June 2024 Batch

JAVA DEVELOPEMENT TASK

Happy Interning :)

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About Next Gen Dev

At NextGenDev, we are dedicated to shaping the future of technology by empowering the next generation of tech talent. We offer comprehensive internship programs and professional services in web development, UI/UX design, Android development, Java programming, Python programming, data science, C++, AI, ML, video editing, content writing, and copywriting.

Instructions

- Update your LinkedIn profiles and tag Next Gen Dev.
- For a JAVA Development internship, you will need to complete at least three (either task 1 or task 2, or task 3 or task 4 or task 5) at your convenience for successful completion of the internship.
- Maintain a separate GitHub repository (name Next_Gen_Dev for all the tasks and share the link of the GitHub repo in the task submission form (it will be given later through email).
- You can refer to online resources such as Google Search and read tutorials. Watch videos (For Help).

Submission

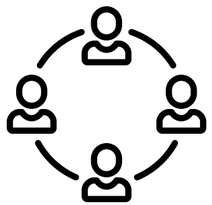
- A **task submission form** will be shared later through email. Till then please continue your task.
- A document needs to be created to showcase the understanding of the code for the Work/Task you have completed.
- The work can be hosted on LinkedIn for proof of your work and to build credibility among your peers. You can tag Next Gen Dev in such posts.
- Please add #Next Gen Dev in each of your task video postings on LinkedIn, Additionally, you can also add hashtags such as #internship #JAVAdevelopment for more reach and visibility.

Perks


Certification


Experience


LOR (*PB)


Networking


Mentorship

Task List

- For a Java Development internship, you will need to **complete any three (either task 1 or task 2 or task 3 or task 4 or task 5)** as per your convenience for successful completion of the internship.

Task Divisions

- **Task 1:** NUMBER GAME
- **Task 2:** STUDENT GRADE CALCULATOR
- **Task 3:** ATM INTERFACE
- **Task 4:** QUIZ APPLICATION WITH TIMER
- **Task 5:** STUDENT COURSE REGISTRATION SYSTEM

Task 1 : NUMBER GAME

- Generate a random number: within a specified range, such as 1 to 100.
- Prompt the user: to enter their guess for the generated number.
- Compare: the user's guess with the generated number and provide feedback on whether the guess is correct, too high, or too low.
- Repeat steps 2 and 3 until the user guesses the correct number.
- You can incorporate additional details as follows:
  - Limit the number of attempts: the user has to guess the number.
  - Add: the option for multiple rounds, allowing the user to play again.
  - Display the user's score: which can be based on the number of attempts taken or rounds won.

Task 2 : STUDENT GRADE CALCULATOR

- Input: Take marks obtained (out of 100) in each subject.
- Calculate Total Marks: Sum up the marks obtained in all subjects.
- Calculate Average Percentage: Divide the total marks by the total number of subjects to get the
- average percentage.
- Grade Calculation: Assign grades based on the average percentage achieved.
- Display Results: Show the total marks, average percentage, and the corresponding grade to the user

Task 3 : ATM INTERFACE

- Create a class to represent the ATM machine.
- Design the user interface for the ATM, including options such as withdrawing, depositing, and checking the balance.
- Implement methods for each option, such as withdraw(amount), deposit(amount), and checkBalance().
- Create a class to represent the user's bank account, which stores the account balance.
- Connect the ATM class with the user's bank account class to access and modify the account balance.
- Validate user input to ensure it is within acceptable limits (e.g., sufficient balance for withdrawals).
- Display appropriate messages to the user based on their chosen options and the success or failure of their transactions.

Task 4 : QUIZ APPLICATION WITH TIMER

- Quiz Questions and Options: Store quiz questions along with multiple-choice options and correct answers.
- Timer: Implement a timer for each question to limit the time to answer.
- Question Display: Present one question at a time with multiple-choice options.
- Answer Submission: Allow users to select an option and submit their answer within the given time.
- Score Calculation: Keep track of the user's score based on correct answers.
- Result Screen: Display the final score and a summary of correct/incorrect answers.

Task 5 : STUDENT COURSE REGISTRATION SYSTEM

- Course Database: Store course information, including course code, title, description, capacity, and schedule.
- Student Database: Store student information, including student ID, name, and registered courses.
- Course Listing: Display available courses with details and available slots.
- Student Registration: Allow students to register for courses from the available options.
- Course Removal: Enable students to drop courses they have registered for.

Thank You

All website link text, emails and socials on all pages are working hyperlinks :)
Do join our socials for the next steps. :)

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