

CS202: PROGRAMMING PARADIGMS & PRAGMATICS

Semester II, 2020 – 2021

Lab 4: Hangman in Perl!

Aim: Write a program to play a word-guessing game like Hangman.

- **Let's get started!**

- Create a directory structure to hold your work for this course and all the subsequent labs:
 - Suggestion: `CS202/Lab4`

- **Introduction**

- The word to guess is represented by a row of dashes, giving the number of letters in the word.
- If the player suggests a letter which occurs in the word, it should write it in all its correct positions
- If the suggested letter does not occur in the word, it should draw one element of a hanged man stick figure as a tally mark
- The game is over when:
 - The player completes the word, or guesses the whole word correctly – Player Wins!
 - Number of tries exceeds a limit (completes the hangman diagram) – Player loses!

- **Game Simplified:**

- It must randomly choose a word from a list of words.
- It must stop when all the letters are guessed correctly.
- It must give them limited tries and stop after they run out.
- It must display letters they have already guessed (either only the incorrect guesses or all guesses).

- **Suggestions:**

- If you are familiar with OOP in Perl, use classes whenever/wherever possible to imitate real world objects
- If not, then try to modularize your program as much as possible into meaningful subroutines
- **First get a simple text version of your game correct!!**
- Then try drawing the hangman as shown in the examples.

- **Examples:**

```

Here is your word: -----
Guesses so far:
Make a guess: a
Good guess! you have 6 body parts left

Here is your word: -----a-
Guesses so far: a
Make a guess: l
Bad guess - you have 5 body parts left

Here is your word: -----a-
Guesses so far: al
Make a guess: e
Bad guess - you have 4 body parts

Here is your word: -----a-
Guesses so far: ale
Make a guess: h
Bad guess - you have 3 body parts

Here is your word: -----a-
Guesses so far: aleh
Make a guess: p
Good guess! you have 3 body parts

Here is your word: p-----a-
Guesses so far: alehp
Make a guess: program
Yeah! you got it!

Do you want to play again (y/n)? n

```

```

_! _
S O _ _ W _ _ _
Pick a letter --> k
Sorry, you already guessed 'K'
Pick a letter --> p
Sorry, you already guessed 'P'
Pick a letter --> h
Guessed Letters : I K O P M W N S J H

```











```

_! _
S O _ _ W _ _ _

```

So sorry. You struck out.

Do you want to play again ? Y/N

0		Word: _ _ _ _ _ Guess: E Misses:
1		Word: _ _ _ _ _ Guess: T Misses: e
2		Word: _ _ _ _ _ Guess: A Misses: e,t
3		Word: _ A _ _ A _ Guess: O Misses: e,t
4		Word: _ A _ _ A _ Guess: I Misses: e,o,t
5		Word: _ A _ _ A _ Guess: S Misses: e,i,o,t
6		Word: _ A _ _ A _ Guess: N Misses: e,i,o,s,t
7		Word: _ A N _ _ A N Guess: H Misses: e,i,o,s,t
8		Word: H A N _ _ A N Guess: R Misses: e,i,o,s,t
9		Word: H A N _ _ A N Guess: Misses: e,i,o,r,s,t

- **Sample List of Words**

"computer|radio|calculator|teacher|bureau|police|geometry|president|subject|country|environment|classroom|animals|province|month|politics|puzzle|instrument|kitchen|language|vampire|ghost|solution|service|software|virus25|security|phonenumber|expert|website|agreement|support|compatibility|advanced|search|triathlon|immediately|encyclopedia|endurance|distance|nature|history|organization|international|championship|government|popularity|thousand|feature|wetsuit|fitness|legendary|variation|equal|approximately|segment|priority|physics|branche|science|mathematics|lightning|dispersion|accelerator|detector|terminology|design|operation|foundation|application|prediction|reference|measurement|concept|perspective|overview|position|airplane|symmetry|dimension|toxic|algebra|illustration|classic|verification|citation|unusual|resource|analysis|license|comedy|screenplay|production|release|emphasis|director|trademark|vehicle|aircraft|experiment";

- **Submitting your work:**

- All source files and class files as one tar-gzipped archive.
 - When unzipped, it should create a directory with your ID. Example: **2008CSB1001** (NO OTHER FORMAT IS ACCEPTABLE!!! Case sensitive!!!)
- Source files should include the following: (Case-Sensitive file names!!)
 - `Hangman.pl`
 - Any other supporting or required files
- ***Negative marks for any problems/errors in running your programs***
- ***If any aspect of the game / rules are confusing, make an assumption and state it clearly in your README file!***
- **README file should also have instructions on how to use/run your program!**
- Submit/Upload it to Google Classroom
- Marks Allocation
 - Correct Text Version [10 points]
 - Graphic Version [+5 points]
 - Coding Style [2 points]
 - README [3 points]