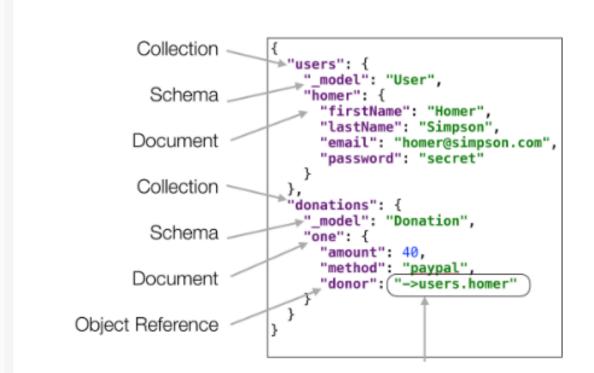
# Seeding Mongo Database

#### Mongoose Seeding





Seeding the database can simplify exploratory development, prepopulating the database with simple test data during development.

#### Motivation for Database Seeding

- Pre-populating the database can enhance developer productivity
- It facilitates simple exploring of various scenarios
- Is particularly useful in establishing normalised data models with inter-document relationships
- Can also be used to pre-configure database for production



## Mongoose seeders on NPM

- Variety of modules available
- Most fairly simple







Seed data population for Mongoose

mongoose-seed lets you populate and clear MongoDB documents with all the benefits of Mongoose validation

# mongoose-seed-plus Public

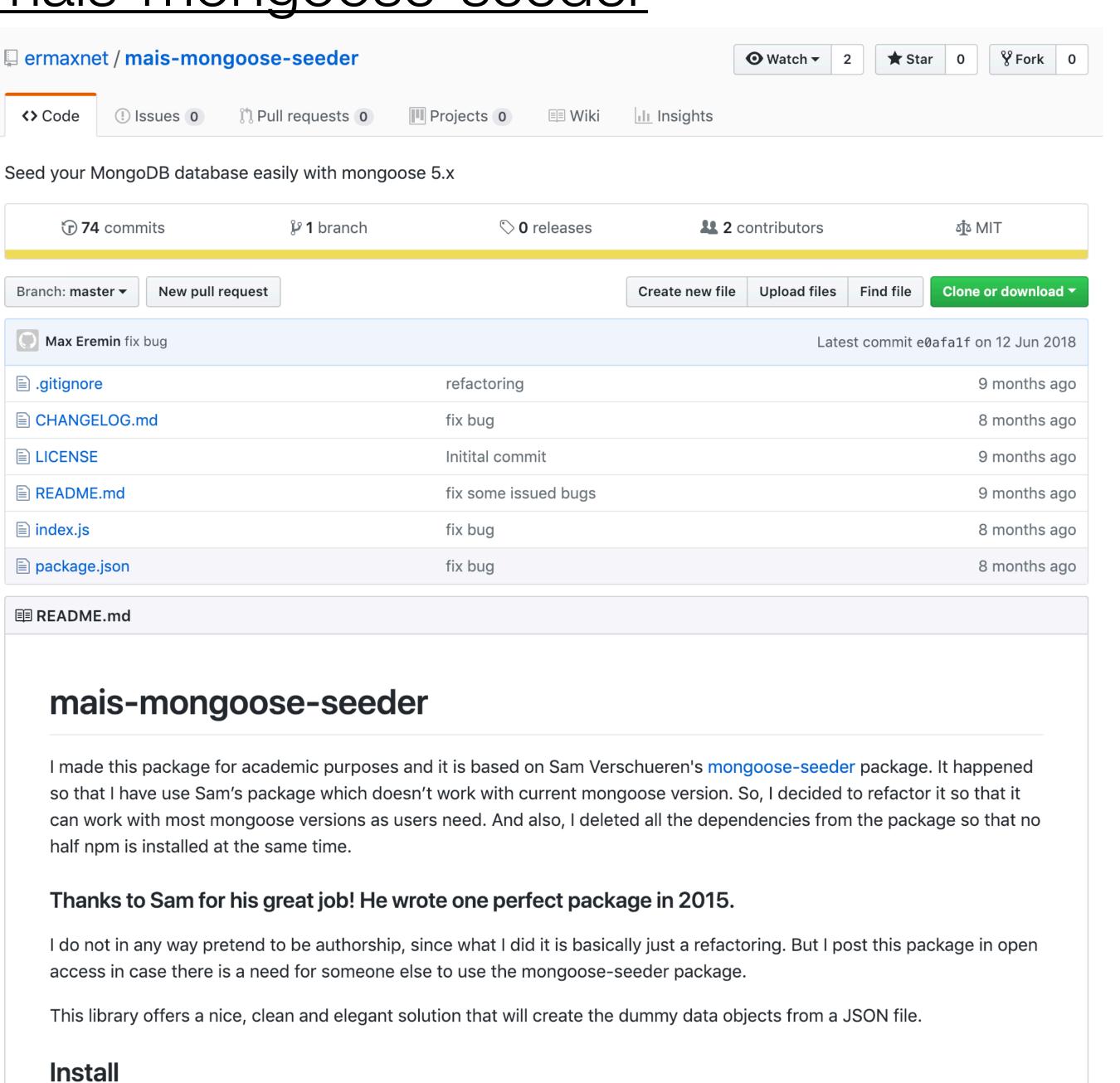


Seed data population for Mongoose

mongoose-seed-plus lets you populate and clear MongoDB documents with all the benefits of Mongoose validation

## https://github.com/ermaxnet/mais-mongoose-seeder

- mongoose-seeder loads from an enhanced JSON file
- Includes special notation for loading relationships between documents



## initdata.json

```
Collection
                          "users": {
                            "_model": "User",
         Schema
                            "homer": {
                              "firstName": "Homer",
                              "lastName": "Simpson",
       Document
                              "email": "homer@simpson.com",
                              "password": "secret"
       Collection
                           "donations": {
                            "_model": "Donation",
         Schema
                            "one": {
                              "amount": 40,
                              "method": "paypal",
       Document
                              "donor": ("->users.homer"
Object Reference
```

reference to homer in users collection

#### seed function

- On application startup:
  - Delete any existing data in the collections
  - Populate the database on initial connection during startup

```
async function seed() {
  var seeder = require('mais-mongoose-seeder')(Mongoose);
  const data = require('./initdata.json');
  const Donation = require('./donation');
  const User = require('./user');
  const dbData = await seeder.seed(data, { dropDatabase: false, dropCollections: true });
  console.log(dbData);
}
```

#### seed function

```
var seeder = require('mais-mongoose-seeder')(Mongoose);
const data = require('./initdata.json');
const Donation = require('./donation');
const User = require('./user');
```

- import
  - the seeder library
  - the initial data json
  - the Schemas
    - Donation
    - User

#### seed function

- Call the seed component
  - pass 'data' loaded from JSON file
  - options:
    - keep the database
    - delete contents of all collections

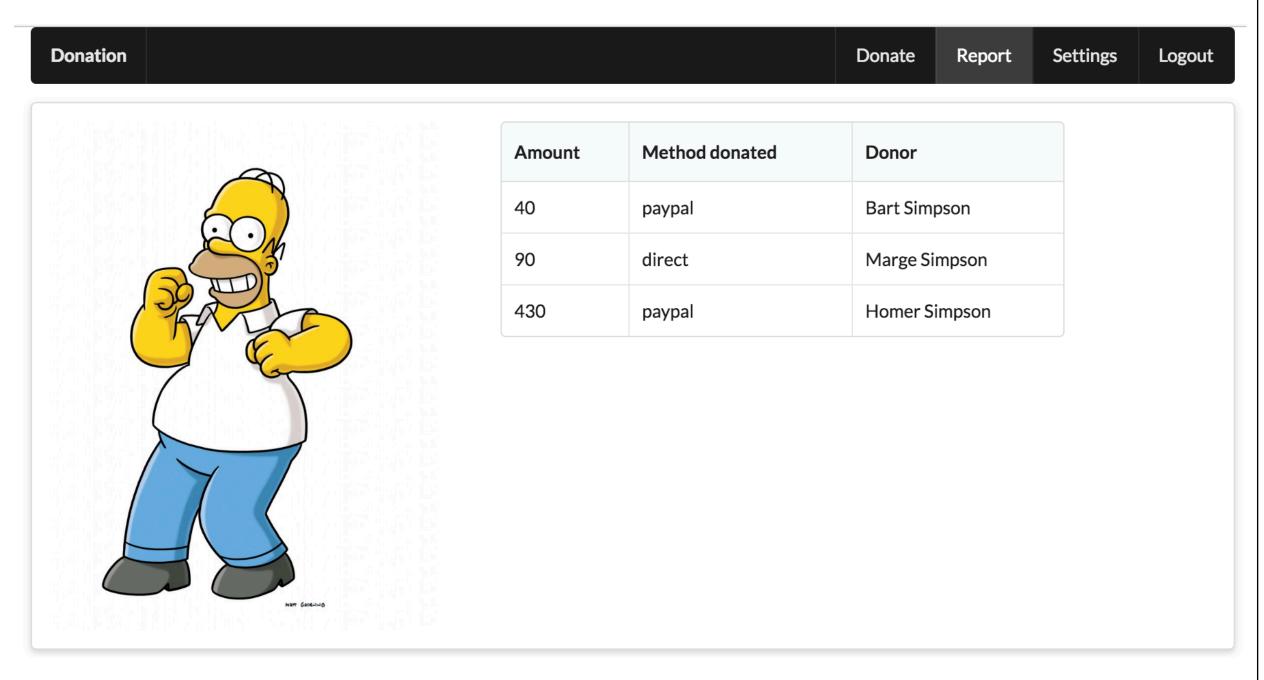
```
const dbData = await seeder.seed(data, { dropDatabase: false, dropCollections: true });
```

### <u>db.js</u>

```
async function seed() {
  var seeder = require('mais-mongoose-seeder')(Mongoose);
  const data = require('./initdata.json');
  const Donation = require('./donation');
  const User = require('./user');
  const dbData = await seeder.seed(data, { dropDatabase: false, dropCollections: true });
  console.log(dbData);
}
```

```
db.once('open', function() {
   console.log(`database connected to ${this.name} on ${this.host}`);
   seed();
})
```

### initdata.json version 2



 We can log in and view basic app functions without having to signup/ login and make donations etc...

```
"users": {
  "_model": "User",
  "homer": {
    "firstName": "Homer",
   "lastName": "Simpson",
    "email": "homer@simpson.com",
    "password": "secret"
  "marge": {
    "firstName": "Marge",
   "lastName": "Simpson",
    "email": "marge@simpson.com",
    "password": "secret"
  "bart": {
    "firstName": "Bart",
   "lastName": "Simpson",
    "email": "bart@simpson.com",
    "password": "secret"
"donations": {
  "_model": "Donation",
  "one": {
    "amount": 40,
   "method": "paypal",
    "donor": "->users.bart"
  "two": {
   "amount": 90,
   "method": "direct",
    "donor": "->users.marge"
  "three": {
   "amount": 430,
    "method": "paypal",
    "donor": "->users.homer"
```