# Section 3: Relational Schema

CREATE TABLE `booking\_status\_types` (

`id` int(11) unsigned NOT NULL AUTO\_INCREMENT,

`status\_type\_name` varchar(50) NOT NULL DEFAULT '',

PRIMARY KEY (`id`)

)

CREATE TABLE `bookings` (

`id` int(11) unsigned NOT NULL AUTO\_INCREMENT,

`consumer\_id` int(11) unsigned NOT NULL,

`property\_id` int(11) unsigned NOT NULL,

`start\_date` date NOT NULL,

`end\_date` date NOT NULL,

`status\_id` int(2) unsigned NOT NULL,

PRIMARY KEY (`id`),

KEY `consumer\_id` (`consumer\_id`),

KEY `property\_id` (`property\_id`),

KEY `status\_id` (`status\_id`),

CONSTRAINT `bookings\_ibfk\_1` FOREIGN KEY (`consumer\_id`) REFERENCES `users` (`id`),

CONSTRAINT `bookings\_ibfk\_2` FOREIGN KEY (`property\_id`) REFERENCES `rental\_properties` (`id`),

CONSTRAINT `bookings\_ibfk\_3` FOREIGN KEY (`status\_id`) REFERENCES `booking\_status\_types` (`id`)

)

CREATE TABLE `city\_districts` (

`id` int(11) unsigned NOT NULL AUTO\_INCREMENT,

`district\_name` varchar(255) NOT NULL DEFAULT '',

`points\_of\_interest` text NOT NULL,

PRIMARY KEY (`id`)

)

CREATE TABLE `degree\_types` (

`id` int(11) unsigned NOT NULL AUTO\_INCREMENT,

`degree\_type\_name` varchar(50) NOT NULL DEFAULT '',

PRIMARY KEY (`id`)

)

CREATE TABLE `faculties` (

`id` int(11) unsigned NOT NULL AUTO\_INCREMENT,

`faculty\_name` varchar(50) NOT NULL DEFAULT '',

PRIMARY KEY (`id`)

)

CREATE TABLE `rental\_properties` (

`id` int(11) unsigned NOT NULL AUTO\_INCREMENT,

`name` varchar(255) NOT NULL,

`supplier\_id` int(11) unsigned NOT NULL,

`address` varchar(255) NOT NULL,

`district\_id` int(11) unsigned NOT NULL,

`property\_type\_id` int(2) unsigned NOT NULL,

`num\_guests` int(10) unsigned NOT NULL DEFAULT '0',

`num\_rooms` int(10) unsigned NOT NULL DEFAULT '0',

`num\_bathrooms` int(10) unsigned NOT NULL,

`price` int(5) NOT NULL,

`description` text NOT NULL,

`has\_air\_conditioning` tinyint(11) NOT NULL DEFAULT '0',

`has\_cable\_tv` tinyint(11) NOT NULL DEFAULT '0',

`has\_laundry\_machines` tinyint(11) NOT NULL DEFAULT '0',

`has\_parking` tinyint(11) NOT NULL DEFAULT '0',

`has\_gym` tinyint(11) NOT NULL DEFAULT '0',

`has\_internet` tinyint(11) NOT NULL DEFAULT '0',

`pets\_allowed` tinyint(11) NOT NULL DEFAULT '0',

`has\_wheelchair\_access` tinyint(11) NOT NULL DEFAULT '0',

`has\_pool` tinyint(11) NOT NULL DEFAULT '0',

`has\_transport\_access` tinyint(11) NOT NULL DEFAULT '0',

`has\_private\_bathroom` tinyint(11) NOT NULL DEFAULT '0',

PRIMARY KEY (`id`),

KEY `district\_id` (`district\_id`),

KEY `supplier\_id` (`supplier\_id`),

KEY `property\_type\_id` (`property\_type\_id`),

CONSTRAINT `rental\_properties\_ibfk\_1` FOREIGN KEY (`district\_id`) REFERENCES `city\_districts` (`id`),

CONSTRAINT `rental\_properties\_ibfk\_2` FOREIGN KEY (`supplier\_id`) REFERENCES `users` (`id`),

CONSTRAINT `rental\_properties\_ibfk\_3` FOREIGN KEY (`property\_type\_id`) REFERENCES `rental\_property\_types` (`id`)

)

CREATE TABLE `rental\_property\_types` (

`id` int(11) unsigned NOT NULL AUTO\_INCREMENT,

`property\_type\_name` varchar(50) NOT NULL DEFAULT '',

PRIMARY KEY (`id`)

)

CREATE TABLE `reviews` (

`consumer\_id` int(11) unsigned NOT NULL,

`property\_id` int(11) unsigned NOT NULL,

`rating` int(1) unsigned NOT NULL,

`comment` text NOT NULL,

`reply` text NOT NULL,

PRIMARY KEY (`consumer\_id`,`property\_id`),

KEY `property\_id` (`property\_id`),

CONSTRAINT `reviews\_ibfk\_1` FOREIGN KEY (`consumer\_id`) REFERENCES `users` (`id`),

CONSTRAINT `reviews\_ibfk\_2` FOREIGN KEY (`property\_id`) REFERENCES `rental\_properties` (`id`)

)

CREATE TABLE `users` (

`id` int(11) unsigned NOT NULL AUTO\_INCREMENT,

`is\_admin` tinyint(1) NOT NULL DEFAULT '0',

`first\_name` varchar(50) NOT NULL,

`last\_name` varchar(50) NOT NULL,

`email` varchar(100) NOT NULL,

`password` varchar(255) NOT NULL,

`phone\_number` varchar(30) NOT NULL,

`grad\_year` int(4) NOT NULL,

`faculty\_id` int(2) unsigned NOT NULL,

`degree\_type\_id` int(2) unsigned NOT NULL,

`gender` varchar(255) NOT NULL,

PRIMARY KEY (`id`),

KEY `faculty\_id` (`faculty\_id`),

KEY `degree\_type\_id` (`degree\_type\_id`),

CONSTRAINT `users\_ibfk\_1` FOREIGN KEY (`faculty\_id`) REFERENCES `faculties` (`id`),

CONSTRAINT `users\_ibfk\_2` FOREIGN KEY (`degree\_type\_id`) REFERENCES `degree\_types` (`id`)

)