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ITE5315 – Assignment 2

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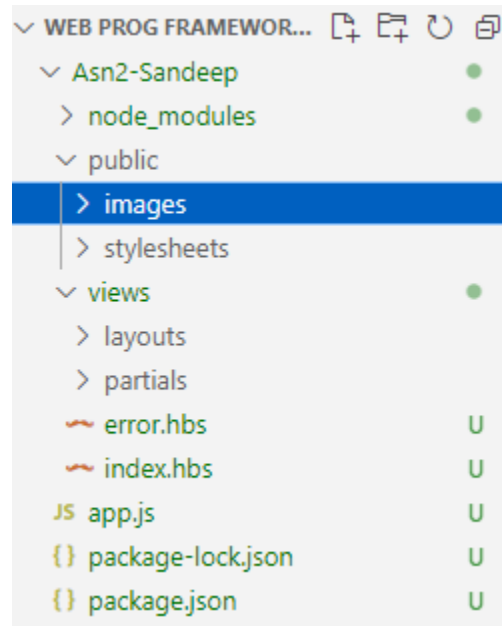
* Name: Sandeep Das

Student ID: N01472825

Date: 29th October 2022

*****/

Step 1:



Step 2:

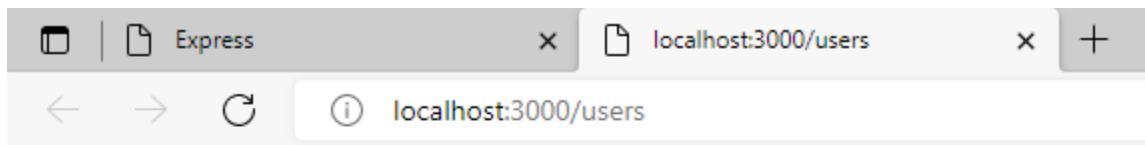
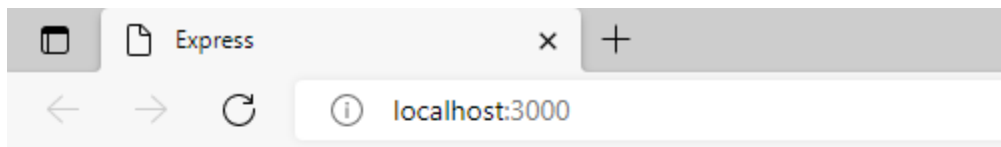
Asn2-Sandeep > JS app.js >  app.get("**) callback

```
1  var express = require('express');
2  var path = require('path');
3  var app = express();
4  const exphbs = require('express-handlebars');
5  const port = process.env.port || 3000;
6  app.use(express.static(path.join(__dirname, 'public')));
7  app.engine('.hbs', exphbs.engine({ extname: 'hbs' }));
8  app.set('view engine', 'hbs');
9  app.get('/', function (req, res) {
10 |   res.render('index', { title: 'Express' });
11 | });
12 app.get('/users', function (req, res) {
13 |   res.send('respond with a resource');
14 | });
15 app.get('*', function (req, res) {
16 |   res.render('error', { title: 'Error', message: 'Wrong Route' });
17 | });
18 app.listen(port, () => {
19 |   console.log(`Example app listening at http://localhost:${port}`)
20 | })
```

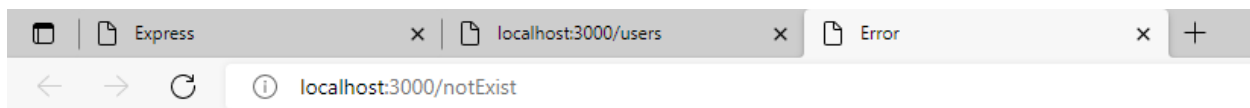
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS C:\Users\Sandeep Das\Documents\Semester 3\Web prog framework 1\Asn2-Sandeep> nodemon .\app.js
[nodemon] 2.0.20
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,json
[nodemon] starting `node .\app.js`
Example app listening at http://localhost:3000
```

Step 3:



respond with a resource



Wrong Route

Step 4:

```
1 var express = require('express');
2 var path = require('path');
3 var app = express();
4 const exphbs = require('express-handlebars');
5 const port = process.env.port || 3000;
6 app.use(express.static(path.join(__dirname, 'public')));
7 app.engine('.hbs', exphbs.engine({ extname: 'hbs' }));
8 app.set('view engine', 'hbs');
9 app.get('/', function (req, res) {
10   res.render('index', { title: 'Express' });
11 });
12 app.get('/users', function (req, res) {
13   res.send('respond with a resource');
14 });
15 app.get('*', function (req, res) {
16   res.render('error', { title: 'Error', message: 'Wrong Route' });
17 });
18 app.listen(port, () => {
19   console.log(`Example app listening at http://localhost:${port}`)
20 })
```

Setting the root path for the app

- a. Firstly in the app we are setting the static root path as the public folder inside our app.

Then main.hbs is located inside the /public.

The default behaviour of handlebars is that whenever a handlebar is called, the control first goes to main.hbs located inside our layout folder and the variables passed are injected into the hbs document. In case we rename main.hbs to anything else. The app wont work as expected.

Then the {{body}} is replaced by the handlebar passed as another parameter after that passed handlebar is substituted with all the variables.

The variables passed as a JS object keys should match the handlebar variables exactly to work.

- b. Error is matched with a wildcard route at the end after defining all valid routes. The message parameter gets injected into the error handlebar and title parameter gets injected to the main handlebar. The {{body}} of main.hbs is substituted by error.hbs
- c. If we comment out the below line. The CSS will not load as the static content of CSS to be served remains unknown to our app

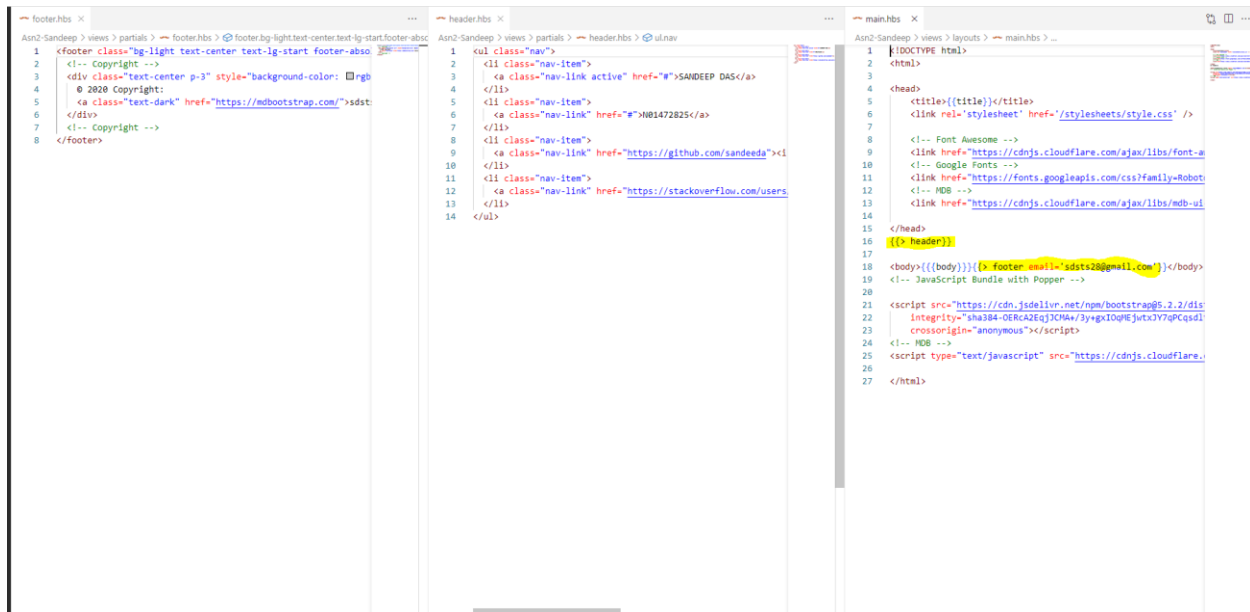
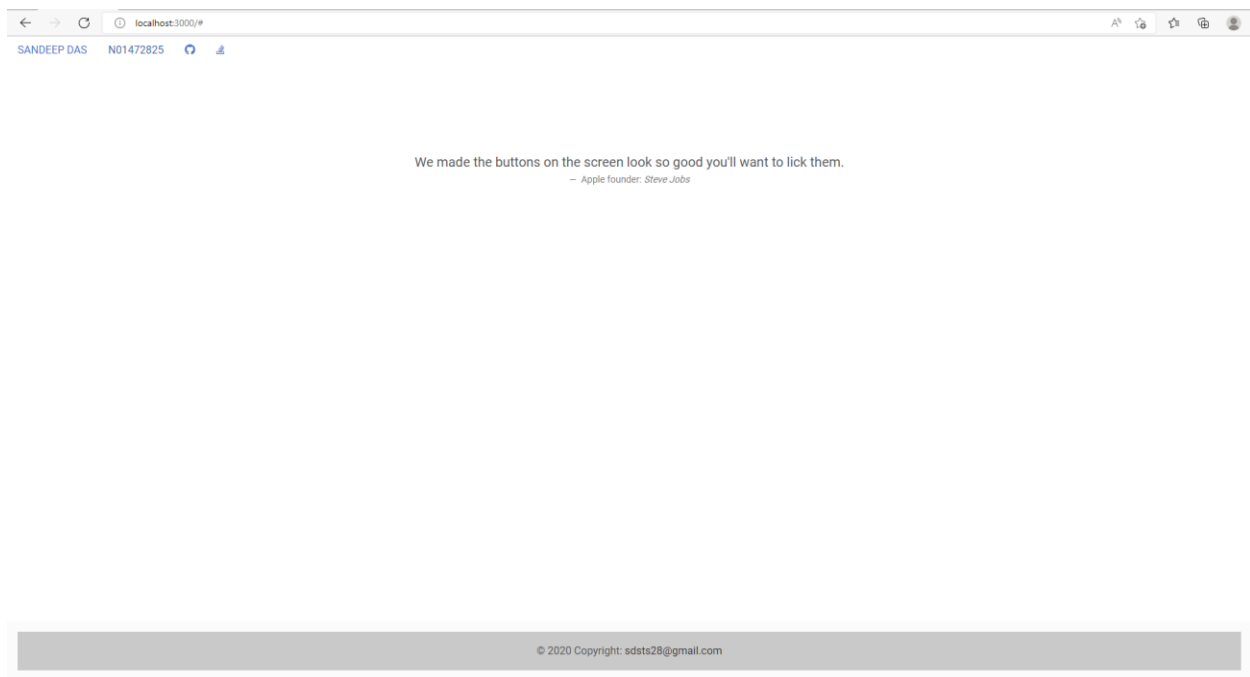
```
app.use(express.static(path.join(__dirname, 'public')));
```

```

var express = require('express');           //Fetch express
module to application
var path = require('path');                 //Fetch path
module to application
var app = express();                         //Initialize app
variable with express
const exphbs = require('express-handlebars'); //Fetch express-
handlebars module for application
const port = process.env.port || 3000;      //Serve web app
of env variable port if defined else on 3000
app.use(express.static(path.join(__dirname, 'public'))); //Configure web
app to use application root path appended with public as the folder to serve
static content
app.engine('.hbs', exphbs.engine({ extname: 'hbs' })) //setiing the app
engine with .hbs key and value as exphbs.engine({ extname: 'hbs' })
app.set('view engine', 'hbs');              //Set app
parameter view engine to hbs value
app.get('/', function (req, res) {           //Set root route
  res.render('index', { title: 'Express' }); //Redirect to
index handlebar and pass title as express and inject the value of title in all
relevant handlebars
});
app.get('/users', function (req, res) {       //Set /users
  route
  res.send('respond with a resource');        //Just pass text
as response
});
app.get('*', function (req, res) {           //Set route for
undefined path
  res.render('error', { title: 'Error', message: 'Wrong Route'
}); //Call the error handlebar and pass message attribute for handlebars
});
app.listen(port, () => {
  console.log(`Example app listening at
http://localhost:${port}`) //initialize the server
})

```

Step 5:



Step 6:

/data route

```
// This path will match to /allData
app.get('/data', (req, res) => {
  console.dir(allBooks, {'maxLength': null})
  res.render('confirmDataLoaded', {message: "JSON data is loaded and ready"});
})
```

```
<div class = "align-items-center justify-content-center d-flex" style="height: 350px;">
  <figure class="text-center">
    <blockquote class="blockquote">
      <p>{{message}}</p>
    </blockquote>
    <figcaption class="blockquote-footer">
      Presented by: <cite title="Source Title">Moustache handlebars</cite>
    </figcaption>
  </figure>
</div>
```



```
ISBN: '62237101',
img: 'http://ecx.images-amazon.com/images/I/51xHUTfYvdL.jpg',
title: 'Hunting Shadows: An Inspector Ian Rutledge Mystery (Inspector Ian Rutledge Mysteries)',
author: 'Charles Todd',
inventory: 17,
category: 'Mystery, Thriller & Suspense'
},
{
  ISBN: '399174680',
  img: 'http://ecx.images-amazon.com/images/I/51JLVnuXSDL.jpg',
  title: 'Scandalous Behavior (A Stone Barrington Novel)',
  author: 'Stuart Woods',
  inventory: 17,
  category: 'Mystery, Thriller & Suspense'
},
{
  ISBN: '1939454654',
  img: 'http://ecx.images-amazon.com/images/I/417gaArFUIL.jpg',
  title: 'Age of Distraction: The Island',
  author: 'Patricia Mahon',
  inventory: 17,
  category: 'Mystery, Thriller & Suspense'
},
{
  ISBN: '1604601604',
  img: 'http://ecx.images-amazon.com/images/I/51BJw1DW9OL.jpg',
  title: 'The Ghostly Quilts on Main (Colebridge Communities)',
  author: 'Ann Hazelwood',
  inventory: 17,
  category: 'Mystery, Thriller & Suspense'
},
{
  ISBN: '399166726',
  img: 'http://ecx.images-amazon.com/images/I/51IQRzWxmKL.jpg',
  title: 'Saving Jason (A Jason Stafford Novel)',
  author: 'Michael Sears',
  inventory: 17,
  category: 'Mystery, Thriller & Suspense'
},
{
  ISBN: '62073508',
  img: 'http://ecx.images-amazon.com/images/I/51yRHlducQL.jpg',
  title: 'Murder on the Orient Express: A Hercule Poirot Mystery (Hercule Poirot Mysteries)',
  author: 'Agatha Christie',
  inventory: 17,
  category: 'Mystery, Thriller & Suspense'
}
}
```

/data/isbn/:index

```
//Get book ISBN details by ISBN index
app.get('/data/isbn/:index', (req, res) => {
  let queryIndex = req.params.index;
  if(queryIndex>=0 && queryIndex<allBooks.length){
    //console.log(allBooks[queryIndex]);
    var result = [];
    result.push(allBooks[queryIndex])
    res.render('listOfBooks', {books:result});

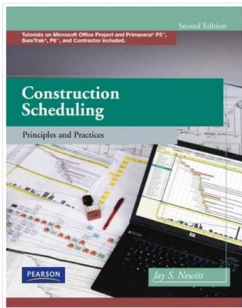
    //res.status(200).send(allBooks[queryIndex].ISBN);
  }
  res.render('confirmDataLoaded', {message:"Out of bounds index...Dont play with

})
```

localhost:3000/data/isbn/4

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List of books

ISBN	Cover Page	Title	Author	Inventory	Category
135137829		Construction Scheduling: Principles and Practices (2nd Edition)	Jay S. Newitt	0	Arts & Photography

localhost:3000/data/isbn/9

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Out of bounds index...Dont play with me
— Presented by: Moustache handlebars

`'/data/search/title'`

```
//Get book details by Title
app.route('/data/search/title')
.get(function(req,res) {
  res.render('searchByTitle');
})
.post(function(req,res){
  let queryTitle = req.body.title;
  console.log(queryTitle);
  var booksWithTitle = JSON.parse('{ "foundBooks": [] }');
  var found = 0;
  if(queryTitle!=""){
    allBooks.forEach(element => {
      if(element.title.toLowerCase().includes(queryTitle.toLowerCase())){
        booksWithTitle['foundBooks'].push(element);
        found++;
      }
    });
  }
  else{
    res.render('confirmDataLoaded',{message: "Looks like you are lost in space and ocean of nothingness"});
  }
  if (found != 0)
    res.render('listOfBooks',{books:booksWithTitle.foundBooks});
  res.render('confirmDataLoaded',{message: "Tried hard! BUT not found"});
})
```

ISBN	Cover Page	Title	Author	Inventory	Category
1780548370		The Official Harry Potter 2016 Square Calendar		3	Calendars
1629054240		Harry Potter Year-In-A-Box Calendar (2016)	Year-In-A-Box	3	Calendars
194001414X		Harry Potter and the Art of Spying	Lynn M.	13	Humor & Entertainment

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Step 7:

localhost:3000/allData

(1426) How to Mak...

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List of books

ISBN	Cover Page	Title	Author	Inventory	Category
044310073X		Oral and Maxillofacial Surgery: An Objective-Based Textbook, 2e		16	Medical Books
1438005687		Barron's GRE, 21st Edition	Sharon Weiner Green M.A.	28	Test Preparation
60750715		George Balanchine: The Ballet Maker (Eminent Lives)	Robert Gottlieb	1	Biographies & Memoirs
1580237959		A Partner in Holiness: Deepening Mindfulness, Practicing Compassion and Enriching Our Lives Through the Wisdom of R. Levi Yitzhak of Berdichev, Vol. 2 (Institute for Jewish Spirituality)	Rabbi Jonathan P. Slater DMin	21	Religion & Spirituality

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Step 8:

```
{{#each books}}
{{#if this.inventory}}
<tr>
  <td>{{this.ISBN}}</td>
  <td><img src={{this.img}} class="img-thumbnail" >
  <td>{{this.title}}</td>
  <td>{{this.author}}</td>
  <td>{{this.inventory}}</td>
  <td>{{this.category}}</td>
</tr>
{{/if}}
{{/each}}
```

Step 9:


```
</tr>
{{#each books}}
<tr>
  <td>{{this.ISBN}}</td>
  <td><img src={{this.img}} class="img-thumbnail" alt="Hollywood Sign" />
  <td>{{this.title}}</td>
  <td>{{this.author}}</td>
  <td>{{checkOutOfStock this.inventory}}</td>
  <td>{{this.category}}</td>
</tr>
{{/each}}
```

localhost:3000/data/search/title

(1426) How to Mak...

SANDEEP DAS N01472825

List of books

ISBN	Cover Page	Title	Author	Inventory	Category
1608874257		Halo: The Poster Collection		Out of stock	Arts & Photography

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```
const HBS = expbs.create({
  //Create custom HELPER
  layoutsDir: "views/layouts",
  partialsDir: "views/partials",
  helpers: {
    checkOutOfStock : function(stock) {
      if(stock == 0) {
        return "Out of stock";
      } else {
        return stock;
      }
    }
  }
});
//app.engine('.hbs', expbs.engine({ ext: '.hbs' }));
app.engine('.hbs', HBS.engine)
app.set('view engine', '.hbs')
```

Step 10:







a.

localhost:3000/allData

(1426) How to Mak...

SANDEEP DAS N01472825

List of books

ISBN	Cover Page	Title	Author	Inventory	Category
044310073X		Oral and Maxillofacial Surgery: An Objective-Based Textbook, 2e		16	Medical Books
1438005687		Barron's GRE, 21st Edition	Sharon Weiner Green M.A.	28	Test Preparation
60750715		George Balanchine: The Ballet Maker (Eminent Lives)	Robert Gottlieb	1	Biographies & Memoirs
1580237959		A Partner in Holiness: Deepening Mindfulness, Practicing Compassion and Enriching Our Lives Through the Wisdom of R. Levi Yitzhak of Berdichev, Vol. 2 (Institute for Jewish Spirituality)	Rabbi Jonathan P. Slater (Ed.)	21	Religion & Spirituality
135137629		Construction Scheduling: Principles and Practices (2nd Edition)	Jay S. Newitt	Out of stock	Arts & Photography
312556411		Literature and Its Writers: A Compact Introduction to Fiction, Poetry, and Drama	Ann Charters	15	Literature & Fiction

Type here to search

12°C Sunny 5:58 PM 10/29/2022

```
</tr>
{{#each books}}
<tr {{setRowColor this.inventory}}>
  <td>{{this.ISBN}}</td>
  <td><img src={{this.img}} class="img-thumbnail" alt="Hollywood Sign on The Hill" /></td>
  <td>{{this.title}}</td>
  <td>{{this.author}}</td>
  <td>{{checkOutOfStock this.inventory}}</td>
  <td>{{this.category}}</td>
</tr>
{{/each}}
</table>
</div>







},
setRowColor : function(stock){
  if (stock == 0)
    return "style='background-color:#e7b4b4'";
}
```

b.

localhost:3000/allData

SANDEEP DAS N01472825

List of books

ISBN	Cover Page	Title	Author	Inventory	Category
1438005687		Barron's GRE, 21st Edition	Sharon Weiner Green M.A.	28	Test Preparation
60750715		George Balanchine: The Ballet Maker (Eminent Lives)	Robert Gottlieb	1	Biographies & Memoirs
1580237959		A Partner in Holiness: Deepening Mindfulness, Practicing Compassion and Enriching Our Lives Through the Wisdom of R. Levi Yitzhak of Berdichev's, Vol. 2 (Institute for Jewish Spirituality)	Rabbi Jonathan P. Slater DMin	21	Religion & Spirituality
135137829		Construction Scheduling: Principles and Practices (2nd Edition)	Jay S. Newitt	Out of stock	Arts & Photography
312556411		Literature and Its Writers: A Compact Introduction to Fiction, Poetry, and Drama	Ann Charters	15	Literature & Fiction
393339157		Straight on Till Morning: The Life of Beryl Markham	Mary S. Lovell	10	Engineering &

```
{{#each books}}
{{#if (checkAuthorAvailable this.author)}}
<tr {{setRowColor this.inventory}}>
  <td>{{this.ISBN}}</td>
  <td><img src={{this.img}} class="img-thumbnail" alt="Hollywood Sign on The Hill" /></td>
  <td>{{this.title}}</td>
  <td>{{this.author}}</td>
  <td>{{checkOutOfStock this.inventory}}</td>
  <td>{{this.category}}</td>
</tr>
{{/if}}
{{/each}}
```

```
},
checkAuthorAvailable(author){
  if(author!=""){
    return true;
  }
}
```

C. I did find partials useful for rendering static content that does not change as our main content changes.