----NETni o'rnatish va dasturlash muhitini sozlash

1. Undestanding C# and .NET

2. Setup development environment

3. .NET SDK vs .NET Runtime

4. .NET CLI

5. The first Console Application

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1.1.3 Ma'lumot toifalari va o'zgaruvchilar

1. C# gramatikasi.

2. Variables

3. Naming convention

4. Primitive Data types

5. Dynamic vs object types

6. Getting and Setting default values

7. Input/Output

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1.1.4 Toifalar o'rtasida Casting va Converting

1. Implicit and explicit casting

2. System.Convert method

3. ToString()

4. Parse and TryParse

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1.1.5 Operatorlar

1. Binary

2. Unary

3. Assignment

4. Logical

5. Conditional Logical

6. Bitwise and binary shift

7. Miscellaneous(nameof, sizeof)

8

1.1.6 Shart va tanlash operatorlari

1. If

2. If else

3. nested if

4. Ternary operator

5.switch

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1.1.7 Takrorlanish operatorlari

1. for

2. while

3. do while

4. foreach

5. continue, break

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1.1.8 Funksiyalar bilan ishlash

1. Funksiya nima?

2. Funksiyaning kiruvchi parametrlari(ref and out)

3. Qiymat qaytaradigan va qaytarmaydigan

funksiyalar

4. Rekursiv funksiyalar

5. Debugging

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1.1.9 Matnlar bilan ishlash

1. String classi metodlari

2. String formatting

3. String interpolation

4. Verbatim string

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1.1.10 Massivlar bilan ishlash

1. One demensional

2. Multi demensional

3. Array class metodlari

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1.2.1 OOPga kirish

1. OOP nima?

2. Class, field, method, constructor, destructor

3. Object instance hosil qilish, this keyword

4. Access modifiers

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1.2.2 OOP Concepts, Encapsulation

1. OOP pillars

2. Encapsulation

3. getter and setter

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1.2.3 Inheritence, base, static, sealed

keyoword

1. Inheritence

2. base keyword

3. sealed class and methods

4. static class, static constructors

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1.2.4 Polymorphism, Aggregation

1. Polymorphism

2. function and operator overloading

3. Overriding

4. Aggregation

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1.2.5 Abstraction, Interface

1. Abstraction, abstract class

2. Interface

3. nested classes

4. partial class

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1.2.6 Enum, struct va generic toifalari

1. Enum

2. Generics

3. struct

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1.2.7 Collections(1-qism)

1. Systems.Collections

2. Array vs ArrayList

3. List, LinkedList, SortedList

4. Stack, Queue

5. Dictionary vs HashTable

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1.2.8 Collections(2-qism)

1. IEnumerable, ICollection, IList, IDictionary

2. Indexer

3. Iteration, yield operator

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1.2.9 Tuple va Nullable types

1. Tuple

2. ValueTuple

3. Nullable types

4. Null-coalescing operator

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1.2.10 Event va Delegate types

1. Delegate

2. Event

3. Anonymous methods

4. Lambda expression

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1. Exceptions

2. try, catch, final

3. throw

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1. StringBuilder

2. Regex

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1. DateTime class

2. Date, DateOnly, TimeOnly

3. TimeStamp

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2. StreamWriter, StreamReader

3. MemoryStream, FileStream

4. Directory, DirectoryInfo

5. DriveInfo

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2. XmlSerializer

3. BinaryFormatter

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1. System.Net, WebClient

2. API connections, URI

2. HttpClient, HttpMethod

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Asynchronous programming

1. MultiThreading

2. Asynchronous Programming

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1. Polling vs Webhook

2. SendMessage, SendSticker, SendPhoto

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2. Database Management Systems (DBMS)

(Postgresql, Oracle)

3. Database types(relational, nosql)

4. PostgreSQL and PgAdmin install

5. Tablespace, Schema, Table, User

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2.1.2

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1. Connect To a PostgreSQL Database

2. Server

3. Data types

4. Constraints => NOT NULL, UNIQUE, PK, FK,

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2. DML(INSERT, SELECT, UPDATE, DELETE) 8

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DSL, TCL, Build Structure 1. DCL (Grant, Revoke)

2. TCL(Commit, Rollback, Savepoint)

3. Build Structure(ONE to ONE, ONE to MANY,

MANY to ONE, MANY to MANY)

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2.1.5

Opertorlar, PostgreSQL fundamentals 1. Operators(Arithmetic, Comparison, Logic)

2. PostgreSQL fundamentals (select distinct, order

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table and column aliases)

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Joining Multiple Tables

1. Joining Multiple Tables (join, cross join, natural

join)

2. AGGREGATE FUNCTIONS (count, avg, max,

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Extra fundamentals for table 1. Subquery, ANY, ALL, EXISTS, Set

2. Operations (UNION, Intersect, Except)

3. CONDITIONAL EXPRESSIONS &

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2. Managing PostgreSQL Views(CREATE, DROP,

UPDATABLE)

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2. SQL functions

3. PL/PgSql functions

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2. Crypto

3. Lock

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3. First application

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2. Action bilan ishlash

3. IActionResult, ActionResult

4. Routing nima?

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Container

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3. Dependency Injection

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