**Assignment: Guessing Game in Bash**

**Overview**

This assignment tests your skills in using Git and GitHub, creating makefiles, and writing Bash programs. You will create a simple guessing game that prompts the user to guess the number of files in the current directory.

**Project Structure**

The GitHub repository for this project will contain the following three files:

1. **guessinggame.sh** - The Bash script for the guessing game.
2. **Makefile** - A makefile to automate the creation of the README.md file.
3. **README.md** - A markdown file containing project details.

**Program Specifications**

**guessinggame.sh**

* The program continuously prompts the user to guess the number of files in the current directory.
* It informs the user if their guess is too high or too low.
* Once the user guesses correctly, they are congratulated, and the program ends.
* The program must be executable via the command bash guessinggame.sh.
* The program must include:
  + At least one function
  + One loop
  + One if statement
* The code must be between 20 and 50 lines.

**Makefile**

* The makefile must generate the README.md file with the following information:
  + Title of the project
  + Date and time when make was run
  + Number of lines of code in guessinggame.sh
* The README.md file should be generated automatically and should not be edited manually.

**Example Code**

**guessinggame.sh**

bash

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#!/bin/bash

count\_files() {

local count=$(ls -1 | wc -l)

return $count

}

count\_files

correct\_guess=$?

echo "How many files are in the current directory?"

while true; do

read guess

if [[ $guess -lt $correct\_guess ]]; then

echo "Your guess is too low. Try again."

elif [[ $guess -gt $correct\_guess ]]; then

echo "Your guess is too high. Try again."

else

echo "Congratulations! You guessed the correct number of files."

break

fi

done

**Makefile**

makefile

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**README.md: guessinggame.sh**

echo "# Guessing Game" > README.md

echo "Date: $(shell date)" >> README.md

echo "Number of lines of code: $(shell wc -l < guessinggame.sh)" >> README.md

.PHONY: clean

**clean:**

rm -f README.md