Java Programming Fundamentals for Teens

Course Overview:

- **Duration:** 16 weeks
- **Class Frequency:** Once or Twice a week
- **Class Duration:** 1 hours per session
- **Age Group:** 12 to 18 years
- Certificate: RoboClub and STEM.org certificate of completion for each level.

Key Highlights:

- **Comprehensive Curriculum:** Learn essential and advanced Java concepts, from syntax to arrays.
- **Hands-On Learning:** Engage in interactive coding sessions and real-world projects for practical experience.
- **Skill Development:** Enhance critical thinking, problem-solving, and analytical skills applicable in various fields.
- **Supportive Environment:** Collaborate with peers in an interactive classroom, fostering teamwork and communication.
- **Real-World Applications:** Discover Java's significance in technology and its use in web and app development.
- **Regular Assessments:** Track progress with quizzes, coding challenges, and constructive feedback.
- **Flexible Schedule:** Classes designed to fit into your busy lifestyle.
- **Resource Access:** Utilize coding tools, online resources, and additional learning materials.
- **Certification of Completion:** Showcase your skills with a certificate after successfully finishing the course.
- **Pathway to Advanced Learning:** Prepare for further studies in programming, data science, or software engineering.

Course Structure: Beginners Level

1. Java Introduction
2. Java Syntax, Output, and Comments
3. Java Variables
4. Data Types - I
5. Data Types - II
6. Type Casting & Operators
7. Revision & Assessment A
8. Java Strings
9. Control Statements (if, if-else)
10. Control Statements (if-else if-else, Switch)
11. Java Loops (while, do-while)
12. For Loop
13. Java Break and Continue & Math
14. Java Arrays - I
15. Java Arrays - II
16. Revision & Assessment B