# File Upload service in NodeJS Loopback

2016/4/6

### NodeJS, Express, Loopback

REST API server http://localhost:3000/explorer

Loopback JS

Express JS

Node JS

slc run // start to run web service slc loopback:relation // define relationships for models slc loopback:model // define db models slc loopback:datasource // define database npm install loopback-connector-mysql --save slc loopback // create app

Model definition common/models, npm packages

#### ExpressJS - web app framework in node js

Controller - For REST API http request/response handling

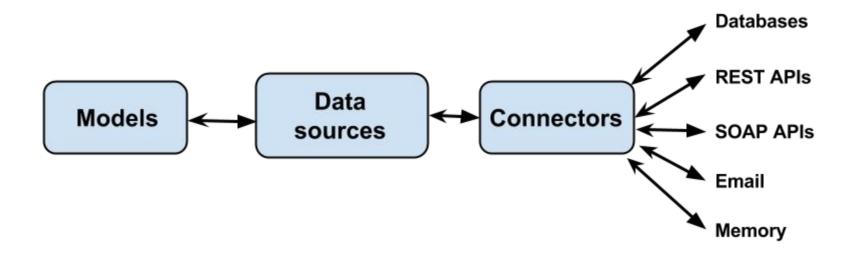
Routing - For REST API endpoint routing

```
var express = require('express');
var app = express();

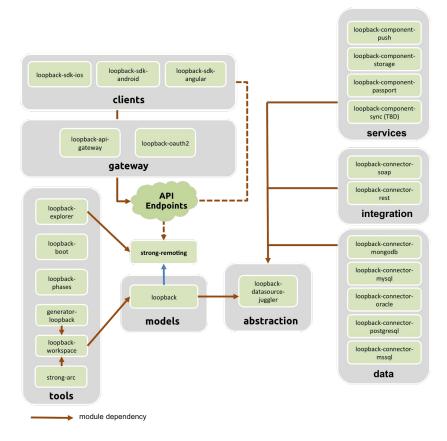
app.get('/', function(req, res){
   res.send('hello world');
});

app.listen(3000);
```

#### Model, Data Source, Connectors in Loopback



#### Loopback Framework Modules - Graphical view



#### Loopback Framework Components - Table view

Component	Description	Module name
Model	Model definition, common/models/*	loopback
Integration	System connectors for REST or SOAP API services	loopback-connector-rest, loopback-connector-soap
Abstraction	Abstract Model to physical data source, server/datasources.json and server/model-config.json	loopback-datasource-juggler
Initialization	Application initialize, server/boot/*, server/server.js	loopback-boot
Data	various data base connectors	loopback-connector-*sql
Tooling	CLI and graphical tools	generator-loopback, strong-arc
Services	Prebuilt services	loopback-component-storage

#### Install required packages

package.json defines required nodejs packages

npm install

to install the depedent packages defined in package.json

#### Loopback framework

Model to REST API by slc loopback:model in PersistModel

Each model has Create/Retrieve/Update/Delete REST API endpoints

User model is created by default, File model is for uploaded files for user

Build model to model relationships(one to many/belongs to)

Define file model object belongs to user model object

Components: storage component

Upload/download files to cloud or local storages

#### References (½)

**ExpressJS API** for routing and controller

**Core Concepts** to get a grip of what loopback framework contains

API Docs for general loopback API documents

Storage Component for file download/upload storage

**Loopback Framework Components** 

<u>loopback-example-user-management</u> main reference to get user login/logout github repo

## References (2/2)

NodeJS API framework

StrongLoop loopback github repo

StrongLoop blog