CSE 13S Fall 2021
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30 September 2021

Assignment 1: Pass the Pigs
DESIGN.pdf

Description of Program:

This program is a simulation of the game David Moffat's dice game, *Pass the Pigs*. This game is played between **2 and 10 players** and the players will take turns rolling a pig. The pig can land on its **Side**, **Razorback**, **Trotter**, **Snouter**, and **Jowler**. If the pig lands on its **Side** it yields 0 points and ends that player's turn and the turn is passed to the next player. This has a 2/7 chance of happening. If it lands on its back (**Razorback**) or lands upright (**Trotter**) 10 points are earned. Razorback and Trotter each have a 1/7 chance of happening. Landing on the snout (**Snouter**) is 15 points with a 1/7 chance. And landing on one of its ears (**Jowler**) is 5 points with a 2/7 chance since there are two ears. The game ends when any player has 100 points or higher.

Files:

pig.c
This contains the implementation of the game

names.h
This contains the array of player names to be used in your implementation of the game. This file will be provided in the course resource repository and may not be modified.

Makefile
The following Makefile targets are implements and function properly:
-make
-make all
-make clean
-make format
The Makefile also must build the program correctly.

README.md
-in Markdown
-briefly describes program
-describes how to build program
-describes how to run program

DESIGN.pdf
-covers the purpose of the program
-layout/structure of the program
-clear description/explanation of how each part of the program should work

-supporting pseudocode (C is not considered pseudocode)

Pseudocode:
Get user input for number of players (in between 2 and 10 inclusive) and seed (positive integer)
If player count is not in the range set player count to 2
If seed is not a positive integer set seed to 2021

Set Current Player Number to 0
Make an array with the players in it with size player count, player[]
Make an array of the player points, playerPoints[]
While True:
        player[Current Player Number] rolls pig
        If the roll is JOWLER:
                Add 5 points to playerPoints[Current Player Number]
        Else if roll is SNOUTER:
                Add 15 points to playerPoints[Current Player Number]
        Else if roll is RAZORBACK or TROTTER:
                Add 10 points to playerPoints[Current Player Number]
        Else:
                Add 1 to Current Player Number
                If Current Player Number is equal to player count - 1:
                        Set Current Player Number to 0
        If playerPoints[Current Player Number] has 100 points or more:
                Break of the while loop
Output that player[Current Player Number] won the game with playerPoints[Current Player Number] total points

Error Handling:
When the user inputs an incorrect value for the number of players (a number that is not between 2 and 10 inclusive) the program will set player count to 2.

Likewise when the user inputs a seed that is not a positive integer the program will set seed to 2021.