Core Database and Table Creation:

Table: 1. Clubs

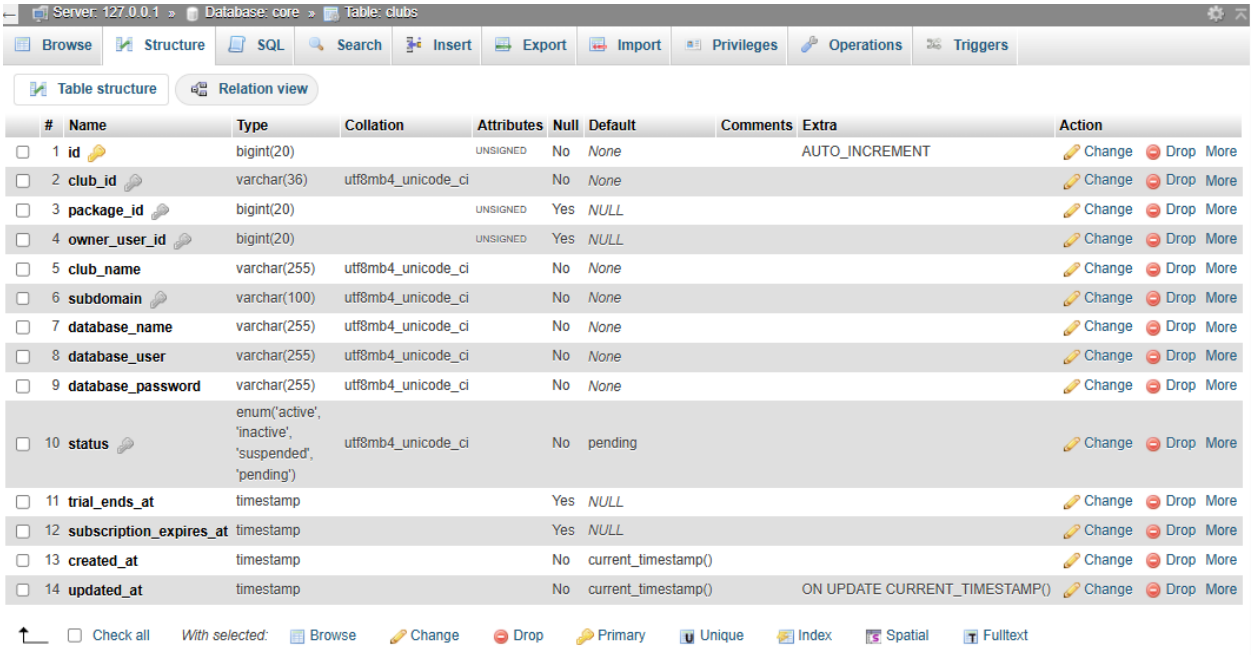


Table: 2. club_users

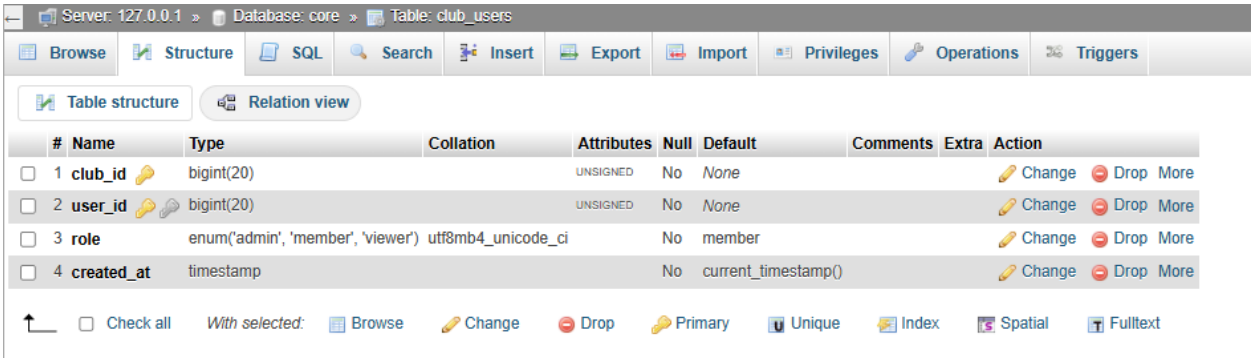


Table: 3. club_settings

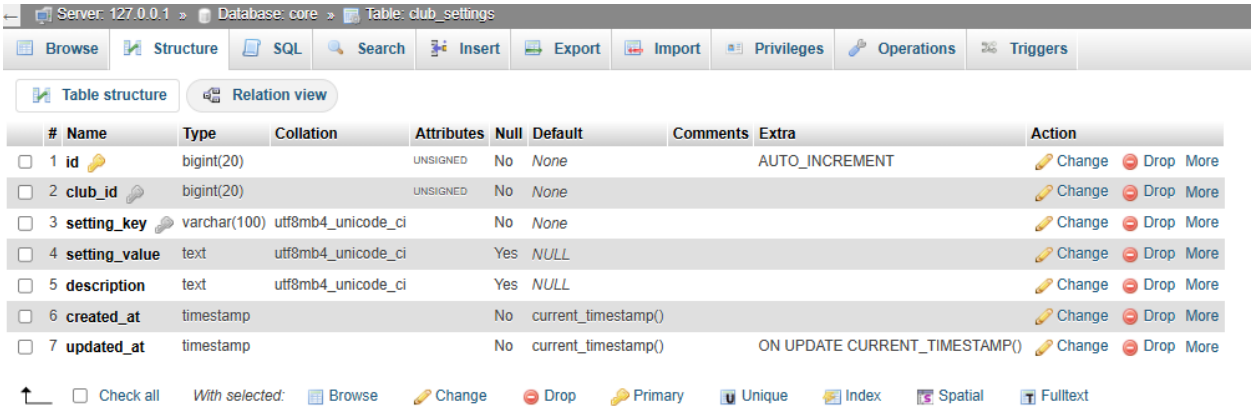


Table: 4. audit_logs

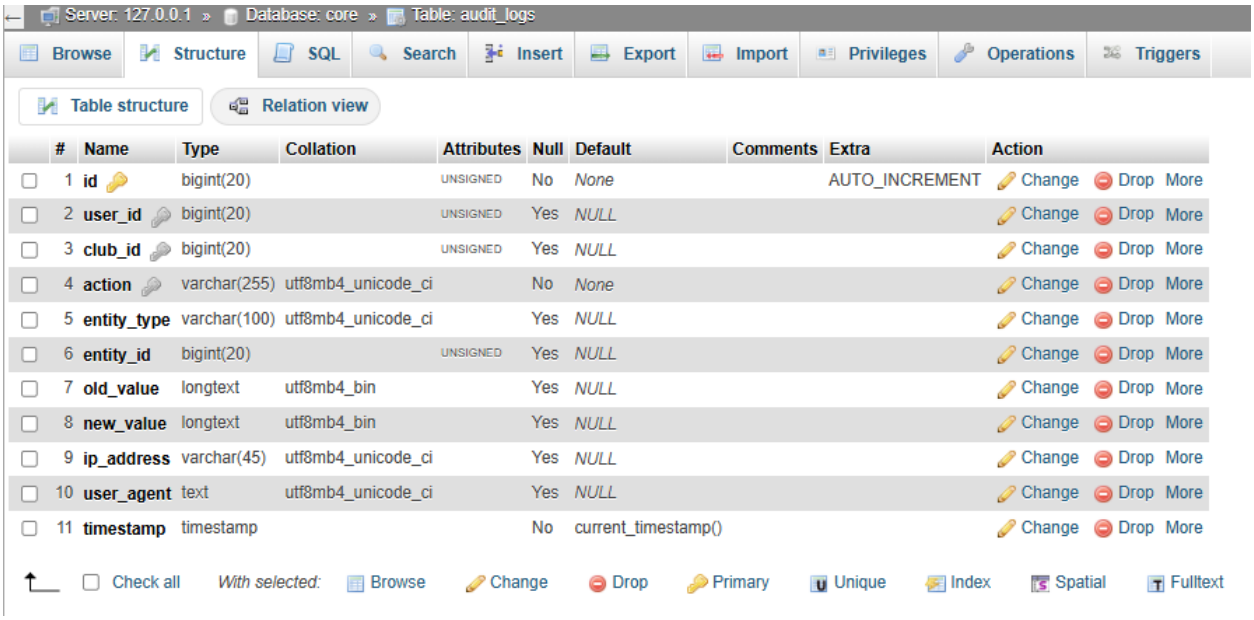


Table: 5. calculation_configs

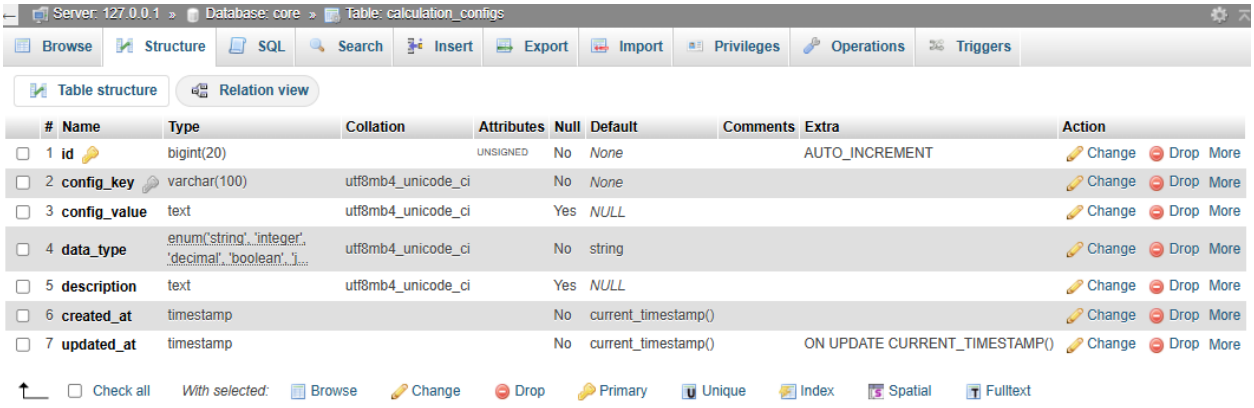


Table: 6. email_configs

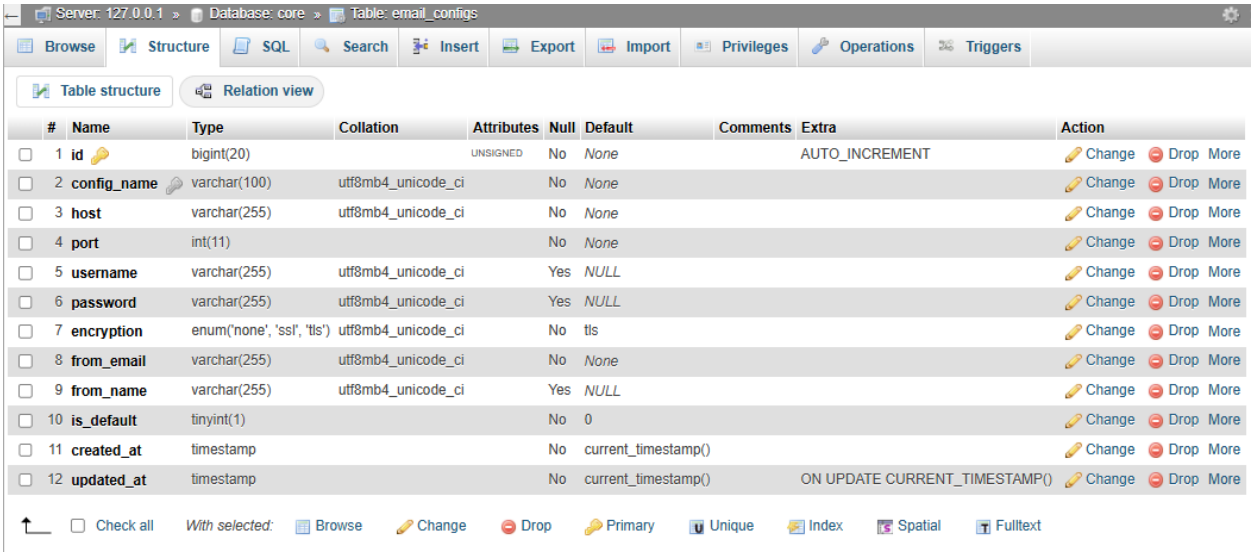


Table: 7. error_logs

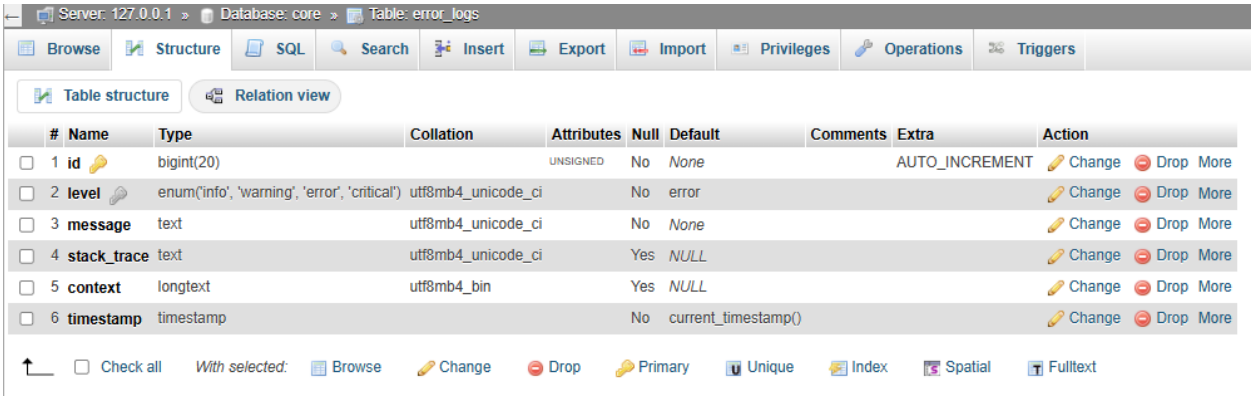


Table: 8. features

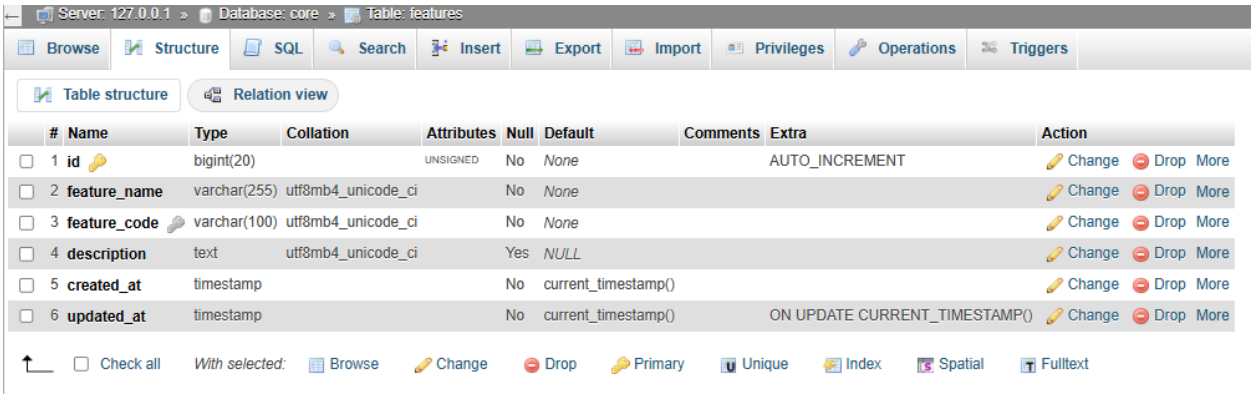


Table: 9. packages

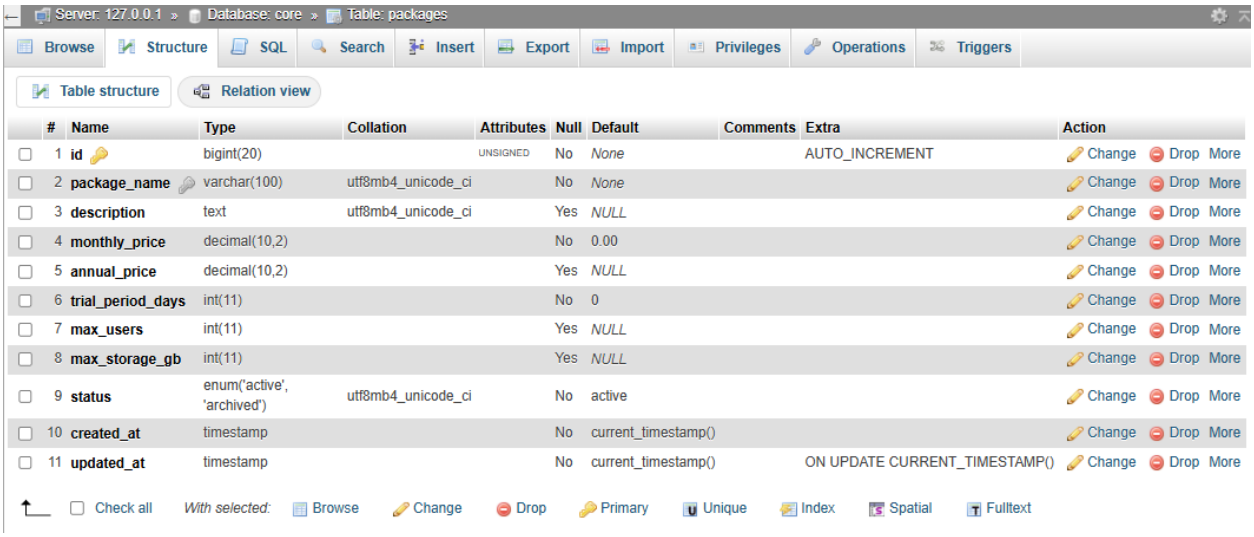


Table: 10. package_features

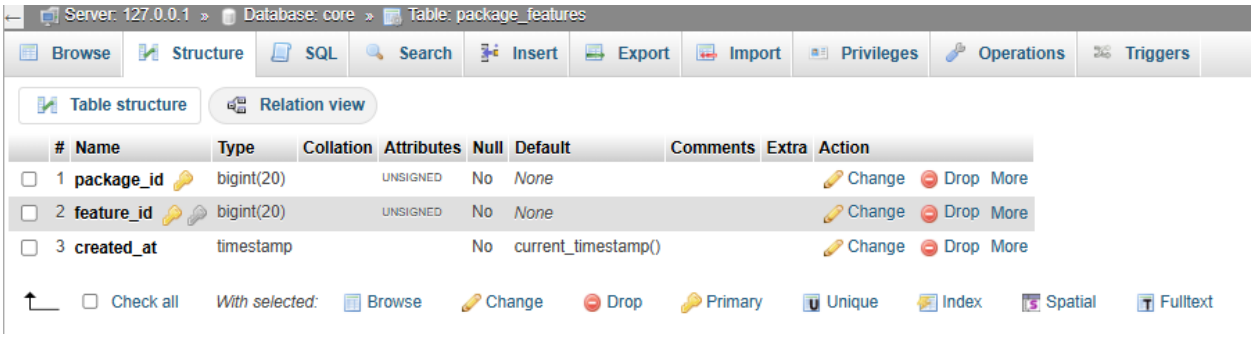


Table: 11. payment_gateways

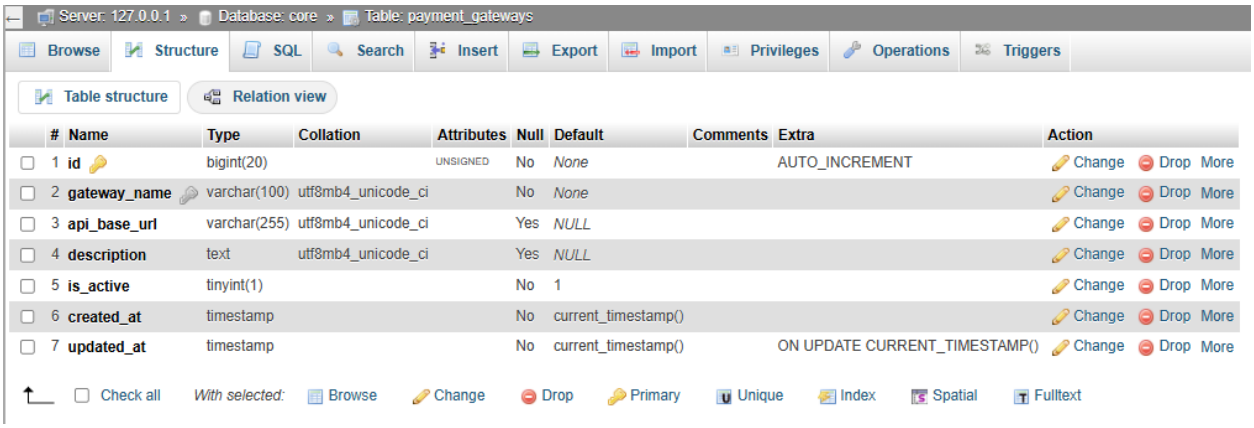


Table: 12. scheduled_tasks

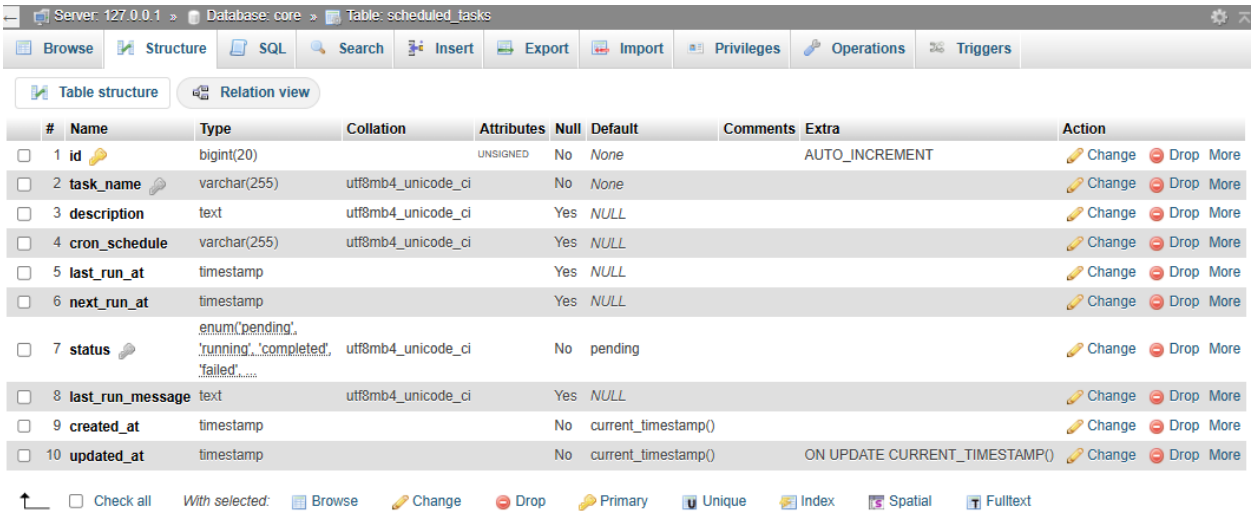
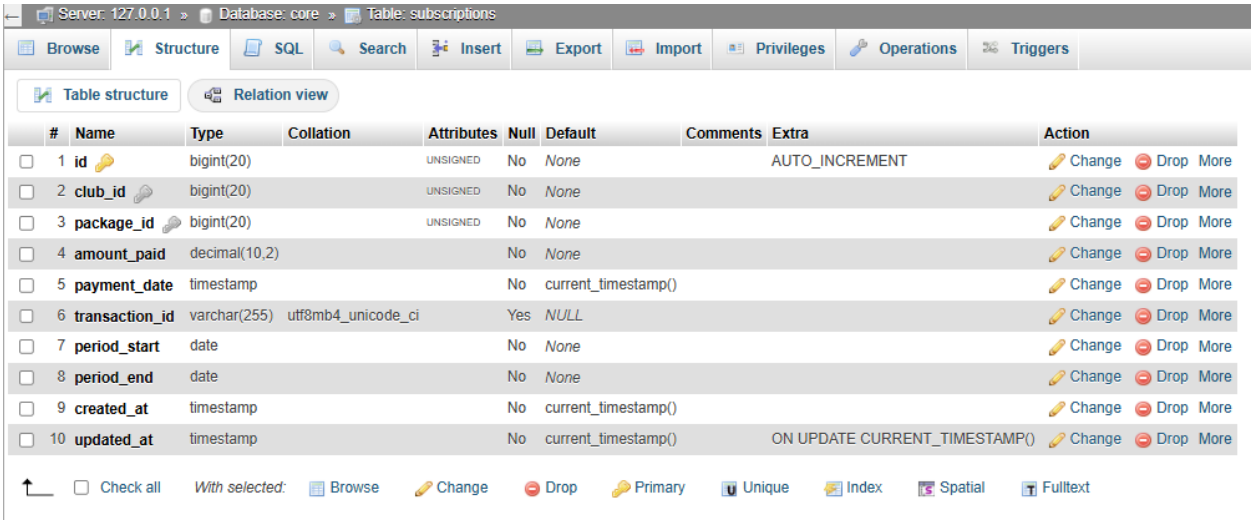
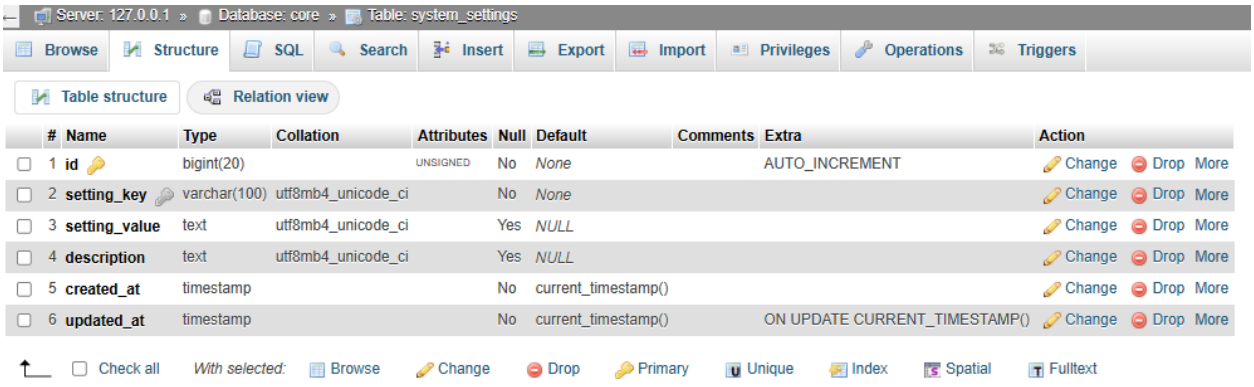


Table: 13. subscriptions



#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	bigint(20)		UNSIGNED	No	None		AUTO_INCREMENT	Change Drop More
2	club_id	bigint(20)		UNSIGNED	No	None			Change Drop More
3	package_id	bigint(20)		UNSIGNED	No	None			Change Drop More
4	amount_paid	decimal(10,2)			No	None			Change Drop More
5	payment_date	timestamp			No	current_timestamp()			Change Drop More
6	transaction_id	varchar(255)	utf8mb4_unicode_ci		Yes	NULL			Change Drop More
7	period_start	date			No	None			Change Drop More
8	period_end	date			No	None			Change Drop More
9	created_at	timestamp			No	current_timestamp()			Change Drop More
10	updated_at	timestamp			No	current_timestamp()		ON UPDATE CURRENT_TIMESTAMP()	Change Drop More

Table: 14. system_settings



#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	bigint(20)		UNSIGNED	No	None		AUTO_INCREMENT	Change Drop More
2	setting_key	varchar(100)	utf8mb4_unicode_ci		No	None			Change Drop More
3	setting_value	text	utf8mb4_unicode_ci		Yes	NULL			Change Drop More
4	description	text	utf8mb4_unicode_ci		Yes	NULL			Change Drop More
5	created_at	timestamp			No	current_timestamp()			Change Drop More
6	updated_at	timestamp			No	current_timestamp()		ON UPDATE CURRENT_TIMESTAMP()	Change Drop More

SQL Script

```sql
-- --------------------------------------------------------
--
-- Database Creation: `core`
--
-- --------------------------------------------------------

DROP DATABASE IF EXISTS `core`;

CREATE DATABASE `core` CHARACTER SET utf8mb4 COLLATE utf8mb4_unicode_ci;

USE `core`;

-- --------------------------------------------------------
--
-- Table structure for table `packages`
--
-- --------------------------------------------------------

CREATE TABLE `packages` (
  `id` BIGINT UNSIGNED NOT NULL AUTO_INCREMENT,
  `package_name` VARCHAR(100) NOT NULL,
  `description` TEXT NULL,
  `monthly_price` DECIMAL(10, 2) NOT NULL DEFAULT 0.00,
  `annual_price` DECIMAL(10, 2) NULL,
  `trial_period_days` INTEGER NOT NULL DEFAULT 0,
  `max_users` INTEGER NULL,
  `max_storage_gb` INTEGER NULL,
  `status` ENUM('active', 'archived') NOT NULL DEFAULT 'active',
  `created_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  `updated_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
  PRIMARY KEY (`id`),
  UNIQUE KEY `uk_packages_package_name` (`package_name`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

```sql
-- --------------------------------------------------------
--
-- Table structure for table `clubs`
--
-- --------------------------------------------------------

CREATE TABLE `clubs` (

  `id` BIGINT UNSIGNED NOT NULL AUTO_INCREMENT,
  `club_id` VARCHAR(36) NOT NULL,
  `package_id` BIGINT UNSIGNED NULL,
  `owner_user_id` BIGINT UNSIGNED NULL,
  `club_name` VARCHAR(255) NOT NULL,
  `subdomain` VARCHAR(100) NOT NULL,
  `database_name` VARCHAR(255) NOT NULL,
  `database_user` VARCHAR(255) NOT NULL,
  `database_password` VARCHAR(255) NOT NULL,
  `status` ENUM('active', 'inactive', 'suspended', 'pending') NOT NULL DEFAULT
'pending',
  `trial_ends_at` TIMESTAMP NULL,
  `subscription_expires_at` TIMESTAMP NULL,
  `created_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  `updated_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
  PRIMARY KEY (`id`),
  UNIQUE KEY `uk_clubs_club_id` (`club_id`),
  UNIQUE KEY `uk_clubs_subdomain` (`subdomain`),
  INDEX `idx_clubs_status` (`status`),
  CONSTRAINT `fk_clubs_package_id` FOREIGN KEY (`package_id`) REFERENCES
`packages`(`id`) ON DELETE SET NULL,
  CONSTRAINT `fk_clubs_owner_user_id` FOREIGN KEY (`owner_user_id`) REFERENCES)
ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

```sql
-- --------------------------------------------------------
--
-- Table structure for table `features`
--
-- --------------------------------------------------------

CREATE TABLE `features` (
  `id` BIGINT UNSIGNED NOT NULL AUTO_INCREMENT,
  `feature_name` VARCHAR(255) NOT NULL,
  `feature_code` VARCHAR(100) NOT NULL,
  `description` TEXT NULL,
  `created_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  `updated_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
  PRIMARY KEY (`id`),
  UNIQUE KEY `uk_features_feature_code` (`feature_code`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;


-- --------------------------------------------------------
--
-- Table structure for table `package_features` (Pivot Table)
--
-- --------------------------------------------------------

CREATE TABLE `package_features` (
  `package_id` BIGINT UNSIGNED NOT NULL,
  `feature_id` BIGINT UNSIGNED NOT NULL,
  `created_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  PRIMARY KEY (`package_id`, `feature_id`),
  CONSTRAINT `fk_pf_package_id` FOREIGN KEY (`package_id`) REFERENCES
`packages`(`id`) ON DELETE CASCADE,
  CONSTRAINT `fk_pf_feature_id` FOREIGN KEY (`feature_id`) REFERENCES
`features`(`id`) ON DELETE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

```sql
-- --------------------------------------------------------
--
-- Table structure for table `club_users` (Pivot Table)
--
-- --------------------------------------------------------

CREATE TABLE `club_users` (
  `club_id` BIGINT UNSIGNED NOT NULL,
  `user_id` BIGINT UNSIGNED NOT NULL,
  `role` ENUM('admin', 'member', 'viewer') NOT NULL DEFAULT 'member',
  `created_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  PRIMARY KEY (`club_id`, `user_id`), -- Composite primary key
  CONSTRAINT `fk_cu_club_id` FOREIGN KEY (`club_id`) REFERENCES `clubs`(`id`) ON
DELETE CASCADE,
  CONSTRAINT `fk_cu_user_id` FOREIGN KEY (`user_id`) REFERENCES `users`(`id`) ON
DELETE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;


-- --------------------------------------------------------
--
-- Table structure for table `subscriptions`
--
-- --------------------------------------------------------

CREATE TABLE `subscriptions` (
  `id` BIGINT UNSIGNED NOT NULL AUTO_INCREMENT,
  `club_id` BIGINT UNSIGNED NOT NULL,
  `package_id` BIGINT UNSIGNED NOT NULL,
  `amount_paid` DECIMAL(10, 2) NOT NULL,
  `payment_date` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  `transaction_id` VARCHAR(255) NULL,
  `period_start` DATE NOT NULL,
  `period_end` DATE NOT NULL,
  `created_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  `updated_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
  PRIMARY KEY (`id`),
  CONSTRAINT `fk_subscriptions_club_id` FOREIGN KEY (`club_id`) REFERENCES
`clubs`(`id`) ON DELETE CASCADE,
  CONSTRAINT `fk_subscriptions_package_id` FOREIGN KEY (`package_id`) REFERENCES
`packages`(`id`) ON DELETE RESTRICT
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

```sql
-- --------------------------------------------------------
--
-- Table structure for table `system_settings`
--
-- --------------------------------------------------------

CREATE TABLE `system_settings` (
  `id` BIGINT UNSIGNED NOT NULL AUTO_INCREMENT,
  `setting_key` VARCHAR(100) NOT NULL,
  `setting_value` TEXT NULL,
  `description` TEXT NULL,
  `created_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  `updated_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
  PRIMARY KEY (`id`),
  UNIQUE KEY `uk_system_settings_key` (`setting_key`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;

-- --------------------------------------------------------
--
-- Table structure for table `audit_logs`
--
-- --------------------------------------------------------
CREATE TABLE `audit_logs` (
  `id` BIGINT UNSIGNED NOT NULL AUTO_INCREMENT,
  `user_id` BIGINT UNSIGNED NULL,
  `club_id` BIGINT UNSIGNED NULL,
  `action` VARCHAR(255) NOT NULL,
  `entity_type` VARCHAR(100) NULL,
  `entity_id` BIGINT UNSIGNED NULL,
  `old_value` JSON NULL,
  `new_value` JSON NULL,
  `ip_address` VARCHAR(45) NULL,
  `user_agent` TEXT NULL,
  `timestamp` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  PRIMARY KEY (`id`),
  INDEX `idx_audit_logs_user_id` (`user_id`),
  INDEX `idx_audit_logs_club_id` (`club_id`),
  INDEX `idx_audit_logs_action` (`action`),
  CONSTRAINT `fk_audit_logs_user_id` FOREIGN KEY (`user_id`) REFERENCES
`users`(`id`) ON DELETE SET NULL,
  CONSTRAINT `fk_audit_logs_club_id` FOREIGN KEY (`club_id`) REFERENCES
`clubs`(`id`) ON DELETE SET NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

```sql
-- --------------------------------------------------------
--
-- Table structure for table `error_logs`
--
-- --------------------------------------------------------

CREATE TABLE `error_logs` (
  `id` BIGINT UNSIGNED NOT NULL AUTO_INCREMENT,
  `level` ENUM('info', 'warning', 'error', 'critical') NOT NULL DEFAULT 'error',
  `message` TEXT NOT NULL,
  `stack_trace` TEXT NULL,
  `context` JSON NULL,
  `timestamp` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  PRIMARY KEY (`id`),
  INDEX `idx_error_logs_level` (`level`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;

-- --------------------------------------------------------
--
-- Table structure for table `scheduled_tasks`
--
-- --------------------------------------------------------

CREATE TABLE `scheduled_tasks` (
  `id` BIGINT UNSIGNED NOT NULL AUTO_INCREMENT,
  `task_name` VARCHAR(255) NOT NULL,
  `description` TEXT NULL,
  `cron_schedule` VARCHAR(255) NULL,
  `last_run_at` TIMESTAMP NULL,
  `next_run_at` TIMESTAMP NULL,
  `status` ENUM('pending', 'running', 'completed', 'failed', 'disabled') NOT NULL
DEFAULT 'pending',
  `last_run_message` TEXT NULL,
  `created_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  `updated_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
  PRIMARY KEY (`id`),
  UNIQUE KEY `uk_scheduled_tasks_name` (`task_name`),
  INDEX `idx_scheduled_tasks_status` (`status`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

```sql
-- --------------------------------------------------------
--
-- Table structure for table `payment_gateways`
--
-- --------------------------------------------------------

CREATE TABLE `payment_gateways` (
  `id` BIGINT UNSIGNED NOT NULL AUTO_INCREMENT,
  `gateway_name` VARCHAR(100) NOT NULL,
  `api_base_url` VARCHAR(255) NULL,
  `description` TEXT NULL,
  `is_active` BOOLEAN NOT NULL DEFAULT TRUE,
  `created_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  `updated_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
  PRIMARY KEY (`id`),
  UNIQUE KEY `uk_payment_gateways_name` (`gateway_name`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;

-- --------------------------------------------------------
--
-- Table structure for table `email_configs`
--
-- --------------------------------------------------------

CREATE TABLE `email_configs` (
  `id` BIGINT UNSIGNED NOT NULL AUTO_INCREMENT,
  `config_name` VARCHAR(100) NOT NULL,
  `host` VARCHAR(255) NOT NULL,
  `port` INT NOT NULL,
  `username` VARCHAR(255) NULL,
  `password` VARCHAR(255) NULL,
  `encryption` ENUM('none', 'ssl', 'tls') NOT NULL DEFAULT 'tls',
  `from_email` VARCHAR(255) NOT NULL,
  `from_name` VARCHAR(255) NULL,
  `is_default` BOOLEAN NOT NULL DEFAULT FALSE,
  `created_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  `updated_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
  PRIMARY KEY (`id`),
  UNIQUE KEY `uk_email_configs_name` (`config_name`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

```sql
-- --------------------------------------------------------
--
-- Table structure for table `calculation_configs`
--
-- --------------------------------------------------------

CREATE TABLE `calculation_configs` (
  `id` BIGINT UNSIGNED NOT NULL AUTO_INCREMENT,
  `config_key` VARCHAR(100) NOT NULL,
  `config_value` TEXT NULL,
  `data_type` ENUM('string', 'integer', 'decimal', 'boolean', 'json') NOT NULL
DEFAULT 'string',
  `description` TEXT NULL,
  `created_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  `updated_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
  PRIMARY KEY (`id`),
  UNIQUE KEY `uk_calculation_configs_key` (`config_key`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;

-- --------------------------------------------------------
--
-- Table structure for table `club_settings`
--
-- --------------------------------------------------------

CREATE TABLE `club_settings` (
  `id` BIGINT UNSIGNED NOT NULL AUTO_INCREMENT,
  `club_id` BIGINT UNSIGNED NOT NULL,
  `setting_key` VARCHAR(100) NOT NULL,
  `setting_value` TEXT NULL,
  `description` TEXT NULL,
  `created_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
  `updated_at` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
  PRIMARY KEY (`id`),
  UNIQUE KEY `uk_club_settings_club_key` (`club_id`, `setting_key`),
  CONSTRAINT `fk_club_settings_club_id` FOREIGN KEY (`club_id`) REFERENCES
`clubs`(`id`) ON DELETE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;


-- End of Script
```