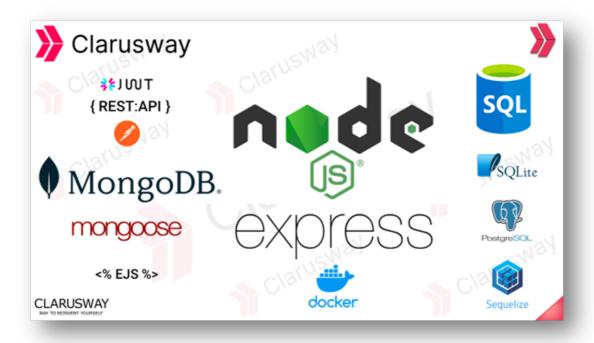Clarusway

Backend
Teamwork
-2-

Teamwork

Subject: OOP and Nodejs

Learning Goals

- Having knowledge about backend and nodejs.
- Understand how real-life entities/objects can be transferred to the computer environment.

Introduction

As developers, we should also be able to express what we know. This study was prepared to support this purpose. Enjoy your work.

Practice Using the `IDE` in Lesson

We will use the VSCode you are familiar with. At the same time, we need to install Nodejs on our computer.

Lets start

1. In the table below specifies the key differences between a front-end and back-end development. Indicate at the beginning of each item whether it is suitable for the front end or the back end.

…F…….is refers to the client-side of an application.

…F…….includes everything that attributes to the visual aspects of a web application.

…B…….refers to the server-side of an application.

…F……. technologies are HTML, CSS, Bootstrap, jQuery, JavaScript, AngularJS, and React.js.

…B…….generally includes a web server that communicates with the database to serve the users' requests.

…F……. some framework examples are AngularJS, React.js, jQuery, Sass, etc.

…B…….consists of everything that happens behind the scenes and users cannot see and interact with.

…F…….is the part of a web application where users can see and interact.

…B…….technologies are Java, PHP, Python, C++, Node.js, etc.

…B…….some framework examples are Express, Django, Rails, Laravel, Spring, etc.

2. Fill-in-the-Blank JavaScript Questions

JavaScript is primarily used for creating __dynamic__ behavior in web pages.

The __json.stringfy__ method is used to convert a JavaScript object into a JSON string.

In JavaScript, __setTimeout__ is a function that calls another function after a specified number of milliseconds.

The __let__ keyword is used to declare a variable that can be reassigned.

__date__ is a JavaScript object used for handling dates and times.

A __high-order__ is a function that takes another function as an argument and/or returns a function as a result.

The __push__ method is used to add elements to the end of an array in JavaScript.

In JavaScript, __parsing__ is the process of converting a string into a number.

The __new__ keyword is used to create a new instance of an object in JavaScript.

JavaScript __node.js__ a runtime environment that allows executing JavaScript code server-side.

3. What is Nodejs? What can we do with Nodejs? Why use Nodejs?

4. Define a class named "Animal". This class should have a constructor function that takes a "species" parameter. You can learn the species of the object with a method called "get_species".

Define a class named "Dog" derived from the Animal class. This class should have a private property named "name". It should have a constructor that takes "species" and "name" parameters. You should be able to get

the name of the dog with a method called "get_name". Additionally, the Dog class should have a method called "bark" that returns the string "Woof!"