**NodeJS with MongoDb & Express**

Lab Book

Document Revision History

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| Date | Revision No. | Author | **Summary of Changes** |
| April 2018 | 1.2 | Rahul Vikash | Created new lab book as per revised course contents |
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Getting Started

## Overview

This lab book is a guided tour for learning Introduction to Object Orientedversion and above. It comprises ‘To Do’ assignments. Follow the steps provided to work out the ‘To Do’ assignments given.

## Setup Checklist for Node Js

Here’s what is expected on your machine for the lab in order to work.

Minimum System Requirements

* Intel Pentium 90 or higher (P166 recommended)
* Microsoft Windows XP, Windows 7 or Windows 8
* Memory: 2GB of RAM (1GB or more recommended)
* Google Chrome 36.0 or Mozilla Firefox 31.0 or Internet Explorer 10 or above
* Install Node JS

Please ensure that the following is done:

* A text editor like Notepad or Notepad++ or Eclipse Luna is installed.
* Visual studio Code

## Instructions

* Create a directory by your name in drive <drive>. In this directory, create a subdirectory JavaScript. For each lab exercise create a directory as lab <lab number>.

1. Module

|  |  |
| --- | --- |
| Goals | * Working on Node JS Modules & basics |
| Time | 60 minutes |
|  |  |

* 1. Create a **prob1.js** containing script. In this script, declare an array of 6 employee names and display it in the console using node .
  2. Create a node server read the data from the file and display on the console
  3. Create a node server write the data into the file
  4. Create a Web Application using node where user can enter username ,password & by using request & response data will transfer to next page

1. Mongo Db with Node JS

|  |  |
| --- | --- |
| Goals | * Working on Mongo Db & Node JS |
| Time | 120 minutes |

1. **Create a console base application using node & Mongo Db where we can do following operation .**
2. Insert the static Data such as product ID, product name, product cost & product description in Mongo Db using node
3. Get All Data
4. Get Date based on product id
5. Delete Data based on product id
6. Update data based on product id

Lab 3 Express Js with Mongo Db Node

|  |  |
| --- | --- |
| Goals | * Working on JSON |
| Time | 1. Minutes |

**3.1 Consider Below JSON File:**

var employees = {

employee: [

{

"empId": 1001,

"empName": "Jack",

"empSalary": 40000,

"empAddress": {

"city": "Pune",

"state": "Maharashtra"

}

},

{

"empId": 1002,

"empName": "Jill",

"empSalary": 42000,

"empAddress": {

"city": "Nashik",

"state": "Maharashtra"

}

},

{

"empId": 1003,

"empName": "Sebastian",

"empSalary": 14000,

"empAddress": {

"city": "Agra",

"state": "Uttar Pradesh"

}

},

{

"empId": 1004,

"empName": "Jessica",

"empSalary": 30000,

"empAddress": {

"city": "Lucknow",

"state": "Uttar Pradesh"

}

},

{

"empId": 1005,

"empName": "Terena",

"empSalary": 45000,

"empAddress": {

"city": "San Diego",

"state": "California"

}

},

{

"empId": 1006,

"empName": "Aadel",

"empSalary": 50000,

"empAddress": {

"city": "San Jose",

"state": "California"

}

},

]

}

Using Express TODO below retrievals

1. Displaying ALL employees

2. Displaying employees belonging to a specific state

3. Updating city of employee

4. Adding a new employee.

**3.2 Extend assignment 3.2 add all data in Mongo Db & do the following operation**

1. Displaying ALL employees

2. Displaying employees belonging to a specific state

3. Updating city of employee

4. Adding a new employee.

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