Criando um CRUD da forma mais prática com o CakePHP 3

Instalar o CakePHP 3

Acessar o terminal/prompt e executar

cd /var/www/html ou c:\xampp\htdocs

composer create-project --prefer-dist cakephp/app:3.* crud3

Criando o banco de dados 'crud3' e configurando

Para popular o banco usaremos o script abaixo:

```
DROP TABLE IF EXISTS 'groups';
CREATE TABLE `groups` (
 'id' int(11) NOT NULL AUTO INCREMENT,
 `name` varchar(100) COLLATE utf8_unicode_ci NOT NULL,
 `created` datetime DEFAULT NULL,
 `modified` datetime DEFAULT NULL,
 PRIMARY KEY ('id')
) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_unicode_ci;
INSERT INTO 'groups' ('id', 'name', 'created', 'modified') VALUES
(1, 'Supers', '2016-08-30 21:15:01',
                                    '2016-08-30 21:15:01'),
(2, 'Admins', '2016-08-30 21:15:01',
                                    '2016-08-30 21:15:01').
(3, 'Managers',
                 '2016-08-30 21:15:01',
                                        '2016-08-30 21:15:01'),
(4, 'Users', '2016-08-30 21:15:01',
                                  '2016-08-30 21:15:01');
DROP TABLE IF EXISTS `users`;
CREATE TABLE `users` (
 'id' int(11) NOT NULL AUTO_INCREMENT,
 `username` varchar(55) COLLATE utf8_unicode_ci NOT NULL,
 `password` varchar(255) COLLATE utf8_unicode_ci NOT NULL,
 `group_id` int(11) NOT NULL,
 `created` datetime DEFAULT NULL,
 `modified` datetime DEFAULT NULL,
 PRIMARY KEY ('id'),
 UNIQUE KEY 'username' ('username'),
 CONSTRAINT `group_fk` FOREIGN KEY (`group_id`) REFERENCES `groups` (`id`) ON DELETE CASCADE
ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_unicode_ci;
INSERT INTO 'users' ('id', 'username', 'password', 'group id', 'created', 'modified') VALUES
             '$2y$10$JSDAQhVzicXNOPsiFxSqL.w0tAO6GDCxUMxR.uP3yWMYUTBtv6W8.', 1,
(1, 'super',
                                                                                              '2016-09-
15 15:57:16',
             '2019-04-06 09:53:44'),
(2, 'admin', '$2y$10$XPWeblQCdPrXIbQzMaBCw.DOHFalF62TH
Z8XbwzA3qUgFVZhbZteC', 2,
                               '2016-09-15 15:57:28',
                                                      '2019-04-06 09:54:01'),
(3, 'manager', '$2y$10$CuHXN/I.fsDjwDD4eW.bie2P3F4Kvy3Uof18diZwrsshUrK8dmqx2',
                                                                                          '2016-09-15
15:57:39', '2019-04-06 09:54:15'),
             '$2y$10$Dp.70puQvgpsdkIxraND0.vuL8TNRIYLncGQEg6NoCdPJGy0fdXgW', 4,
                                                                                          '2016-09-15
15:58:21', '2019-04-06 09:54:28');
DROP TABLE IF EXISTS `permissions`;
CREATE TABLE `permissions` (
 'id' int(11) NOT NULL AUTO_INCREMENT,
 `group_id` int(11) NOT NULL,
 `controller` varchar(50) COLLATE utf8_unicode_ci NOT NULL,
```

```
'action' varchar(100) COLLATE utf8 unicode ci NOT NULL,
 `created` datetime DEFAULT NULL,
 'modified' datetime DEFAULT NULL,
 PRIMARY KEY ('id'),
 UNIQUE KEY 'unique key' ('group id', 'controller', 'action'),
 CONSTRAINT `perm_fk` FOREIGN KEY (`group_id`) REFERENCES `groups` (`id`) ON DELETE CASCADE ON
UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8 unicode ci;
DROP TABLE IF EXISTS `customers`;
CREATE TABLE `customers` (
 'id' int(11) NOT NULL AUTO_INCREMENT,
 `name` varchar(55) COLLATE utf8_unicode_ci NOT NULL,
 `birthday` date DEFAULT NULL,
 'phone' varchar(14) COLLATE utf8 unicode ci DEFAULT NULL,
 'observation' text COLLATE utf8 unicode ci,
 `created` datetime DEFAULT NULL,
 'modified' datetime DEFAULT NULL,
 PRIMARY KEY ('id')
) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8 unicode ci;
INSERT INTO `customers` (`id`, `name`, `birthday`, `phone`, `observation`, `created`, `modified`) VALUES
    'Brennan G. Wilcox', '2016-04-15',
                                       '(851) 190-1314',
                                                          'ante. Maecenas mi felis, adipiscing', NULL,
                                                                                                      NULL).
(1,
    'Chase Summers',
                        '2016-08-27',
                                       '(846) 297-4733',
                                                          'Sed molestie. Sed id risus',
                                                                                                 NULL),
(2,
                                                                                       NULL,
(3,
    'Sonia L. Mckay',
                        '2015-12-02',
                                       '(131) 453-1690',
                                                          'fermentum vel, mauris. Integer sem',
                                                                                                 NULL,
     NULL),
(4,
    'Isadora L. Bowers', '2015-10-24',
                                       '(939) 798-4625',
                                                          'consequat, lectus sit amet luctus',
                                                                                            NULL,
                                                                                                      NULL),
                                                          'Aliquam tincidunt, nunc ac mattis', NULL,
(5,
    'Sophia Cochran',
                        '2017-06-15',
                                       '(811) 687-0491',
                                                                                                      NULL),
    'Maxwell T. Burton', '2016-01-12',
(6,
                                       '(147) 962-3265',
                                                          'at arcu. Vestibulum ante ipsum',
                                                                                            NULL,
                                                                                                      NULL),
(7,
    'Desiree Y. Henry', '2017-07-21',
                                       '(148) 711-3747',
                                                          'vitae dolor. Donec fringilla. Donec', NULL,
                                                                                                      NULL),
    'Asher Key',
                   '2015-11-07',
                                  '(355) 668-5871',
                                                      'a, aliquet vel, vulputate eu,',
                                                                                  NULL,
                                                                                            NULL),
    'Tyler Castro', '2016-08-31',
                                                      'nec tempus mauris erat eget', NULL,
                                  '(567) 793-5061',
                                       '(445) 457-4552',
(10, 'Rudyard Weber',
                        '2015-10-26',
                                                          'Morbi vehicula. Pellentesque tincidunt tempus',
     NULL, NULL),
(11, 'Allen Austin', '2016-04-15', '(758) 867-2179',
                                                      'ipsum. Phasellus vitae mauris sit', NULL,
                                                                                                 NULL).
                       '2015-10-13',
(12, 'Octavius Cooper',
                                      '(101) 625-3985',
                                                          'ipsum non arcu. Vivamus sit', NULL,
                                                                                                 NULL),
(13, 'Dustin M. Oneill', '2016-04-24',
                                                          'magnis dis parturient montes, nascetur', NULL,
                                       '(276) 722-0976',
     NULL),
(14, 'Giacomo K. Horton',
                             '2016-07-03', '(773) 532-7468',
                                                               'neque. Sed eget lacus. Mauris', NULL,
                                                                                                      NULL),
(15, 'Signe T. Weaver',
                        '2016-06-17',
                                       '(210) 895-3664',
                                                          'dui nec urna suscipit nonummy.',
                                                                                            NULL,
                                                                                                      NULL),
(16, 'Avram O. Delaney', '2016-08-05',
                                       '(609) 552-7572',
                                                          'Donec luctus aliquet odio. Etiam',
                                                                                                      NULL),
                                                                                            NULL,
(17, 'Cara Parker', '2016-07-24', '(854) 169-4797',
                                                     'ornare lectus justo eu arcu.',
                                                                                  NULL,
                                                                                            NULL).
(18, 'Chelsea Mcclain',
                        '2016-08-06',
                                       '(363) 636-1560',
                                                          'mollis lectus pede et risus.',
                                                                                       NULL,
(19, 'Wesley Garner',
                        '2016-06-11',
                                       '(578) 231-2389',
                                                          'Fusce feugiat. Lorem ipsum dolor', NULL,
(20, 'Irene P. Arnold',
                                                          'accumsan laoreet ipsum. Curabitur consequat,',
                        '2016-02-12',
                                       '(253) 631-9830',
     NULL,
            NULL),
(21, 'Austin S. Wall',
                        '2016-01-21',
                                      '(225) 694-9511',
                                                          'Sed eget lacus. Mauris non',
                                                                                       NULL,
Após criar o banco configure em config/app.php
```

Para o MySQL apenas ajuste as 3 linhas:

```
'username' => 'root',
'password' => ",
'database' => 'crud',
```

Configurando as Rotas

Acesse config/routes.php e comente a linha abaixo:

```
//$routes->connect('/pages/*', ['controller' => 'Pages', 'action' =>
'display']);
E logo abaixo adicione esta:
$routes->connect('/', ['controller' => 'Customers', 'action' => 'index']);
```

Geração do Código com o bake

```
bin/cake bake all groups
bin/cake bake all users
bin/cake bake all permissions
bin/cake bake all customers
```

Testando

http://localhost/crud3

http://localhost/crud3/users

http://localhost/crud3/groups

http://localhost/crud3/permissions

Detalles

Como no exemplo as 4 tabelas estão relacionadas, podemos ver em users uma combo já populada com groups.

Podemos ver os campos tipo data que já vem com uma combo.

E assim por diante.

Obs.: não basta que as tabelas sejam relacionadas no SGBD para que o Cake proceda dessa forma, precisamos seguir suas convenções para relacionamento. Veja o script sql do banco e notará que para relacionar groups com users adicionamos um campo em users chamado user id.

Mais detalhes sobre as convenções do CakePHP veja:

https://ribafs.github.io/curriculo/livros/cakephp/3-convencoes-sobre-configuracoes.html