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KIDZIAN LEARNING PLATFORM

Founded by Rashmi

STUDENT PERFORMANCE REPORT - June 2025

STUDENT INFORMATION

Name: Rishi

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Total Points: 20

Generated: 6/20/2025

PERFORMANCE SUMMARY

Total Days Active: 2

Activities Completed: 2

Total Points Earned: 20

Average Points/Day: 10

ACTIVITIES BREAKDOWN

Assignments: 0

Projects: 0

Assessments: 0

Attendance Days: 0

WHAT YOU HAVE LEARNED IN YOUR COURSES

Python Level 2:

Age Group: 10- 15

About this course:

• Kidzian Python Level 2 Course: From Logic to Live Projects
For Ages 12-17 | Real-World Projects | GUI with Tkinter
Course Overview
- Dive deeper into Python with real-world logic, structures, and applications.
- Interactive GUI development using Tkinter.
- Exciting projects that blend creativity, math, and programming logic.

Module-wise Course Breakdown

1. Data Structures in Python

- Lists: Creation, nested lists, methods, and list comprehensions.
- Tuples: Immutable sequences, tuple unpacking.
- Dictionaries: Key-value access, updating, nested dictionaries.
- Project: Student Records System using Lists & Dictionaries.

2. GUI Programming with Tkinter
- GUI fundamentals: Tk(), Label, Button, Entry, Text, Frame, Canvas.
- Geometry managers: pack(), grid(), place().
- Event handling and button actions.
- Mini Projects: Unit Converter, Simple Calculator, To-Do List, Password Generator.

3. File Operations
- File open modes: 'r', 'w', 'a'.
- Reading & writing to .txt files.
- Using file content in GUI apps.
- Mini Project: To-Do List with Save/Load functionality.

4. Advanced Math Functions
- math module: ceil(), floor(), pow(), sqrt(), log(), sin(), cos().
- Application in math-based mini games and calculators.

5. Exception Handling
- Using try-except to handle runtime errors.
- Specific exception types (ValueError, ZeroDivisionError).
- finally and error messages.
- Mini Project: Error-proof Calculator.

6. Searching & Sorting Algorithms
- Searching: Linear and Binary Search.
- Sorting: Bubble Sort and Selection Sort.
- Code tracing and dry runs with sample data.
- Mini Project: Sort and search exam scores using GUI.

7. Real-Time Python Projects
- Project 1: Student Report Card Generator - Uses dictionaries and file handling.
- Project 2: Expense Tracker - GUI-based
- Project 3: Quiz App - Displays questions, collects answers, shows score.

8. Game Projects with Tkinter
- Memory Matching Game: Grid layout, card matching logic, score tracking.
- Maze Navigation Game: Canvas-based maze, keyboard movement, collision detection.
- Add-ons: Timer, collectibles, level-up logic.

Learning Outcomes:

• Ø<ß¯ Learning Outcomes: Python Level 2

By the end of this course, students will be able to:

Implement Core Data Structures

Use lists, tuples, and dictionaries to organize, store, and manipulate complex data.

Build Interactive GUI Applications using Tkinter

Design user-friendly interfaces and handle user inputs through buttons, entries, and events.

Perform File Operations

Read from and write to text files for persistent data storage in real-time applications.

Apply Mathematical Concepts Using Python’s math Module

Use advanced mathematical functions for building calculators and logic-based games.

Handle Errors Gracefully with Exception Handling

Anticipate, catch, and respond to runtime errors to prevent program crashes.

Understand and Implement Searching and Sorting Algorithms

Apply linear/binary search and bubble/selection sort algorithms in real-world scenarios.

Create Full-fledged Python Projects

Combine logic, GUI, and file handling to develop projects like quiz apps, report card generators, and expense trackers.

Develop Game-Based Applications

Use logic and event-driven programming to build Memory Matching and Maze games with animations and level design.

Improve Problem-Solving and Logical Thinking

Tackle programming challenges with a structured approach and build confidence in computational thinking.

Think Creatively and Collaboratively

Design original projects, debug effectively, and explain their code in a team or classroom setting.

PERFORMANCE ANALYTICS