has this data structure.
On the other hand, it also uses a Dictionary class (a trie) to store the list
of solutions so that the Validator class can operate on these solutions list
more efficiently using the isWord function.