Standardized API Development

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FDS

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- Intro
- Installation and configuration
 - First setup
 - Configure database
 - Configure model
 - Start API server
- Query data

Loopback

LoopBack is a highly-extensible, open-source Node.js framework that enables you to create dynamic end-to-end REST APIs with little or no coding.

First setup

- \$ npm install -g loopback-cli
- \$ 1b

Configure database

```
$ 1b datasource
   Enter the data-source name: postgres-db
   Select the connector for oracledb: PostgreSQL
 Connector specific configuration:
   Connection String url to override other settings:
 postgres://postgres:postgres@localhost/mantis
   host: localhost
   port: 5432
   user: postgres
 ?
   password: ******
 ?
   database: mantis
   install loopback-connector-postgresql@^2.4 Yes
```

Configure model

- \$ 1b model
 - ? Enter the model name: dive
 - ? Select the data-source to attach dive to:

postgres-db

- ? Select model's base class PersistedModel
- ? Expose dive via the REST API? Yes
- ? Custom plural form (used to build REST URL):

dives

? Common model or server only? common Let's add some dive properties now.

Configure model properties

Enter an empty property name when done.

? Property name: id
invoke loopback:property

- ? Property type: number
- ? Required? Yes
- ? Default value [leave empty for none]:

Link models

- \$ 1b relation ? Name of the model to create the relationship from: dive
 - ? Relation type: has many
- ? Name of the model to create a relationship with: participant
 - ? Name for the relation: participants
 - ? Custom foreign key: dive_id
 - ? Whether a "through" model is required? No

Start API server

```
$ node .
```

In debugging mode:

\$ DEBUG=loopback:connector:postgresql node .

Query data

Use the built-in explorer: http://localhost:3000/explorer

| dive | | Show/Hide List Operations Expand Operations |
|--------|--------------------|--|
| PATCH | /dives | Patch an existing model instance or insert a new one into the data source. |
| GET | /dives | Find all instances of the model matched by filter from the data source. |
| PUT | /dives | Replace an existing model instance or insert a new one into the data source. |
| POST | /dives | Create a new instance of the model and persist it into the data source. |
| PATCH | /dives/{id} | Patch attributes for a model instance and persist it into the data source. |
| GET | /dives/{id} | Find a model instance by {{id}} from the data source. |
| HEAD | /dives/{id} | Check whether a model instance exists in the data source. |
| PUT | /dives/{id} | Replace attributes for a model instance and persist it into the data source. |
| DELETE | /dives/{id} | Delete a model instance by {(id)} from the data source. |
| GET | /dives/{id}/exists | Check whether a model instance exists in the data source. |

The End

Questions?

All code and presentation: https://github.com/ndsmyter/loopback-brownbag

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