CSC309 Assignment 2

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Requirements

- Node.js
- SQLite3
- Sequelize - (Object Relational Map used my models.js)
- Express - (for routing API requests)
- Cheerio - (For scraping text from HTML)
- Request - (Module for nicer HTTP requests)
- Forever - (Monitor server and restart on crash)

Usage

Install Dependencies :

```
$ npm install
```

Start Server:

```
$ ./node_modules/.bin/forever app.js
```

Server for Marking:

http://greywolf.cdf.toronto.edu:31315

RESTful API

`POST /blog` Add blog to the list of tracked blogs.
@param `blog` A string indicating a new blog to track by its {base-hostname}

`GET /blog/{base-hostname}/trends` Get a listing of posts liked by the given blog
@param `limit` maximum number of posts to display
@param `order` {"Trending" / "Recent"} sorting order in which the posts will be displayed

`GET /blogs/trends` Get a listing of posts liked by all tracked blogs
@param `limit` maximum number of posts to display
@param `order` {"Trending" / "Recent"} sorting order in which the posts will be displayed

Project Structure

The node.js app creates an HTTP server and listens for incoming requests. The requests are dispatched to respective methods in controller.js using methods from the express.js library. If a route doesn't have a matching function, then 404 is returned.

All the interaction with the database is done through the functions defined in models.js. Using the sequelize.js library, model.js defines an SQLite 3 database, and the relevant query functions.

Controller.js uses the methods defined in models.js to peform the respective queries. The query results are then properly formatted and JSON data is returned through an HTTP response.

In addition, Tracker.js makes hourly calls to the Tumblr API to collect updated information for the tracked blogs. The information is passed to the database throught the functions in models.js.

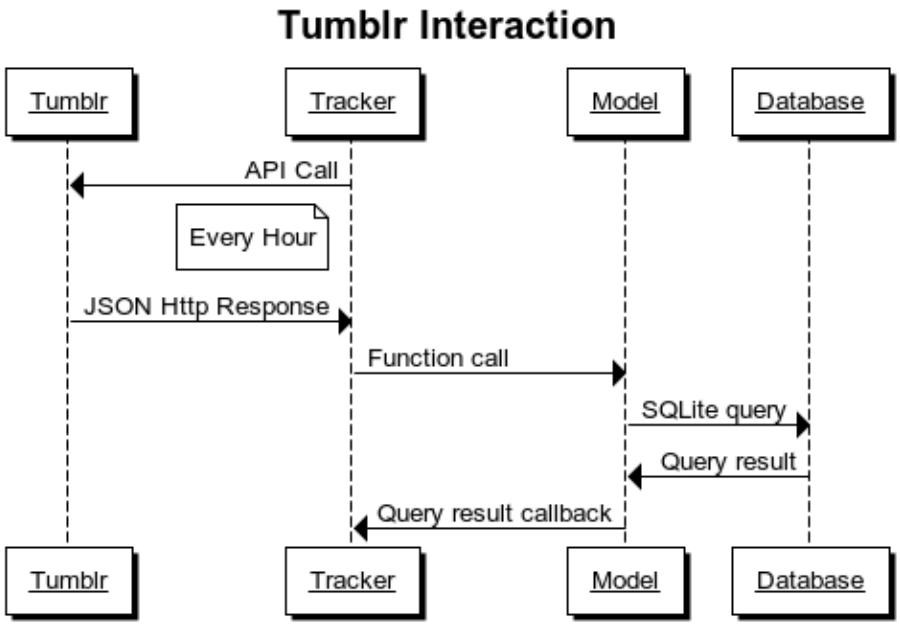
`app.js` The bare node.js server that listens to HTTP requests and routes to methods in `controller.js`.

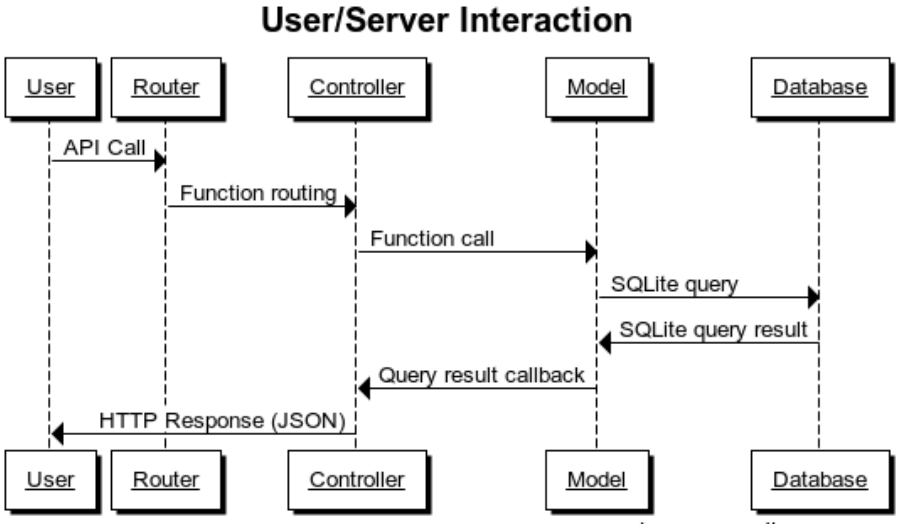
`controller.js` The main server logic of the REST API lives here.

`tracker.js` Automatically collects information about tracked blogs from tumblr every hour.

`model.js` Initializes the database (if it doesn't exist), and contains functions that query the database.

Sequence Diagrams





Database Structure

`dq.sqlite`

Blogs(blogName)

Posts(id, likedBy, url, date, text, image, type, last_track, last_count, increment, sequence, tracking)

```
notes:

  likedBy : References blog(blogName).

  date :  Date the post was authored.

  tracking : Tracking history serialized as JSON.
```