Auto-Completion Trie (ACT)

The Auto-Completion Trie (ACT) is a Java program that implements an auto-completion feature using a trie data structure. It allows users to efficiently search for words based on a given prefix.

Features

- <u>Depth First Search:</u> Insertion of words into the trie data structure & auto-completion of words based on a given prefix.
- <u>File I/O:</u> Loading words from a dictionary file to build the trie.

Usage

1) <u>Building the program:</u> Compile the Java source code to generate the executable class files.
2) <u>Running the program:</u> *Execute the compiled program using the Java Virtual Machine (JVM).*
3) <u>Searching for Words:</u> *Enter search queries at the command-line prompt to find auto-completion suggestions. Type "exit" to quit the program.*

Application Structure

- <u>ACT.java</u> ⇒ *Main Java source code file containing the implementation of the ACT program.*
- <u>Dictionary2.txt</u> ⇒ *Sample dictionary file containing a list of words for testing the program.*

Screenshots

```
$> Please type search queries:
$> test
$> Your options are:
$> test
$> testament
$> testaverde
$> testaverdes
$> tested
$> tester
$> testeverde
$> testified
$> testifies
$> testify
$> testifying
$> testimony
$> testing
$> Please type search queries:
$> exit
Thanks for using ;)
```