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**CS-300 Analysis and Design**

**March 23, 2025**

**Project One Milestone**

Include: Libraries and headers

Define: create structure to hold course data

struct Course: {}

courseId

courseName

preCount

preList

Course() (constructor) {courseId=courseName = ""; preCount=0; preList= ""}

Main: ()

Create new List named courseList of struct-type Course

Get CSV file path from user

if no data exists use default location

Call txtParser() pass through CSV file path

Call validateList() pass through courseList

Get user value and search and Store in userSearch

Call printCourse() pass through userSearch

End

txtParser(String)

Create a temp local list called tempList

Open file in path by invoking parser libraries

Loop through every row until end of file

if 1st and 2nd string exist

Add the 1st string to struct at courseID

Add the 2nd string to struct at courseName

Loop until no value is found in column (no more pre-req)

Increment variable named preCount for each pre-req found

Concatenate a string names preNames for each pre-req

Add preCount to struct at preCount

Add preNames to struct at preList

Return tempList

End

searchList:(String)

Create tempCourse of type Course

Loop through list for each course

If string is == courseID

Set tempCourse to Course

Return tempCourse

End

printCourse:(String)

Create tempCourse of type Course

Set tempCourse == searchList(string)

Output courseID to console

Output courseName to Console

Loop 0 to preCOunt

For each Course in preList

Call printCourse() passing preList

End

validateList:()

Create tempCourse of type Course

Create variable vaild and set True

For each Course

If vaild is false Break

Loop 0 to preCount

Set tempCourse == searchList(preList token)

If tempCourse courseID is null set vaild equals false

Return valid

End