California State University, Sacramento
College of Engineering and Computer Science

Computer Science 35: Introduction to Computer Architecture

Spring 2018 – Lab 6 – *Silly Sentences*

Overview

You have a job at a computer games company. Yes, you are lucky! Besides spending your days getting paid to play, you have to help write some simple games.

Your boss wants you to create a game called "Silly Sentences". The game can be quite fun – and wacky – depending on who you play it with.

The game consists of two human players that take turns entering parts of a sentence. To make it interesting, each player cannot see what the other enters. At the end, your program will put the words together and form a complete sentence. Because each player won't know the final result, the sentence can be silly, weird, nonsensical, and completely ludicrous.

How the Game Works

Silly Sentences consists of 4 turns:

1. Player A enters a noun
2. Player B enters a verb
3. Player A enters a preposition – such as into, under, over, near, etc....
4. Player B enters a second noun

After each turn, the screen is cleared. After the 4 rounds, the game simply puts the words together to form a sentence.

Requirements

You must think of a solution on your own. .

1. Input the four variables

2. Clear the screen between players

3. Prompt each player – tell them what the need to enter: verb, noun, etc...

4. Output the completed string with spaces between the words – alackofspacesishardtoread.

Once you have your program working, you need to test it with one of your classmates. If you are working on this activity from home: find a friend or family member.

…but, most importantly, have fun!

Sample Program

Here is a sample program. Your solution doesn't have to look exactly like this. Customize then prompts, text, etc. however you think it looks best.

The user's input is displayed in blue.

The screen is cleared before each player enters part of the sentence. You need to look at the library documentation to learn how to clear the screen. You can clear the screen before *Player A* enters the first noun, but you don't have to.

```
Welcome to Silly Sentences!

Player A, enter a noun: Sacramento
```

Screen is cleared

```
Player B, enter a verb: jumped
```

Screen is cleared

```
Player A, enter a preposition: over
```

Screen is cleared

```
Player B, enter a noun: moon
```

Screen is cleared

```
Your sentence is:

Sacramento jumped over moon.
```

Reading and Storing Text

To read text from the keyboard, please read about the ScanCString subroutine in the CSC35 Library. You will need to create a buffer large enough to hold each part of the sentence.

```
Phrase:
   .space 30
```

UNIX Commands

Editing

Action	Command	Notes
Edit File	**`nano`** *filename*	"Nano" is an easy to use text editor.
E-Mail	**`alpine`**	"Alpine" is text-based e-mail application. You will e-mail your assignments it.
Assemble File	**`as -o`** *objectfile asmfile*	Don't mix up the *objectfile* and *asmfile* fields. It will destroy your program!
Link File	**`ld -o`** *exefile objectfiles*	Link and create an executable file from one (or more) object files

Folder Navigation

Action	Command	Description
Change current folder	**`cd`** *foldername*	"Changes Directory"
Go to parent folder	**`cd ..`**	Think of it as the "back button".
Show current folder	**`pwd`**	Gives a file path
List files	**`ls`**	Lists the files in current directory.