# Programming-Fundamentals-2017

Programming Fundamentals @ SoftUni September 2017 - https://softuni.bg/trainings/1712/programming-fundamentals-september-2017

The “Programming Fundamentals” course extends the previously gained basic coding skills from the “Programming Basics” course at the Software University and adds additional knowledge and practical programming skills.

The course covers source control systems, Git and GitHub for team collaboration, understanding the basic data types in programming, extracting pieces of code into methods with parameters and return value, using the debugger to trace the program execution and find bugs, processing sequences of elements using arrays and lists, using collections, working with matrices for processing tabular data, working with dictionaries to map keys to values, using strings for text processing, and the basics of working with classes and objects, using API classes and defining simple classes.

Along with the programming techniques, the algorithmic thinking and problem solving skills are advanced by solving hundreds of practical programming problems. All exercises and exams are automatically evaluated with real-time feedback through the SoftUni online judge system. At the end all students take a practical programming exam.

Course start: 18 September 2017 Course end: 05 November 2017 Course type: online

1 RESOURCES<br>

2 COURSE OVERVIEW<br>

3 GIT AND GITHUB<br>

4 GIT, GITHUB - EXERCISES<br>

5 DATA TYPES AND VARIABLES<br>

6 DATA TYPES AND VARIABLES - EXERCISES<br>

7 METHODS. DEBUGGING AND TROUBLESHOOTING CODE<br>

8 METHODS AND DEBUGGING- EXERCISES<br>

9 ARRAYS<br>

10 ARRAYS - EXERCISES<br>

11 LISTS<br>

12 LISTS - EXERCISES<br>

13 DICTIONARIES, LAMBDA AND LINQ<br>

14 DICTIONARIES, LAMBDA AND LINQ - EXERCISES<br>

15 OBJECTS AND CLASSES<br>

16 OBJECTS AND CLASSES - EXERCISES<br>

17 FILES AND EXCEPTIONS<br>

18 FILES AND EXCEPTIONS - EXERCISES<br>

19 STRINGS<br>

20 STRINGS - EXERCISES<br>

21 REGEX<br>

22 REGEX - EXERCISE<br>

23 EXAM PREPARATION I<br>

24 EXAM PREPARATION II<br>

25 EXAM PREPARATION III<br>

26 EXAM PREPARATION IV<br>

27 PRACTICAL ЕXAM<br>