Tabular input

In this section, we will show you how to use a model to save and validate related models. Sometimes you will need to handle multiple models of the same kind in a single form.

For instance, we have contests and prizes for contests. Any contest might contain an unlimited number of prizes. So, we need the ability to create a contest with prizes, validate them, display all errors, and save the primary model (contest model) and all related models (prize models) to the database.

Getting ready

1. Create a new application by using the Composer package manager, as described in the official guide at [http://www. yiiframework. c om/doc-2.0/guide -start-installation .html](http://www.yiiframework.com/doc-2.0/guide-start-installation.html).
2. Create migrations for contest and prize tables with the following commands:

./yii migrate/create create\_table\_contest\_and\_prize\_table

Update just created migration's methods up() and down() by following code

public function up()

{

$tableOptions = null;

if ($this->db->driverName === 'mysql') {

$tableOptions = 'CHARACTER SET utf8 COLLATE utf8\_general\_ci ENGINE=InnoDB';

}

$this->createTable('{{%contest}}', [

'id' => Schema::TYPE\_PK,

'name' => Schema::TYPE\_STRING . ' NOT NULL',

], $tableOptions);

$this->createTable('{{%prize}}', [

'id' => Schema::TYPE\_PK,

'name' => Schema::TYPE\_STRING,

'amount' => Schema::TYPE\_INTEGER,

], $tableOptions);

$this->createTable('{{%contest\_prize\_assn}}', [

'contest\_id' => Schema::TYPE\_INTEGER,

'prize\_id' => Schema::TYPE\_INTEGER,

], $tableOptions);

$this-addForeignKey('fk\_contest\_prize\_assn\_contest\_id',  
'{{%contest\_prize\_assn}}', 'contest\_id', {{%contest}}', 'id');

$this->addForeignKey('fk\_contest\_prize\_assn\_prize\_id',

'{{%contest\_prize\_assn}}', 'prize\_id', '{{%prize}}', 'id');

}

public function down()

{

$this-dropForeignKey('fk\_contest\_prize\_assn\_contest\_id',

'{{%contest\_prize\_assn}}');

$this->dropForeignKey('fk\_contest\_prize\_assn\_prize\_id',

'{{%contest\_prize\_assn}}');

$this->dropTable('{{%contest\_prize\_assn}}');

$this->dropTable('{{%prize}}');

$this->dropTable('{{%contest}}');

}

1. Then, install migration with the following command:

./yii migrate/up

1. With Gii, generate contest, prize, and ContestPrizeAssn models.