## Data structure Algorithm Advance Lab Project

91ICT Group - ICT58
Anh Nguyen Hoang
Sam Hoang Van
Luong Nguyen Van
Son Dao Duy
Tuan Nguyen Minh

Hanoi University of Science and Technology

October 27, 2015

#### Outline



Introduction

Overview and Usage Shortcut

Data structure design

Data source and References

#### Introduction



91Dict is a dictionary application developed by

- 1. C programming language
- 2. Data Structure Btree
- 3. Gtk+ 3.0 library for graphical user interface (GUI)

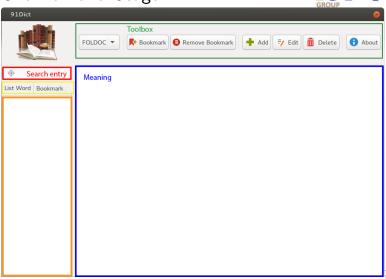
## Overview and Usage



- 3 different dictionaries
  - FOLDOC
  - 2. English Vietnamese Dictionary
  - 3. Vietnamese English Dictionary
- Program feature
  - 1. Add word
  - 2. Edit word
  - 3. Delete word
  - 4. Bookmark
  - 5. Suggests word
  - 6. Search Entry Autocomplete (by History)

## Overview and Usage





#### Shortcut



- 'ctrl + n': Add new word
- 'ctrl + e': Edit current search word or selected word
- 'shift + delete': Delete current search word or selected word
- 'ctrl + d': bookmark word
- 'ctrl + delete' : delete bookmark selected word on bookmark

## Data structure design



91Dict use Btree for data structure for storage data

- Dictionary (key: word, value: meaning)
- Soundex (Key: Soundex String, value: list of words has same soundex string separated by semi-colon;)
- Bookmark (Key: word, value : 1)
- History for search entry autocomplete (Key: word, value : 1)

#### Data source and References



- Btree http://www.hydrus.org.uk/doc/bt/html/
- GTK+ 3.0 http://www.gtk.org/
- Glade help for design https://glade.gnome.org/
- 91Dict Source Code https://github.com/91ICT/91Dict



# The End