Module 1

Step 1: [Click here for instructions on deploying a Bitnami MEAN stack using your Rasmussen-issued Microsoft Azure account.](https://content.learntoday.info/Learn/CIS3917Cfw_Summer_18/cis3917cfw-summer-18/media/SetUpMEANStackonAzure.pdf)

Step 2: [Click here for instructions on installing Filezilla](http://sotd.us/instructions/filezilla/filezilla.html).

Step 3: [Click here for instructions on using Putty to establish SSH connection](https://content.learntoday.info/Learn/CIS3917Cfw_Summer_18/cis3917cfw-summer-18/media/Connect%20to%20your%20VM%20with%20SSH.docx).

Step 4: [Click here for instructions on setting up GitHub](https://content.learntoday.info/Learn/CIS3917Cfw_Summer_18/cis3917cfw-summer-18/media/Create%20a%20GitHub%20Account%20and%20Repository.docx).

Step 5: [Click here for instructions on installing Atom](https://content.learntoday.info/Learn/CIS3917Cfw_Summer_18/cis3917cfw-summer-18/media/Installing%20Atom.docx).

Module 2

Step 1: Identify your Bitnami MEAN stack credentials. This can be identified by accessing your [Bitnami Launchpad](https://azure.bitnami.com/) for Microsoft Azure.

Step 2: Identify your Administrator password using the Bitnami Launchpad for Microsoft Azure (refer to [Using the Bitnami Launchpad](https://docs.bitnami.com/azure/faq/#using-the-bitnami-launchpad)).

Step 3: Identify your SSH username to gain secure shell access to your application. This should be “Bitnami”.

Step 4: Download your SSH key or password (Refer to [Obtaining your SSH credentials from the Azure marketplace](https://docs.bitnami.com/azure/faq/#obtaining-your-ssh-credentials-from-the-azure-marketplace)).

Step 5: Create a new MEAN project:

To create a new MEAN project, connect to your virtual machine using Filezilla SFTP, create a new folder for your project in the /home/bitnami directory and then create a new Express project (Note: Do not type the ‘$’. The ‘$’ is not part of the commands.):

$ cd /home/bitnami

$ mkdir projects

$ cd projects

$ express sample

cd sample

$ npm install

To start the application, use this command. Note: When you type this command, no text or alert will appear. The cursor will appear on the next line.:

$ ./bin/www

Step 6: Start the application to run on port 3000. By default, the application will run on port 3000.

To access the application and see its output, browse to http://localhost:3000/. To end the application, terminate the running Express process.

Module 3

For this assignment, you must use your development environment, to create a web application.

Step 1:[Click here for instructions on connecting to your Azure MEAN stack using FTP](https://content.learntoday.info/Learn/CIS3917Cfw_Summer_18/cis3917cfw-summer-18/media/Connect%20to%20your%20Azure%20MEAN%20stack%20using%20FTP.docx).

Note: You may be already connected via Filezilla (FTP software)

Step 2:[Click here for instructions on Creating a new MEAN application](https://content.learntoday.info/Learn/CIS3917Cfw_Summer_18/cis3917cfw-summer-18/media/Creating%20New%20MEAN%20Application.docx).

Note: this was already done in previous steps.

Module 4 You must create a sample webpage that displays content from a Mongo database. There are a series of steps to create the application

1. Download the [Sample Code.zip](https://content.learntoday.info/Learn/CIS3917Cfw_Summer_18/cis3917cfw-summer-18/media/Sample%20Code.zip) folder. Inside this zip file there is “Module 04sample code” that contains sample.zip. Inside this zip file (sample.zip) in the folder Sample you will find **Primer-dataset.Json** file that you need to load into database
2. Test your access to your MongoDB. (Download [Accessing MongoDB.docx.](https://content.learntoday.info/Learn/CIS3917Cfw_Summer_18/cis3917cfw-summer-18/media/Accessing%20MongoDB.docx))

Please make sure you copy file **.bowerrc** to your VM

1. Create a new MongoDB and user credentials. (Download [Create a MongoDB and User.docx](https://content.learntoday.info/Learn/CIS3917Cfw_Summer_18/cis3917cfw-summer-18/media/Create%20a%20MongoDB%20and%20User.docx).)

* “Download this file …” means to use Primer-dataset.Json from zip file as described above.
* Create folder Downloads under Bitnami on your remote machine (use Filezilla). Copy Primer-dataset.Json from your local machine into this folder.
* Note that you need to spell out password in this command (incorrect in original instructions)

mongo admin --username root --**password** [Bitnami root password]

* In this command make sure you use standard double-quote symbol located next to “enter key”.

db.createUser( { user: "alex", pwd: "mypassword", roles: [ "readWrite", "dbAdmin" ]} )

* It is important to note and record your URI for database in the last step. Example: mongodb://alexg:mypassword@localhost/mydb

1. Create a Sample Library application to display books, authors, and genres. (Download [Creating A Sample Library.docx](https://content.learntoday.info/Learn/CIS3917Cfw_Summer_18/cis3917cfw-summer-18/media/Creating%20a%20Sample%20Library.docx).)

* **Resolving Error: Cannot find module 'moment'**

a) Edit package.json file located in sample folder. Add this line in the dependencies section. (including quotation marks)

"moment": "~1.0.1"

b) then copy it into your sample folder on VM using filezilla

c) Next run this command on VM using putty: sudo npm install

* **resolving 404 and related errors** 
  1. Make sure that app.js has following three lines close to top (about line 8-9)

var index = require('./routes/index');

var users = require('./routes/users');

var catalog = require('./routes/catalog');

and these three lines in the middle (about lines 36-37)

app.use('/', index);

app.use('/users', users);

app.use('/catalog', catalog); // Add catalog routes to middleware chain.

* 1. Copy content of the folder sample/views from local machine to remote VM using Filezilla

Discussion module 4

1. Follow the steps in [Import Restaurants DB.docx](https://content.learntoday.info/Learn/CIS3917Cfw_Summer_18/cis3917cfw-summer-18/media/Import%20Restaurants%20DB.docx) import the sample Restaurants database to a MongoDB.
2. Execute the following query to review the contents:
3. db.restaurants.find();

Module 5

You must now modify the application created in the Module 04 Course Project and enable the option to create a new genre, or book (SELECT ONLY 1). The Module 05 instructions contain the code to enable the “Create new author” link in the application. Based on the sample code, follow the same steps to enable the “Create new genre” or “Create new book” link:

1. Create a new author form (Download [Create Author Form.docx](https://content.learntoday.info/Learn/CIS3917Cfw_Summer_18/cis3917cfw-summer-18/media/Create%20Author%20Form.docx).)
2. Follow the same steps to create a new book or genre form. *Note: Some parts of the code may need to change to correspond to the book and genre data.*()

Module 6

You must now modify the application created in the Module 05 Course Project and enable the option to update a book and delete an author. The Module 06 instructions contain the code to enable update and delete options:

1. Add the controllers to update a book. (Download [Update.docx](https://content.learntoday.info/Learn/CIS3917Cfw_Summer_18/cis3917cfw-summer-18/media/Update.docx))
2. Add the controllers to delete an author. (Download [Delete.docx](https://content.learntoday.info/Learn/CIS3917Cfw_Summer_18/cis3917cfw-summer-18/media/Delete.docx))