**Ctrl+shift+L**

Node

* ‘npm start’ runs ‘node server.js’ command.
* ‘npm –g install supervisor’ – this module auto restarts the server when changes are saved. Start server by ‘supervisor serjer.js’

Representational State Transfer:REST API

* REST is stateless- no idea of current user state or history.
* Abbreviation for application program interface, which enables applications to talk to each other.
* In MEAN, it is used to create a stateless interface to database, enabling a way for other applications to work with the data.

Problems with Single Page Application(SPA)

* Crawlability: js are difficult to crawl. Sols-1 have server create HTML-based version and deliver that to crawler. 2 use headless browser such as PhantomJS to run JS.
* Analytics integration: analyse the traffic, can be added using different APIs
* Speed of initial load: need to load the framework at least once and all the contents at the beginning. To overcome: use lazy loading.

Blog example

* Has two sides Blog entries- needs to be fast(pages changes instantly) and admin interface- needs to be interactive. Soln is to create admin interface with angularjs and blog entries with express & nodejs with angularjs for adding features.

**Prototype development stages:**

1. build static site
2. design data model and create database
3. build data API
4. hook database into the application
5. augment the application.

Express

* Express is a web application framework for no.

Package.json file

* In every node app there should be package.json in root folder.
* It contains metadata about the project including packages that it depends on.
* ‘npm install’ run It in same folder as package.json to install all the dependencies listed in the file.
* All packages are installed in node modules, inside subfolders and they all have package.json file each.
* To add more packages: ‘npm install –save package-name’ run it in the same folder as package.json.

**Creating Express project**

* You will need: node &npm, express generator installed globally, git , heroku and terminal.
* Verify installation: express –version.
* 4 template engines available: Jade is default, EJS, JSHtml and Hogan.