

Hano CMS Documentation

Table of Contents

1	- Introduction	4
	Document Scope and Purpose	4
	Target Audience	4
	System Environment	4
	Design Approach	4
	Data Flow Design	4
	Architecture Design	4
	UI Design	5
	Design Patterns	5
	Hano CMS System High level View	5
2	- Modules	6
	Dashboard	6
	Flashcard	6
	Student Management	7
	Attendance	8
	Parents Management	9
	Products	9
	Structure of the Products	9
	Category	9
	Product	10
	Options	10
	Create or edit option	17
	Books	17
	Payment	18
	Setting	18
3 -	– Activity Diagram	21
4 -	– Entity Diagram	22
	Users and branches	22
	Users and Products	23
	Attendances	24
	Branches	24
	Temporary Stop Student	25

Branches and Stock	25
Branches and Billing	26
Flashcard	26
Products	27
Payment	27

1 - Introduction

This introduction provides an overview of the System Architecture Document for Hano CMS System. It includes the purpose, scope, target audience, design approach, main component design and high level system design considerations of the system.

Document Scope and Purpose

This document provides a description of the technical design for Hano CMS System – Web Portal. This document's primary purpose is to describe the technical vision for how business requirements will be realized. This document provides an architectural overview of the system to depict different aspects of the system. This document also functions as a foundational reference point for developers.

Please note that this is a baseline document and may be updated as development progresses.

Target Audience

This document is targeted (but not limited) to technical stakeholders:

- Development Team
- IT Management
- Support Staff

It is assumed that the reader has a technical background in software design and development.

System Environment

Development: Laravel – PHP framework

➤ Diagrams: Microsoft Visio 2007

Database: MySQL

Server: Hostinger Premium Web Hosting

Server: Linux

Design Approach

The design approach used here is based on the following:

Data Flow Design

The data flow of the Hano CMS is Internet-based.

Architecture Design

3-tier architecture design for Hano CMS System. The database management system (DBMS) architecture contains an Application layer between the user and the DBMS, which is responsible for communicating the user's request to the DBMS system and send the response from the DBMS to the user.

UI Design

Laravel dashboard admin design with elements of Bootstrap, PHP, Java script, Jquery and CSS. Design that can easily customize and easy to expand in future.

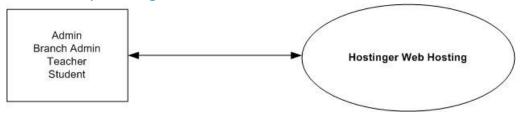
Design Patterns

This application is designed as an object-oriented system for an Internet-based architecture using two-layer architecture by factoring application classes into the following layers:

Client Application. This is the layer where the physical window and widget objects live. It will also contain Controller classes as in classical MVC. Any new user interface widgets developed for this application are put in this layer. In most cases this layer is completely developed within Grails.

Data Source layer. The Hostinger Web hosting (source code and database).

Hano CMS System High level View



2 - Modules

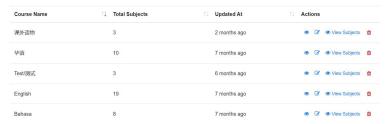
Dashboard

> Display Total Students, Total Active Students, Total Stop Students and Total teacher.



Flashcard

- > To add, update or delete flashcard.
- > To display/show flashcard for student.
- > 5 levels of flashcard display:
 - Course



Subjects



Chapter



Sections

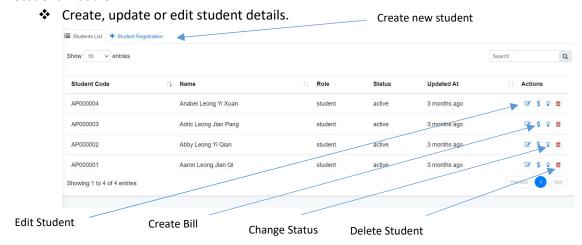


Subsections (with random and reset function)



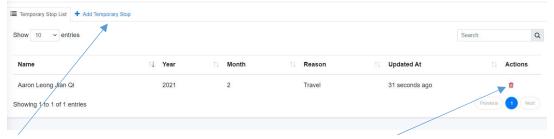
Student Management

> Student Module



> Temporary Stop Module

Create or delete temporary stop student.

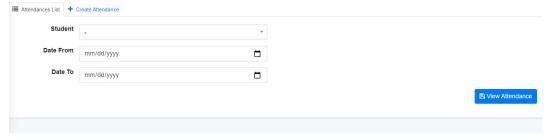


Add Temporary Stop Student

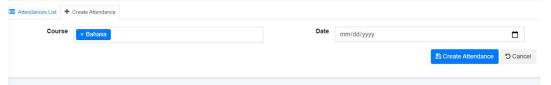
Remove Temporary Stop Student

Attendance

View or search student attendance by date.



> Create student attendance.

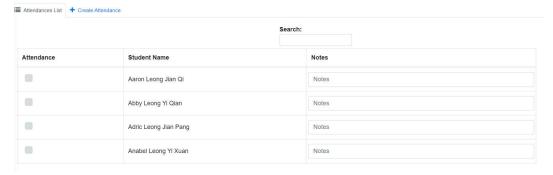


Mark attendance

Course:
Bahasa

Attendance Date:

Oct 20, 2021

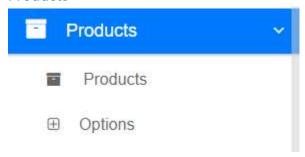


Parents Management

> Create, update or edit student's parent details.



Products



Structure of the Products

Category -> Product -> Options

Category

- > Hanohano (1:1)
- ➤ HanoLand (Packages) (Educare)
- Book
- ➤ Top Up
- Over Payment
- Deduct

Product

- ➤ 1 Language
- 2 Language
- > 3 Language
- ➤ ABM
- H Advanced
- > H Discount
- ➢ BRNQ
- > Top up
- ➢ BC
- ➤ BM
- ➢ BI
- HL_Advanced
- Packages
- ➤ Uniform
- Materials
- > Insurance
- ➤ HL_Discount
- Activity
- Overpay
- Deduct By Advance Payment
- Deduct By Overpay

Options

- ➤ H_BC_1 day/week_220
- ➤ H_BM_1 day/week_220
- ➤ H_BI_1 day/week_220
- > H BC 1 day/week 240
- ➤ H_BM_1 day/week_240
- > H BI 1 day/week 240
- ➤ H_BC_2 days/week_280
- ➤ H_BM_2 days/week_280
- ➤ H_BI_2 days/week_280
- > H BC 2 days/week 300
- ➤ H_BM_2 days/week_300
- > H BI 2 days/week 300
- ➤ H_BC_3 days/week_350
- ➤ H_BM_3 days/week_350
- > H BI 3 days/week 350
- ➤ H_BC_3 days/week_380
- ➤ H_BM_3 days/week_380
- > H BI 3 days/week 380
- ➤ H_BC_4 days/week_430
- ➤ H_BM_4 days/week_430

- ➤ H BI 4 days/week 430
- ➤ H_BC_4 days/week_480
- > H_BM_4 days/week_480
- ➤ H_BI_4 days/week_480
- H_BC_5 days/week_490
- > H BM 5 days/week 490
- > H BI 5 days/week 490
- H_BC_5 days/week_520
- > H BM 5 days/week 520
- H_BI_5 days/week_520
- H_BC+BM_1 day/week_300
- H_BC+BI_1 day/week_300
- ➤ H_BM+BI_1 day/week_300
- H_1 subj+ABM_1 days/week_300
- ➤ H BC+BM 1 day/week 320
- H_BC+BI_1 day/week_320
- ➤ H BM+BI 1 day/week 320
- H_1 subj+ABM_1 day/week_320
- H_2 subj_2days/week_340
- ➤ H_BC+BM_2 days/week_360
- ➤ H_BC+BI_2 days/week_360
- > H BM+BI 2 days/week 360
- > H 1 subj+ABM 2 days/week 360
- ➤ H_BC+BM_2 days/week_390
- ➤ H BC+BI 2 days/week 390
- H_BM+BI_2 days/week_390
- H_1 subj+ABM_2 days/week_390
- > H BM+BC 3 days/week 400
- H_BC+BM_3 days/week_450
- ➤ H_BC+BI_3 days/week_450
- ➤ H BM+BI 3 days/week 450
- H_1 subj+ABM_3 days/week_450
- ➤ H_BC+BM_3 days/week_480
- ➤ H BC+BI 3 days/week 480
- ➤ H_BM+BI_3 days/week_480
- H_1 subj+ABM_3 days/week_480
- > H BC+BM 4 days/week 530
- ➤ H BC+BI 4 days/week 530
- H_BM+BI_4 days/week_530
- ➤ H_1 subj+ABM_4 days/week_530
- > H BC+BM 4 days/week 580
- ➤ H_BC+BI_4 days/week_580
- H BM+BI_4 days/week_580
- > H 1 subj+ABM 4 days/week 580

- > H BC+BM 5 days/week 590
- ➤ H_BC+BI_5 days/week_590
- ➤ H BM+BI 5 days/week 590
- H_1 subj+ABM_5 days/week_590
- H_BC+BM_5 days/week_620
- ➤ H BC+BI 5 days/week 620
- ➤ H BM+BI 5 days/week 620
- H_1 subj+ABM_5 days/week_620
- ➤ H BC+BM+BI 1 day/week 380
- H_2 subjs+ABM_1 day/week_380
- ➤ H BC+BM+BI 1 day/week 400
- H_2 subjs+ABM_1 day/week_400
- ➤ H BC+BM+BI 2 days/week 440
- H_2 subjs+ABM_2 days/week_440
- ➤ H BC+BM+BI 2 days/week 460
- H_2 subjs+ABM_2 days/week_460
- H_BC+BM+ABM_3days/week_490
- ➤ H_BC+BM+BI_3days/week_490
- H_BC+BM+BI_3 days/week_550
- ➤ H_2 subjs+ABM_3 days/week_550
- ➤ H_BC+BM+BI_3 days/week_580
- > H 2 subjs+ABM 3 days/week 580
- ➤ H BC+BM+BI 4 days/week 630
- H_2 subjs+ABM_4 days/week_630
- ➤ H BC+BM+BI 4 days/week 680
- ➤ H_2 subjs+ABM_4 days/week_680
- H_BC+BM+BI_5 days/week_690
- > H 2 subjs+ABM 5 days/week 690
- ➤ H BC+BM+BI 5 days/week 720
- H_2 subjs+ABM_5 days/week_720
- ➤ H ABM 120
- ➤ H_ABM_1 day/week_ 190
- ➤ H_3 subjs+ABM_1 day/week_500
- ➤ H 3 subjs+ABM 1 day/week 520
- H_3 subjs+ABM_2 days/week_560
- H_3 subjs+ABM_2 days/week_580
- > H 3 subjs+ABM 3 days/week 670
- H_3 subjs+ABM_3 days/week_700
- > H 3 subjs+ABM 4 days/week 750
- H_3 subjs+ABM_4 days/week_800
- > H 3 subjs+ABM 5 days/week 810
- H_3 subjs+ABM_5 days/week_840
- H_Non-refundable Advanced_1 subj_1day/wk_220
- H Non-refundable Advanced 1 subj 1day/wk 240

- H_Non-refundable Advanced_1 subj_2days/wk_280
- H_Non-refundable Advanced_1 subj_2days/wk_300
- > H Non-refundable Advanced 1 subj 3days/wk 350
- ➤ H Non-refundable Advanced 1 subj 3days/wk 380
- H_Non-refundable Advanced_1 subj_4days/wk_430
- ➤ H Non-refundable Advanced 1 subj 4days/wk 480
- H_Non-refundable Advanced_1 subj_5days/wk_490
- H_Non-refundable Advanced_1 subj_5days/wk_520
- ➤ H Non-refundable Advanced 2 subjs 1day/wk 300
- > H Non-refundable Advanced 2 subjs 1day/wk 320
- ➤ H Non-refundable Advanced 2 subjs 2days/wk 360
- ➤ H Non-refundable Advanced 2 subjs 2days/wk 390
- > H Non-refundable Advanced 2 subjs 3days/wk 450
- ➤ H Non-refundable Advanced 2 subjs 3days/wk 480
- ➤ H Non-refundable Advanced 2 subjs 4days/wk 530
- H_Non-refundable Advanced_2 subjs_4days/wk_580
- ➤ H Non-refundable Advanced 2 subjs 5days/wk 590
- ➤ H_Non-refundable Advanced_2 subjs_5days/wk_620
- > H Non-refundable Advanced 3 subjs 1day/wk 380
- ➤ H Non-refundable Advanced 3 subjs 1day/wk 400
- ➤ H_Non-refundable Advanced_3 subjs_2days/wk_440
- ➤ H Non-refundable Advanced 3 subjs 2days/wk 460
- ➤ H Non-refundable Advanced 3 subjs 3days/wk 550
- ➤ H_Non-refundable Advanced_3 subjs_3days/wk_580
- ➤ H Non-refundable Advanced 3 subjs 4days/wk 630
- > H Non-refundable Advanced 3 subjs 4days/wk 680
- ➤ H_Non-refundable Advanced_3 subjs_5days/wk_690
- ➤ H Non-refundable Advanced 3 subjs 5days/wk 720
- > H Registration 50
- ➤ H_Enrollment_8th-14th_-25%
- H Enrollment_15th-21st_-50%
- H_Enrollment_22nd-31st_-75%
- ➤ H 3 months -6%
- ➤ H 6 months -8%
- > H 12 months -10%
- ➤ H_Special_Discount_-5%
- H Special Discount -10%
- ➤ H Special Discount -15%
- ➤ H Special Discount -20%
- n_special_biscount_-20%
- H_Special_Discount_-25%H Special Discount -30%
- H_Special_Discount_-50%
- H_Special_Discount_-70%
- ➤ H BRNQ 120

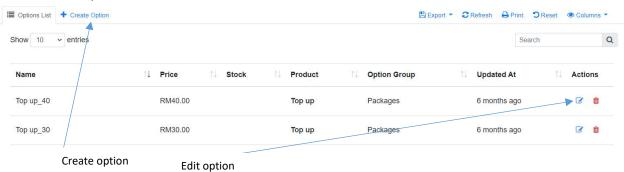
- ➤ H_BRNQ_150
- ➤ Top up_10
- ➤ Top up_20
- > Top up_30
- ➤ Top up_40
- ➤ H_WB_Basic Learning 1
- ➤ H_WB_Red100
- ➤ H_WB_Red200
- ➤ H WB KBSR 1
- ➤ H_WB_KBSR 2
- ➤ H_WB_KBSR 3
- H_WB_KSSR 4
- ➤ H_WB_KSSR 5
- ➤ H_WB_KSSR 6
- ➤ H WB KSSR SMK 1
- ➤ H_WB_KSSR SMK 2
- ➤ H_WB_KSSR SMK 3
- ➤ H_WB_KSSR SMK 4
- ➤ H_Writing_Red100
- ➤ H_Writing_Red200
- ➤ H_Writing_KBSR 1
- ➤ H_Writing_KBSR 2
- ➤ H_Writing_KBSR 3
- H_Writing_KSSR 4
- ➤ H_Writing_KSSR 5
- ➤ H_Writing_KSSR 6
- ➤ H_Writing_KSSR SMK 1
- ➤ H_Writing_KSSR SMK 2
- ➤ H_Writing_KSSR SMK 3
- ➤ H_Writing_KSSR SMK 4
- ➤ H Word List Red100
- H_Word List_Red200
- H_Word List_KBSR 1
- H_Word List_KBSR 2
- ➤ H_Word List_KBSR 3
- H_Word List_KSSR 4
- ➤ H Word List KSSR 5
- H_Word List_KSSR 6
- ➤ H_Word List_KSSR SMK 1
- H_Word List_KSSR SMK 2
- ➤ H_Word List_KSSR SMK 3
- ➤ H_Word List_KSSR SMK 4
- > H Textbook Basic Learning 1
- H Suku Kata Buku 1

- H Suku Kata Buku 2
- H_Suku Kata Buku 3
- ➤ H_Word List_Pra 1
- H_Word List_Pra 2
- ➤ H_Word List_PK 1A
- ➤ H_Word List_PK 1B
- H_Word List_PK 2A
- ➤ H_Word List_PK 2B
- H Word List PK 3A
- ➤ H_Word List_PK 3B
- H_Word List_PK 4A
- ➤ H_Word List_PK 4B
- ► H_Word List_PK 5A
- ➤ H_Word List_PK 5B
- ➤ H_Word List_PK 6A
- ➤ H_Word List_PK 6B
- H_Petikan_PK 1
- H_Petikan_PK 2
- ➤ H_Petikan_PK 3
- H_Petikan_PK 4
- ➤ H_Petikan_PK 5
- ➤ H_Petikan_PK 6
- H_Textbook_Pra 1
- ➤ H_Textbook_Pra 2
- ➤ H TT 1
- ➤ H_TT 2
- ➤ H_TT 3
- ➤ H_TT 4
- ➤ H TT 5
- ➤ H_TT 6
- > H_Tulisan_Pra 1
- ➤ H_Tulisan_PK 1A
- ➤ H_Tulisan_PK 1B
- ➤ H_Tulisan_PK 2A
- ➤ H_Tulisan_PK 2B
- ➤ H_Tulisan_PK 3A
- > H Tulisan PK 3B
- H_Tulisan_PK 4A
- ➤ H_Tulisan_PK 4B
- H_Tulisan_PK 5A
- ➤ H_Tulisan_PK 5B
- ➤ H_Tulisan_PK 6A
- ➤ H Tulisan PK 6B
- ➤ H_WB_Pre 1

- ➤ H_WB_Pre 2
- H_Textbook_Pre 1
- H Textbook Pre 2
- > H Phonics Book 1
- ➤ H_Phonics Book 2
- > H Phonics Book 3
- > HL Registration 50
- HL_Non-refundable Advanced_400
- HL Non-refundable Advanced 500
- HL_Non-refundable Advanced_650
- ➤ HL Non-refundable Advanced Half+1 to 1 2 subjs 500
- HL_Non-refundable Advanced_Half+1 to 1_3 subjs_600
- ➤ HL_Non-refundable Advanced_Full+1 to 1_2 subjs_500
- ➤ HL_Non-refundable Advanced_Full+1 to 1_3 subjs_600
- HL_Non-refundable Advanced_After school_800
- ➤ HL_Non-refundable Advanced_After school_900
- ➤ HL_Non-refundable Advanced_After school_1,000
- ➤ HL_Half Day_400
- > HL_Half Day+1 to 1_2 subjs_1,000
- ➤ HL_Half Day+1 to 1_3 subjs_1,100
- > HL_Full Day+1 to 1_2 subjs_1,150
- ➤ HL_Full Day+1 to 1_3 subjs_1,250
- > HL After school 800
- > HL_After school_900
- > HL After school 1,000
- > HL_Uniform_80cm_40
- > HL_Uniform_90cm_40
- > HL Uniform 100cm 40
- > HL Uniform 110cm 40
- HL_Uniform_120cm_40
- > HL Uniform 130cm 40
- HL_T-shirt_XS_25
- HL_T-shirt_S_25
- > HL T-shirt M 25
- HL_T-shirt_L_25
- HL_T-shirt_XL_25
- > HL T-shirt XXL 25
- > HL Materials_400
- > HL Materials 450
- HL_Materials_500
- > HL Insurance 20
- > HL Insurance 30
- > HL Insurance 40
- ➤ HL 3 months -6%

- HL_Special_Discount_-5%
- HL_Special_Discount_-10%
- > HL_Special_Discount_-15%
- ➤ HL_Special_Discount_-20%
- ➤ HL_Special_Discount_-25%
- HL_Special_Discount_-30%
- HL_Special_Discount_-50%
- HL_Special_Discount_-70%
- ➤ HL_Activity_50
- HL_Activity_100
- HL_Activity_150
- HL_Activity_200
- Overpay
- Deduct by Advance
- Deduct By Overpay
- ➤ Top up

Create or edit option



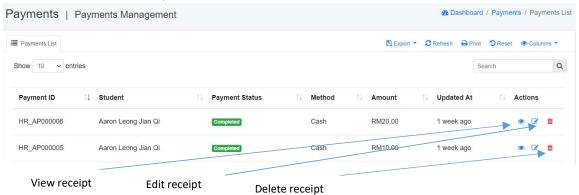
Books

> Assign the book for student before open a receipt.



Payment

View, edit and delete receipt.



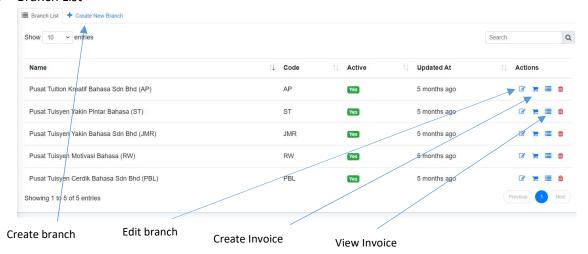
Setting

- User
 - Create, update or edit all user details. (Admin, Student, Parent and etc)



> Branches (With Book Inventory Control and payment)

Branch List

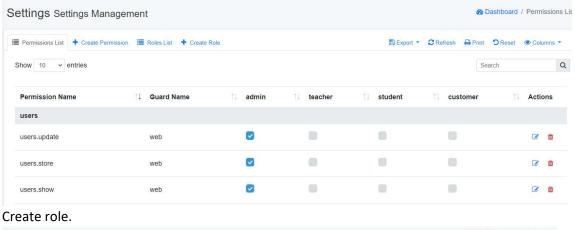


Inventory (Add stock of book for selected branch)



Roles & Permissions

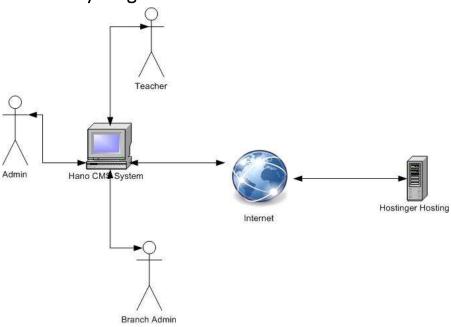
Edit permission for selected role.



Create role.

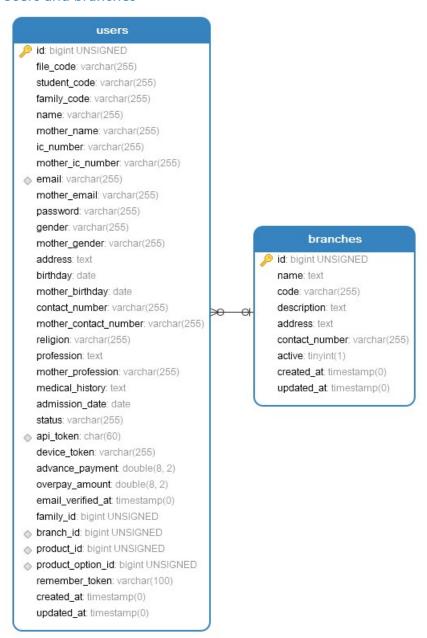


3 – Activity Diagram

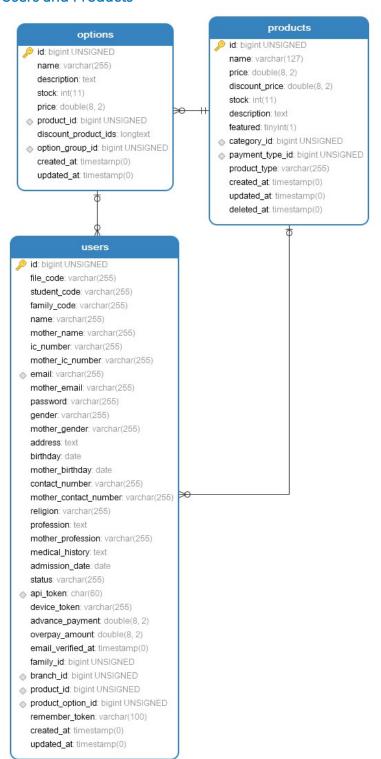


4 – Entity Diagram

Users and branches



Users and Products



Attendances

attendances



/ id: bigint UNSIGNED

course_id: bigint UNSIGNED

date: date note: text

status: varchar(255) created_at: timestamp(0) updated_at: timestamp(0)

Branches

branches



🔑 id: bigint UNSIGNED

name: text

code: varchar(255)

description: text address: text

contact_number: varchar(255)

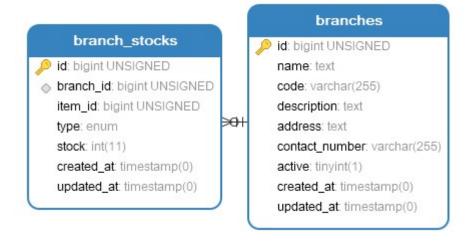
active: tinyint(1)

created_at: timestamp(0) updated_at: timestamp(0)

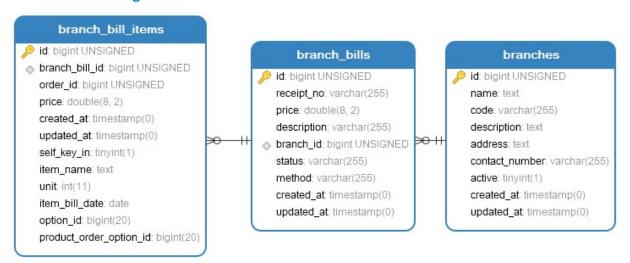
Temporary Stop Student



Branches and Stock



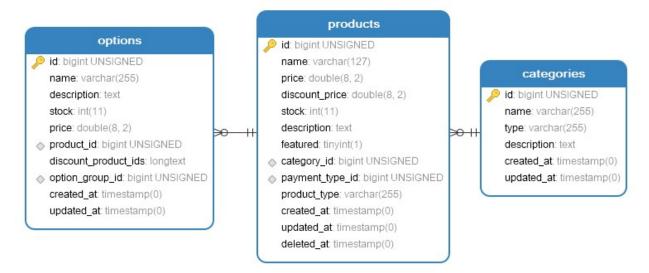
Branches and Billing



Flashcard



Products



Payment

