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can you help me create a database schema with this sql CREATE TABLE `users` (
  `user_id` int NOT NULL AUTO_INCREMENT,
  `username` varchar(50) NOT NULL,
  `email` varchar(100) NOT NULL,
  `password_hash` varchar(255) NOT NULL,
  `full_name` varchar(100) NOT NULL,
  `role_id` int NOT NULL,
  `department` varchar(100) DEFAULT NULL,
  `subject` varchar(100) DEFAULT NULL,
  `employee_id` varchar(50) DEFAULT NULL,
  `status` enum('active','inactive') DEFAULT 'active',
  `created_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP,
  `updated_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
  PRIMARY KEY (`user_id`),
  UNIQUE KEY `username` (`username`),
  UNIQUE KEY `email` (`email`),
  UNIQUE KEY `employee_id` (`employee_id`),
  KEY `idx_username` (`username`),
  KEY `idx_email` (`email`),
  KEY `idx_role` (`role_id`),
  KEY `idx_status` (`status`),
  KEY `idx_users_dept_subject` (`department`,`subject`),
  KEY `idx_users_role_subject` (`role_id`,`department`,`subject`),
  CONSTRAINT `users_ibfk_1` FOREIGN KEY (`role_id`) REFERENCES `roles`(`role_id`)
    ON DELETE RESTRICT
) ENGINE=InnoDB AUTO_INCREMENT=5 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci; --
-- Table structure for table `roles`
--

DROP TABLE IF EXISTS `roles`;
/*!40101 SET @saved_cs_client      = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `roles` (
  `role_id` int NOT NULL AUTO_INCREMENT,
  `role_name` varchar(50) NOT NULL,
  `description` text,
  `permissions` json DEFAULT NULL,
  `created_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP,
  `updated_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
  PRIMARY KEY (`role_id`),
  UNIQUE KEY `role_name` (`role_name`)
) ENGINE=InnoDB AUTO_INCREMENT=6 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;

--
-- Table structure for table `roles`
--

DROP TABLE IF EXISTS `roles`;
/*!40101 SET @saved_cs_client      = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `roles` (
  `role_id` int NOT NULL AUTO_INCREMENT,
  `role_name` varchar(50) NOT NULL,

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`description` text,
`permissions` json DEFAULT NULL,
`created_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP,
`updated_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
PRIMARY KEY (`role_id`),
UNIQUE KEY `role_name` (`role_name`)
) ENGINE=InnoDB AUTO_INCREMENT=6 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;

CREATE TABLE `notifications` (
`notification_id` int NOT NULL AUTO_INCREMENT,
`user_id` int NOT NULL,
`document_id` int DEFAULT NULL,
`title` varchar(200) NOT NULL,
`message` text NOT NULL,
`type` enum('info','warning','success','error') DEFAULT 'info',
`is_read` tinyint(1) DEFAULT '0',
`created_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP,
`read_at` timestamp NULL DEFAULT NULL,
PRIMARY KEY (`notification_id`),
KEY `document_id` (`document_id`),
KEY `idx_user` (`user_id`),
KEY `idx_read` (`is_read`),
KEY `idx_created` (`created_at`),
KEY `idx_notification_user_read` (`user_id`, `is_read`),
CONSTRAINT `notifications_ibfk_1` FOREIGN KEY (`user_id`) REFERENCES `users` (`user_id`) ON DELETE CASCADE,
CONSTRAINT `notifications_ibfk_2` FOREIGN KEY (`document_id`) REFERENCES `documents` (`document_id`) ON DELETE CASCADE
) ENGINE=InnoDB AUTO_INCREMENT=8 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;

CREATE TABLE `documenttypes` (
`doc_type_id` int NOT NULL AUTO_INCREMENT,
`type_name` varchar(100) NOT NULL,
`description` text,
`requires_department` tinyint(1) DEFAULT '0',
`initial_status` varchar(50) DEFAULT 'Submitted',
`created_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP,
`updated_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
PRIMARY KEY (`doc_type_id`),
UNIQUE KEY `type_name` (`type_name`),
KEY `idx_type_name` (`type_name`)
) ENGINE=InnoDB AUTO_INCREMENT=11 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;

CREATE TABLE `documents` (
`document_id` int NOT NULL AUTO_INCREMENT,
`title` varchar(200) NOT NULL,
`description` text,
`document_type` varchar(50) NOT NULL,
`file_path` varchar(255) NOT NULL,
`file_size` int DEFAULT NULL,
`file_name` varchar(255) DEFAULT NULL,

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`uploader_id` int NOT NULL,
`department` varchar(100) DEFAULT NULL,
`priority` enum('low','medium','high','urgent') DEFAULT 'medium',
`status` enum('pending','in_review','approved','rejected','revision_requested')
DEFAULT 'pending',
`current_approver_id` int DEFAULT NULL,
`remarks` text,
`approval_deadline` date DEFAULT NULL,
`created_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP,
`updated_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
PRIMARY KEY (`document_id`),
KEY `current_approver_id`(`current_approver_id`),
KEY `idx_uploader`(`uploader_id`),
KEY `idx_status`(`status`),
KEY `idx_type`(`document_type`),
KEY `idx_department`(`department`),
KEY `idx_created`(`created_at`),
KEY `idx_doc_status_created`(`status`, `created_at`),
CONSTRAINT `documents_ibfk_1` FOREIGN KEY (`uploader_id`) REFERENCES
`users`(`user_id`) ON DELETE RESTRICT,
CONSTRAINT `documents_ibfk_2` FOREIGN KEY (`current_approver_id`)
REFERENCES `users`(`user_id`) ON DELETE SET NULL
) ENGINE=InnoDB AUTO_INCREMENT=8 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;

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CREATE TABLE `document_signatures` (
`signature_id` int NOT NULL,
`document_id` int DEFAULT NULL,
`signer_id` int DEFAULT NULL,
`signer_name` varchar(100) DEFAULT NULL,
`signer_role` varchar(50) DEFAULT NULL,
`signer_department` varchar(100) DEFAULT NULL,
`signer_subject` varchar(100) DEFAULT NULL,
`approval_level` int DEFAULT NULL,
`signature_hash` varchar(64) DEFAULT NULL,
`signed_at` timestamp NULL DEFAULT NULL,
PRIMARY KEY (`signature_id`),
UNIQUE KEY `signature_hash`(`signature_hash`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;

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CREATE TABLE `departments` (
`department_id` int NOT NULL AUTO_INCREMENT,
`department_name` varchar(100) NOT NULL,
`description` text,
`created_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP,
`updated_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
PRIMARY KEY (`department_id`),
UNIQUE KEY `department_name`(`department_name`),
KEY `idx_department_name`(`department_name`)
) ENGINE=InnoDB AUTO_INCREMENT=16 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;

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CREATE TABLE `approvals` (

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`approval_id` int NOT NULL AUTO_INCREMENT,
`document_id` int NOT NULL,
`approver_id` int NOT NULL,
`approval_level` int NOT NULL,
`status` enum('pending','approved','rejected','revision_requested') DEFAULT
'pending',
`comments` text,
`decision_date` timestamp NULL DEFAULT NULL,
`notified_at` timestamp NULL DEFAULT NULL,
`created_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP,
`updated_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
PRIMARY KEY (`approval_id`),
KEY `idx_document` (`document_id`),
KEY `idx_approver` (`approver_id`),
KEY `idx_status` (`status`),
KEY `idx_level` (`approval_level`),
KEY `idx_approval_status_level` (`status`, `approval_level`),
CONSTRAINT `approvals_ibfk_1` FOREIGN KEY (`document_id`) REFERENCES
`documents` (`document_id`) ON DELETE CASCADE,
CONSTRAINT `approvals_ibfk_2` FOREIGN KEY (`approver_id`) REFERENCES
`users` (`user_id`) ON DELETE RESTRICT
) ENGINE=InnoDB AUTO_INCREMENT=9 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;

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CREATE TABLE `approval_matrix` (
`matrix_id` int NOT NULL AUTO_INCREMENT,
`document_type` varchar(50) DEFAULT NULL,
`department` varchar(100) DEFAULT NULL,
`approval_level` int NOT NULL,
`role_id` int NOT NULL,
`is_required` tinyint(1) DEFAULT '1',
`can_skip` tinyint(1) DEFAULT '0',
`created_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP,
`updated_at` timestamp NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
PRIMARY KEY (`matrix_id`),
KEY `role_id` (`role_id`),
KEY `idx_doc_type` (`document_type`),
KEY `idx_department` (`department`),
KEY `idx_level` (`approval_level`),
CONSTRAINT `approval_matrix_ibfk_1` FOREIGN KEY (`role_id`) REFERENCES
`roles` (`role_id`) ON DELETE CASCADE
) ENGINE=InnoDB AUTO_INCREMENT=4 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;

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