

UNIT 45

PROGRAMMING

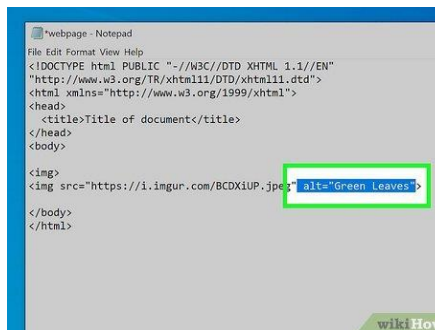
Objectives: at the end of the lesson, students will be able to:

1. learn and use vocabulary related to the topic;
2. read short texts about programming and summarize key points;
3. solve the problems related to programming.

Lead-in: Hidden Word

Let students think about what unites these words /pictures.

English **spoken** **written** **C#** **Phyton** **Java**



Vocabulary Building

Key Terms

PHP – a scripting language that is used to create dynamic web pages

Interactive – if something is interactive, it will respond to a user's commands

XML – (Extensive Markup Language) is a programming language that is used to encode web pages

Back end – if something is back end, it occurs at the end of a project or job

Visual Basic – a simple programming language with a graphical component

Script – a group of commands to be carried out automatically

Editor – a program that is used to create and change files

User-friendly – it means it is easy to access and use

Activity: “Bingo” Game

Ask students to draw a grid with 20 numbers in their copybook. A teacher calls out randomly any words related to the topic (or previous topics). If the word called is present on their board, they need to cross it out. The first player to get all words in a row, either vertically or horizontally, wins bingo. The winner (or winners) must provide definitions for the words and make sentences for them. (only in this case, they will be total winners).

B I N G O				

Reading

Programming

Programming is the process of creating a set of instructions for computers to follow, often using specific programming languages. A programmer is skilled in writing code and can work with various languages such as PHP, which is commonly used for web development.

Web developers often use HTML to structure web pages and XML for data representation, ensuring that the information is both user-friendly and easily accessible. Many programmers utilize an editor to write and organize their code efficiently. For desktop applications, languages like Visual Basic allow developers to create intuitive interfaces that enhance user experience. Additionally, scripting languages enable quick automation of tasks, making programming versatile and essential in today's digital world.

Activity: Read the statements and mark your answer as 'T' for True or 'F' for False.

1. A programmer can use PHP to build web applications.
2. HTML is used primarily for data representation.
3. XML is designed to be user-friendly for displaying structured data.
4. Visual Basic is a suitable language for web development.

5. An editor is where programmers write and edit their code.
6. Scripting languages are not commonly used in programming.

Speaking

Activity: Brainstorming

In small groups, students brainstorm and discuss how to make a user-friendly application using various programming languages.

Group Work Activity: Problem Solving

Students discuss possible solutions in groups to the provided scenarios and present their ideas to the class.

Scenario 1: A company relies on an outdated legacy system that is prone to failures and does not integrate with newer technologies.

Propose a plan for upgrading or replacing the legacy system while minimizing disruption to business operations.

Scenario 2: A programming team is struggling with collaboration, resulting in conflicting code and missed deadlines.

Discuss ways to improve team communication and collaboration, such as implementing version control systems and regular stand-up meetings.

Scenario 3: A developer can't find the root cause of a bug in their code that affects a significant feature of an application.

Break down the debugging process, suggesting strategies for isolating the issue and identifying potential fixes.