Day 2 : Data structures

Goal :

* Students understand what arrays are and their uses

1. Recap of last lesson
   1. Tools
      1. XAMPP
      2. Atom
2. Arrays
   1. List of students
      1. $student0 = ‘Juan’;
      2. $student1 = ‘Leticia’;
      3. $student2 = ‘Donald’;
      4. $student3 = ‘Ben’;
   2. What are arrays used for?
      1. Group related things together
      2. Provide examples
      3. Ask for examples
   3. Two types of arrays
      1. Indexed
      2. Associative
   4. Creating an indexed array
      1. $listName = array(‘item1’, ‘item2’);
      2. $listName = [ ‘item1’ , ‘item2’ ];
   5. Printing an array
      1. Echo vs print\_r
   6. Adding to array
      1. $listName = array(‘item1’, ‘item2’);
      2. print\_r
      3. $listName[] = ‘item3’;
      4. Print\_r
      5. echo within double quoted string
         1. echo “The first thing in my array is $listName[0]”;
   7. Print individual
      1. echo $listName[1];
   8. Creating an associative array
      1. $associative = array( ‘Shire’ => ‘Home of the hobbits’, ‘Rivendell’ => ‘Home of the elves’ );
      2. $associative = [ ‘Shire’ => ‘Home of the hobbits’, ‘Rivendell’ => ‘Home of the elves’ ];
   9. Adding to associative array
      1. $associative = [ ‘Shire’ => ‘Home of the Hobbits’, ‘Rivendell’ => ‘Home of the Elves’ ];
      2. print\_r
      3. $associative = [ ‘Moria’ => ‘Home of the Dwarves’];
      4. print\_r
      5. Doesn’t work in double quoted strings
         1. Fixed : echo “ The Shire is : {$associative[‘Shire’]}”;
            1. EXERCISE

Create an

1. Conditionals
   1. Different outcomes depending on input
   2. Intro to boolean
      1. True and false are special
         1. Not case-sensitive
   3. If statement
      1. If ( condition is true ) { //do this }elseif{ //do this instead }else{//do this }
      2. Compare 2 non-boolean values
         1. ==
         2. !=
         3. <, <=
         4. >, >=
            1. EXERCISE
      3. Logical operators
         1. &&
         2. ||
         3. !
            1. EXERCISE