CognoRise INFOTECH

COGNORISE INFOTECH

Learn -- Innovate -- Thrive

PYTHON DEVELOPMENT INTERNSHIP

ABOUT US

CognoRise Infotech thrives as a dynamic and varied community that unites individuals with akin aims and eventual achievements. Our primary concentration resides in establishing prospects that encompass a multitude of domains, encompassing the enhancement of leadership acumen, knowledge acquisition, engagement amongst students, and the cultivation of mutual interests.

We hold a steadfast belief in the potency of leadership and its capacity to propel constructive transformation. Hence, we furnish platforms and reservoirs of support for members within our community to cultivate their leadership proficiencies. By means of mentorship initiatives, interactive workshops, and synergistic undertakings, we endow individuals with the authority to assume leadership positions and engender meaningful alterations in their respective domains.

INSTRUCTIONS

o Update your linkedln profiles.

o For the internship ,you will need to complete any 3 task at your convenience for successful completion of the internship.

o Create a new Github repository and name it CognoRise Infotech and share the link of the Github repo in the submission form(it will be shared later through email).

o You can refer to online resources such as Google Search and documentation.

SUBMISSION

o A TASK SUBMISSION FORM will be shared later through email . Till then please continue your task.

o Create a demo video of your task, preferably screen recorded.

o The video can be hosted on LinkedIn for proof of your work and build credibility among your peers .

o You can tag CognoRise Infotech on LinkedIn in such posts.

o Please add #cognorise in each of your task video postings on LinkedIn, Additionally, you can also add hashtags such as #internship #webdevelopment. for more reach and visibility.

TASK 1
CALCULATOR APP

- Design a simple calculator with basic arithmetic operations.
- Prompt the user to input two numbers and an operation choice.
- Perform the calculation and display the result.

TASK 2
PASSWORD GENERATOR

- A password generator is a useful tool that generates strong and random passwords for users. This project aims to create a password generator application using Python, allowing user to specify the length and complexity of the password.
- User Input: Prompt the user to specify the desired length of the password.
- Generate Password: Use a combination of random characters to generate a password of the specified length.
- Display the Password: Print the generated password on the screen.

TASK 3
ROCK, PAPER, SCISSORS GAME

- User Input: Prompt users to select rock, paper, or scissors.
- Computer Selection: Randomly generate the computer's choice.
- Game Logic: Determine the winner based on user and computer selections. Rock beats scissors, scissors beat paper, and paper beats rock.
- Display Result: Present user and computer choices. Display outcomes: win, lose, or tie.
- Score Tracking (Optional): Record user and computer scores for multiple rounds.
- Play Again: Ask if users want another round.
- User Interface: Design a user-friendly interface with clear instructions and feedback.

TASK 4
HANGMAN GAME

- Word List: Create a list of words for the game.
- Random Word: Select a random word from the list.
- Initial Display: Show empty hangman figure and underscores for unguessed letters.
- User Input: Prompt the user for a letter guess.
- Check Letter: Validate the guess and check if it's in the word.
- Update State: Reveal correctly guessed letters in the word.
- Hangman Display: Display hangman figure for incorrect guesses.
- Win/Loss Check: Determine win or loss conditions.
- Play Again: Ask if the player wants to play another round.
- User Interface: Design a clear interface showing hangman figure, word state, and feedback

TASK 5
DICE ROLLING SIMULATOR

- Create a simple Python program that simulates rolling dice. Users can specify the number of sides on the dice and the number of rolls.
- The program generates random numbers for each roll and displays the results.
- It's a quick and fun way to emulate the experience of rolling dice, commonly used in board games or tabletop role-playing games.
- The simulator allows users to explore the outcomes of dice rolls without the physical dice.

TASK 6
COUNTDOWN TIMER

- The Countdown Timer Python project is designed to create a user-friendly timer application that counts down from a specified time.
- Utilizing libraries like tkinter for the graphical user interface and time for time-related functions, this project enhances skills in event handling and time management. Users can set custom countdown durations, making it a versatile tool for tasks like cooking, productivity sprints, or workout sessions.
- This project showcases practical application of Python in creating interactive and functional desktop tools.

TASK 7
QR CODE ENCODER/DECODER

- The QR Code Encoder/Decoder Python project involves creating a tool to generate QR codes for information like URLs or texts and decoding QR codes to retrieve the embedded data.
- Utilizing libraries like qrcode and opencv-python, this project enhances practical skills in image processing and data encoding.
- It's a versatile project with applications in various fields, including marketing, logistics, and information sharing, showcasing the power of Python in data representation and extraction through QR codes.

TASK 8
SUDOKU SOLVER

- The Sudoku Solver Python project is focused on implementing an algorithm to solve Sudoku puzzles.
- Utilizing backtracking or other solving techniques, the program takes an incomplete Sudoku grid as input and outputs the completed solution.
- This project hones skills in algorithmic problem-solving and array manipulation. Additionally, it demonstrates the practical application of Python in solving complex puzzles efficiently, offering users a tool to tackle and solve Sudoku challenges programmatically.

INTERNSHIP AIM
LEARNING AND ADVANCEMENT

- The purpose of this internship is to learn and grow

- Our internship is designed to facilitate your learning journey and foster growth.The choice to seek guidance is entirely yours.

- The provided tasks may appear simple or complex.

- We anticipate your approach to be marked by professional commitment, dedicating the attention each task merits.

CONNECT WITH US

- MAIL US: cognoriseinfotech@gmail.com
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- TELEGRAM: https://t.me/CognoRise_InfoTech
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- LINKEDIN: https://www.linkedin.com/company/cognoriseinfotech/