

# Unit 2 - Lesson 1:

## Software Development

```
//fires the appear event when appropriate
var check = function() {
    //is the element hidden?
    if (!t.is(':visible')) {
        //it became hidden
        t.appeared = false;
        return;
    }

    //is the element inside the visible window?
    var a = w.scrollLeft();
    var b = w.scrollTop();
    var o = t.offset();
    var x = o.left;
    var y = o.top;

    var ax = settings.accX;
    var ay = settings.accY;
    var th = t.height();
    var wh = w.height();
    var tw = t.width();
    var ww = w.width();

    if (y + th + ay >= b &&
        y <= b + wh + ay &&
        x + tw + ax >= a &&
        x <= a + ww + ax) {

        //trigger the custom event
        if (!t.appeared) t.trigger('appear', settings.data);
    } else {
        //it scrolled out of view
        t.appeared = false;
    }
};

//create a modified fn with some additional logic
var modifiedFn = function() {
    //mark the element as visible
    t.appeared = true;

    //is this supposed to happen only once?
    if (settings.one) {
        //remove the check
        w.unbind('scroll', check);
        var i = $.inArray(check, $.fn.appear.checks);
        if (i >= 0) $.fn.appear.checks.splice(i, 1);
    }

    //trigger the original fn
    fn.apply(this, arguments);
};

//bind the modified fn to the element
$.fn.appear.one('appear', settings.data, modifiedFn);
```

## Lesson 1: Software Development

**Time available:** 4 hours



### Lesson programming:

1. Socialize the technology idiom of the day.
2. Review vocabulary about technology.
3. Warming up: Matching activity about the previous vocabulary through a game.
4. Socialize key vocabulary about Software development.
5. Crossword puzzle activity about the previous vocabulary.
6. Reading: "Software Development".
7. Answer the multiple - choice questions.
8. Watch the video "The history of Software"
9. Game: Multiple-choice and true/false questions about the previous video.
10. Explain what the skimming strategy is.
11. Socialize some keywords about the reading "The Software Development Process."
12. Reading: "The Software Development Process".
13. True, False, Doesn't say activity based on the reading text.

### Learning materials:

- Warming-up activity:  
<https://wordwall.net/es/resource/66201056/vocabulary-software-development>
- Readings
- Video "The history of Software": <https://www.youtube.com/watch?v=au-gE-Ohbhg>
- Kahoot game "The history of Software":  
<https://create.kahoot.it/share/the-history-of-software/48638eea-6461-4da9-8eb2-a49bad99447e>



# Lesson 1: Software Development

## 1- Idiom of the day:

- **Ahead of the curve:** This expression is used to describe a product, person or business that is more advanced or innovative than others in the same field.

“The research team’s groundbreaking discoveries kept the company ahead of the curve.”



## 2- Review the following vocabulary about Software Development

- Develop
- Research
- Design
- Step
- Debug
- Test
- Smoothly
- Deploy
- Engineering
- Subfields



## 3. Warming up: Match the word to the corresponding definition:

- <https://wordwall.net/es/resource/66201056/vocabulary-software-development>

#### 4- Let's socialize the following vocabulary:

- **Software Development:** The process of creating software (Synonym: Software Creation)
- **Testing:** The act of evaluating software to find errors (Synonym: Examining)
- **Debugging:** The process of finding and fixing bugs in software (Synonym: Error Correction)
- **Expertise:** Specialized knowledge or skills (Synonym: Proficiency)
- **Risk Management:** The process of identifying, assessing, and controlling threats (Synonym: Risk Control)
- **Software Testing:** The process of verifying a software system (Synonym: Software Verification)
- **Requirements:** Needs or conditions that are necessary for a system (Synonym: Specifications)
- **Software Developers:** Professionals who create and maintain software (Synonym: Software Engineers)
- **Operating Systems:** Software that supports a computer's basic functions (Synonym: OS)
- **Specialize:** To focus on a particular area of study (Synonym: Concentrate)



**5- Crossword Puzzle Activity:** Find and fill in the words related to software development in the crossword puzzle below. The words can be placed horizontally or vertically. Good luck!

**Across Clues:**

- **SOFTWARE:** This is the end product of software development, consisting of programs and applications.
- **PROGRAMMING:** Writing and implementing code to create software.
- **DEBUGGING:** The process of finding and fixing defects in software.
- **JAVA:** A widely used programming language.
- **CPP (C++):** A high-performance programming language known for system/software development.
- **LINUX:** An open-source operating system.
- **EDUCATION:** The process of teaching or learning, especially in schools or colleges.

**Down Clues:**

- **TESTING:** The act of checking software for errors and bugs.
- **DESIGN:** The process of planning and creating something.
- **PYTHON:** A high-level programming language known for its ease of learning.
- **WINDOWS:** A popular operating system developed by Microsoft.
- **PSYCHOLOGY:** The study of mind and behavior.
- **HEALTHCARE:** An industry focused on the health and well-being of individuals.





**10- Before the reading activity, the teacher explains what the skimming strategy is.**

### **Skimming Strategy:**

Skimming is a reading technique that involves quickly moving through a text to get a general overview of the content rather than focusing on detailed comprehension. This strategy allows readers to cover a large amount of material in a short amount of time.

### **When to Use Skimming:**

1. **Previewing:** Before delving into a detailed reading of a text, to get a sense of what it's about.
2. **Time Constraints:** When you have limited time to read and need to grasp the main points quickly.
3. **Reviewing:** To quickly review a text you've already read in detail to reinforce your understanding.
4. **Research:** When looking for specific information or trying to determine if a text is relevant to your needs.
5. **General Overview:** To get a basic understanding of a text when detailed comprehension is not necessary.

### **How to Use Skimming:**

1. **Read the Title and Headings:** Start by looking at the title, headings, and subheadings to get an idea of the main topics covered in the text.
2. **Look at the Introduction and Conclusion:** Often, the introduction and conclusion of a text will summarize the main points.
3. **Focus on the First Sentences of Paragraphs:** The first sentence often introduces the main idea of a paragraph.
4. **Notice Keywords and Phrases:** Keep an eye out for bold or italicized words, bullet points, and any repeated phrases or concepts.
5. **Pay Attention to Visuals:** Graphics, charts, and pictures can provide important information and context.
6. **Speed Over the Text:** Let your eyes move rapidly over the text, not stopping to read each word or sentence in detail.



## How to Apply Skimming Reading Strategy:

1. **Set Your Purpose:** Know why you are skimming the text. Are you looking for a general idea, specific information, or trying to decide if the text is useful for your research?
2. **Adjust Your Speed:** Be flexible with your reading speed. Slow down slightly for more important sections and speed up over less relevant parts.
3. **Practice Regularly:** Like any skill, skimming improves with practice. Regularly incorporate skimming into your reading habits.
4. **Take Brief Notes:** Jot down main ideas or keywords as you skim. This helps in retaining important information.
5. **Review After Skimming:** Once you've skimmed the text, take a moment to summarize the main points in your mind or out loud to reinforce comprehension.

## 11- Socialize the following vocabulary with the students:

- **Software Development LifeCycle (SDLC)** - A process used in software development, guiding the transformation of concepts into functional software.
- **Precision** - The quality of being exact and accurate.
- **Patience** - The ability to wait or tolerate delays without becoming annoyed.
- **Resource Distribution** - The allocation or assignment of resources (like time, money, and tools) to different parts of a project.
- **Blueprint** - A detailed plan or design.
- **Development** - The actual creation and coding of the software.
- **Agile and Waterfall** - Different methodologies used in software development.
- **Deployment** - The process of releasing the software for use.
- **Production Environment** - The setting where the software is actually used by its intended users.
- **Maintenance** - Regular updates and fixes to the software after its release.
- **Performance** - How well the software functions.

