Willem Kroeger

CS 300: Data Structures and Algorithms: Analysis and Design

Southern New Hampshire University

January 28, 2023

Hash table Pseudocode

**Opening files**

Define file name

Open file “file name”

WHILE file is not empty

Get next line

Parse each line

Find “,” that separates each parameter

If “,” doesn’t exist in a line, format error = TRUE

Else, format error = false

For each prerequisite course

Find course number in file

If course number is missing, format error = TRUE

If format error = TRUE

Print error

Else

Print “no errors found”

**Create course Objects**

Vector<Node> nodes

Node()

int key = nullptr

Course Info : course data

Course id, course name, prerequisites

Next = nullptr

Open file

For each line in file

Use “,” as delimiter

Find course id

Key = course id % 13 (or other prime number)

Create new node with key value

Store course data

Store course ID

Store course name

Store all prerequisites

For every “,” past the first comma

Store as a prerequisite for that class

Close file

**Print course information**

While traversing node lists

If node key != default data  
 Print node  
 while next node != nullptr  
 print node data  
 increment node to next node