

Projeto Teste de Seleção ContabExpress

Nome: Paulo Ricardo Almeida da Silva

PROCEDIMENTOS INICIAIS

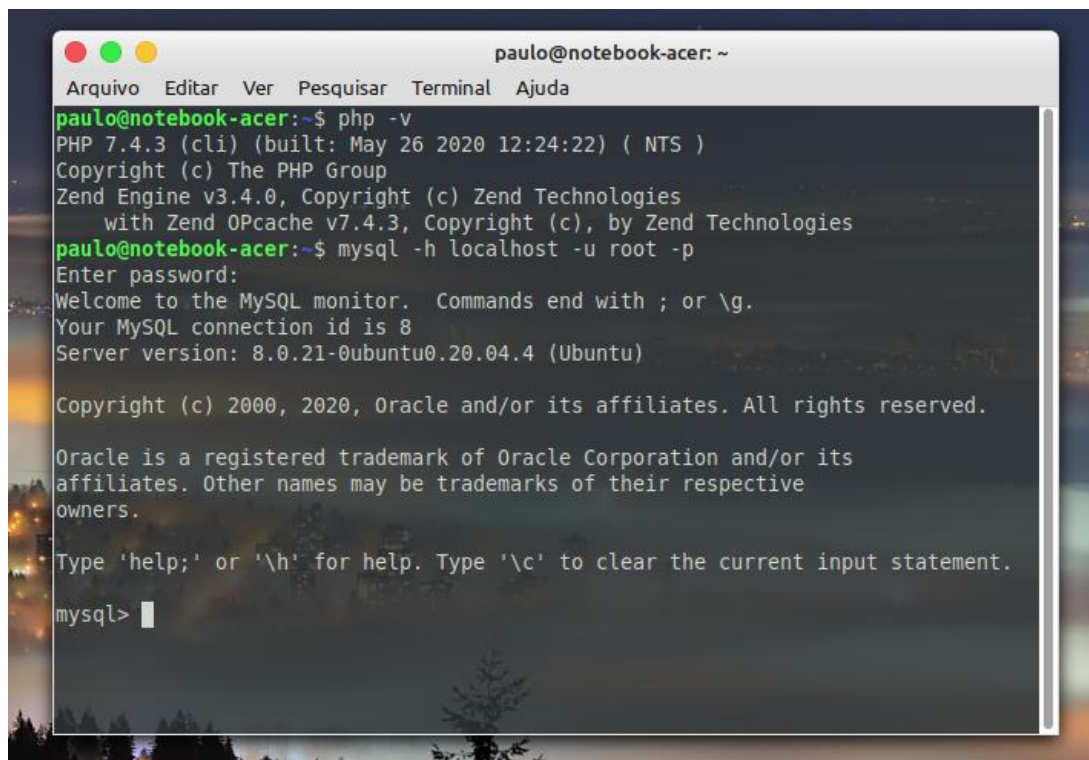
Como procedimento preliminar, segue a verificação dos requisitos informados para execução do projeto.

Verificação dos requisitos

Os requisitos solicitados foram:

- ◆ Versão do PHP: 7.3;
- ◆ Versão do Banco de Dados MySQL 5.7.

Já as configurações instaladas no host são as seguintes:

A screenshot of a terminal window titled 'paulo@notebook-acer: ~'. The window has a menu bar with 'Arquivo', 'Editar', 'Ver', 'Pesquisar', 'Terminal', and 'Ajuda'. The terminal shows the following commands and output:

```
paulo@notebook-acer:~$ php -v
PHP 7.4.3 (cli) (built: May 26 2020 12:24:22) ( NTS )
Copyright (c) The PHP Group
Zend Engine v3.4.0, Copyright (c) Zend Technologies
    with Zend OPcache v7.4.3, Copyright (c), by Zend Technologies

paulo@notebook-acer:~$ mysql -h localhost -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.21-0ubuntu0.20.04.4 (Ubuntu)

Copyright (c) 2000, 2020, Oracle and/or its affiliates. All rights reserved.

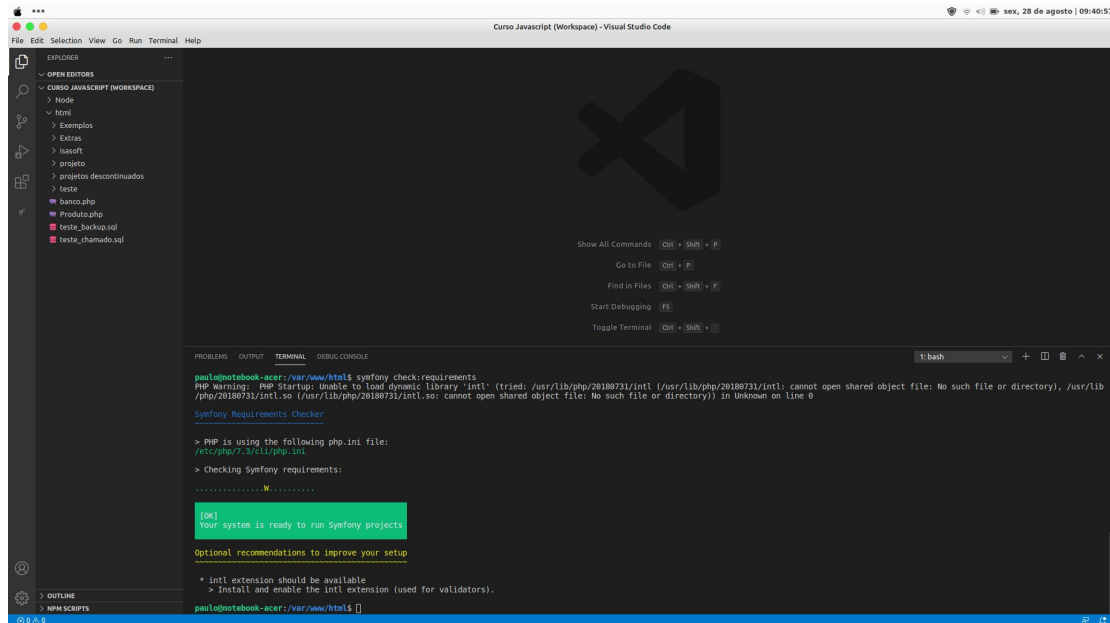
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

Verificação do ambiente para instalação do Framework Symfony

Como procedimento inicial para instalação do projeto, e orientação da documentação oficial do framework, optou-se pela instalação do binário *symfony* e checar se o host atende os requisitos do framework. O comando `symfony check:requirements` obteve o seguinte resultado:



INSTALAÇÃO DO FRAMEWORK

Para a instalação do framework optou-se pela instalação do esqueleto base, onde instalaremos somente os componentes necessários para o projeto.

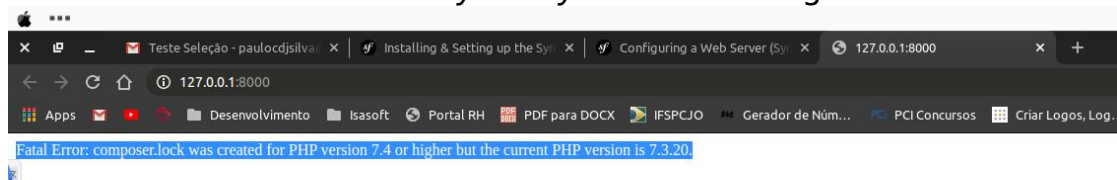
```
composer create-project symfony/skeleton contabexpress
```

EXECUÇÃO TESTE DO FRAMEWORK

Como verificação final de execução do projeto será testado a execução tanto pelo servidor local do binário *symfony* quanto pelo servidor local apache (simulação de hospedagem).

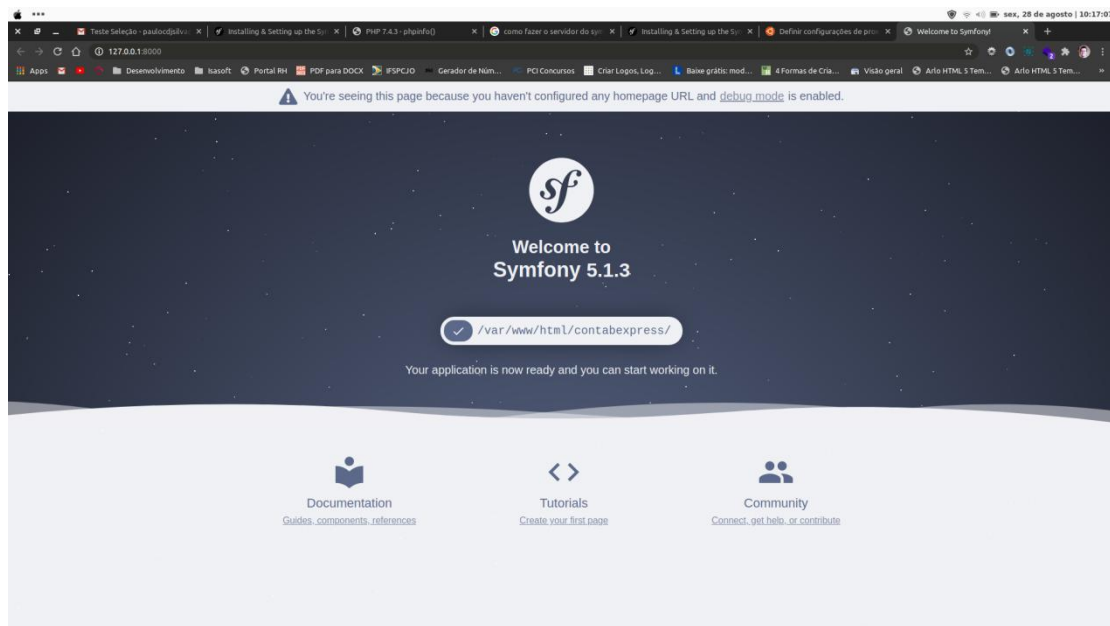
Via Server do Symfony

Ao testar o servidor do *symfony* verificou o seguinte erro:



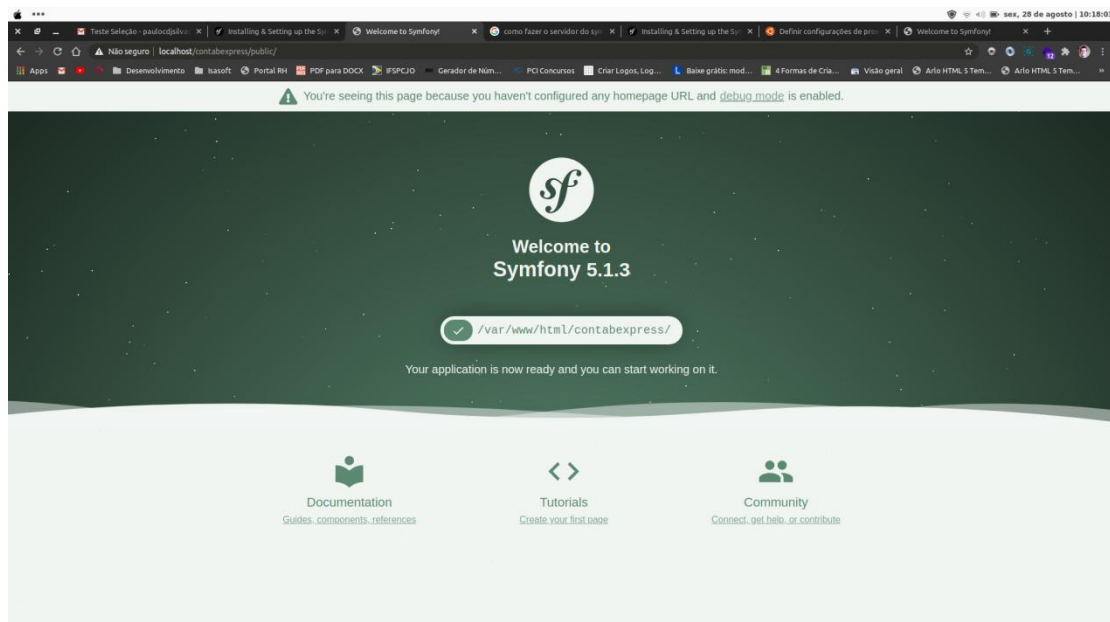
E para resolução do problema a documentação oficial sugere a troca da versão do PHP para a que está em execução. O comando abaixo resolve o problema:

```
echo 7 > .php-version
```



Via Server Apache

Para a execução do projeto no servidor Apache foi necessário somente dar as permissões necessárias ao projeto.



PACOTES NECESSÁRIOS

Os pacotes necessários para execução do projeto foram instalados com os seguintes comandos:

// Rotas

```
composer require annotations
```

// Template

```
composer require twig
```

// Manipulação do Banco de Dados

```
composer require symfony/orm-pack
```

// Migrações

```
composer require --dev symfony/maker-bundle
```

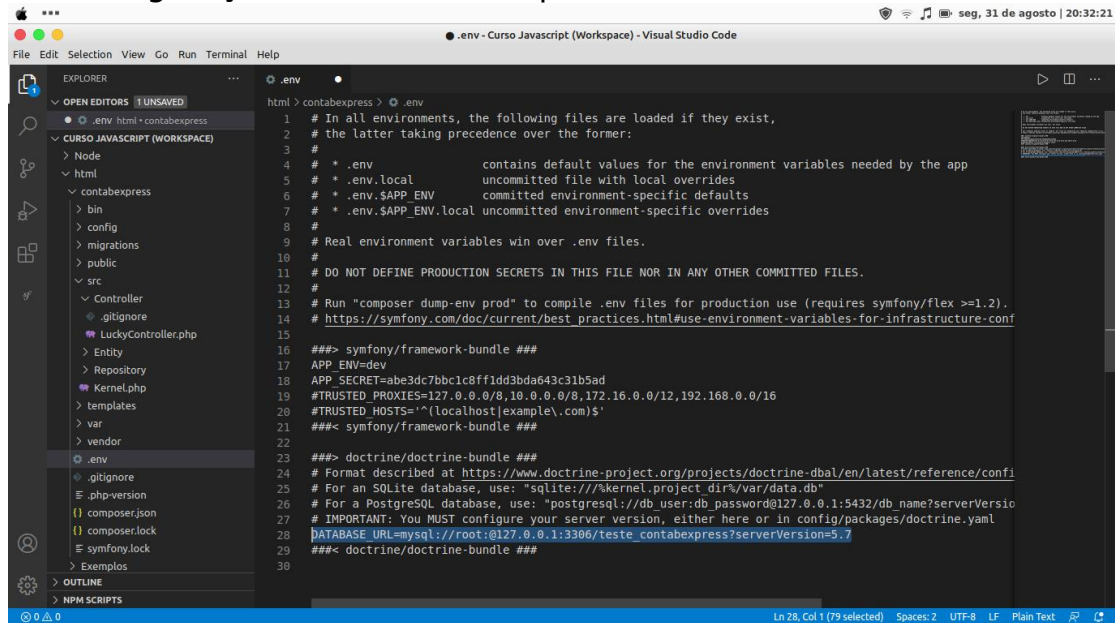
CRIANDO O BANCO DE DADOS

O banco de dados criado para a aplicação seguiu o diagrama de entidade e relacionamento abaixo:



Para que o banco fosse criado no servidor de banco de dados foram utilizados os seguintes passos:

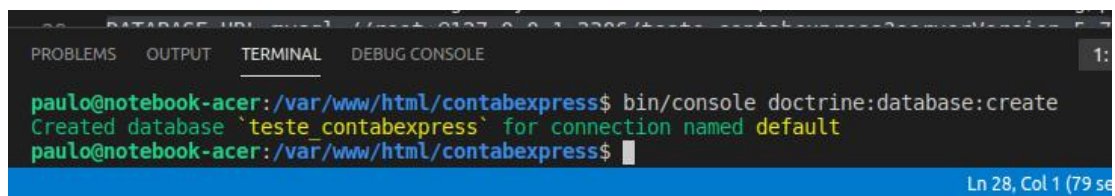
Configuração do banco no arquivo .ENV:



The screenshot shows the Visual Studio Code editor with the `.env` file open. The file contains configuration for Symfony and Doctrine. The Explorer sidebar on the left shows the project structure, including `contabexpress` and `src`. The `.env` file content is as follows:

```
1 # In all environments, the following files are loaded if they exist,
2 # the latter taking precedence over the former:
3 #
4 # * .env contains default values for the environment variables needed by the app
5 # * .env.local uncommitted file with local overrides
6 # * .env.$APP_ENV committed environment-specific defaults
7 # * .env.$APP_ENV.local uncommitted environment-specific overrides
8 #
9 # Real environment variables win over .env files.
10 #
11 # DO NOT DEFINE PRODUCTION SECRETS IN THIS FILE NOR IN ANY OTHER COMMITTED FILES.
12 #
13 # Run "composer dump-env prod" to compile .env files for production use (requires symfony/flex >=1.2).
14 # https://symfony.com/doc/current/best_practices.html#use-environment-variables-for-infrastructure-conf
15
16 ###> symfony/framework-bundle ###
17 APP_ENV=dev
18 APP_SECRET=abe3dc7bbclc8ff1dd3bda643c31b5ad
19 #TRUSTED_PROXIES=127.0.0.0/8,10.0.0.0/8,172.16.0.0/12,192.168.0.0/16
20 #TRUSTED_HOSTS='(localhost|example\..com)'\
21 ###< symfony/framework-bundle ###
22
23 ###> doctrine/doctrine-bundle ###
24 # Format described at https://www.doctrine-project.org/projects/doctrine-dbal/en/latest/reference/conni
25 # For an SQLite database, use: "sqlite://%kernel.project_dir%/var/data.db"
26 # For a PostgreSQL database, use: "postgresql://db_user:db_password@127.0.0.1:5432/db_name?serverVersio
27 # IMPORTANT: You MUST configure your server version, either here or in config/packages/doctrine.yaml
28 DATABASE_URL=mysql://root:@127.0.0.1:3306/teste_contabexpress?serverVersion=5.7
29 ###< doctrine/doctrine-bundle ###
30
```

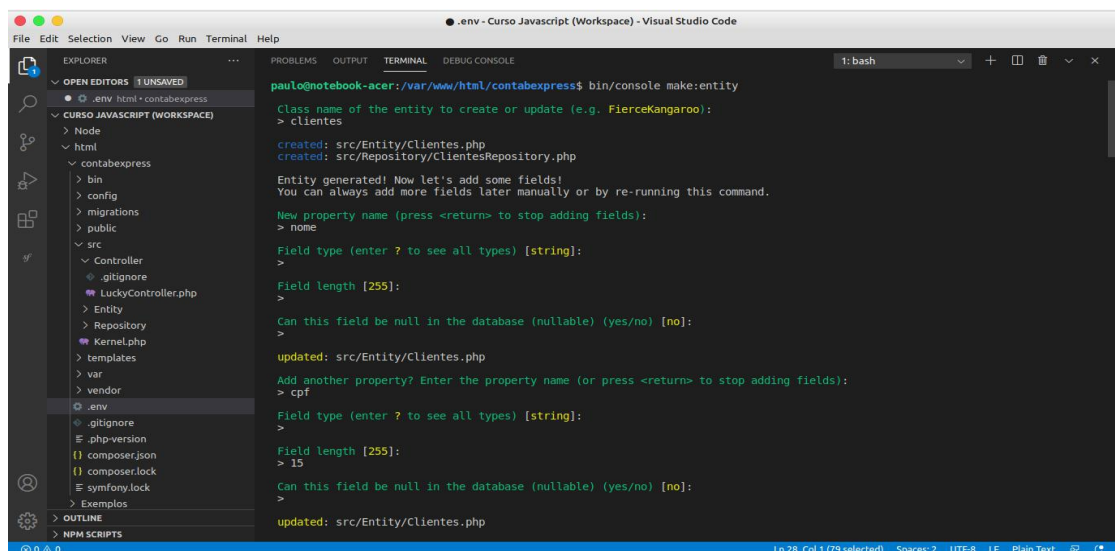
Criação do banco de dados utilizando o seguinte comando:
`bin/console doctrine:database:create`



The screenshot shows the terminal output of the command `bin/console doctrine:database:create`. The output indicates that the database 'teste_contabexpress' was created successfully for the connection named 'default'.

```
paulo@notebook-acer:/var/www/html/contabexpress$ bin/console doctrine:database:create
Created database `teste_contabexpress` for connection named default
paulo@notebook-acer:/var/www/html/contabexpress$
```

Criação da entidade clientes utilizando o seguinte comando:
`bin/console make:entity`



The screenshot shows the terminal output of the command `bin/console make:entity`. The output prompts the user to enter the class name of the entity to create or update (e.g., `FierceKangaroo`). The user enters `clientes`. The output then shows the files created: `src/Entity/Cientes.php` and `src/Repository/CientesRepository.php`. The output also prompts the user to enter the field name, type, length, and whether it can be null in the database. The user enters `cpf` as the field name, `string` as the field type, `15` as the field length, and `no` as the answer to whether it can be null in the database. The output then shows the files updated: `src/Entity/Cientes.php`.

```
paulo@notebook-acer:/var/www/html/contabexpress$ bin/console make:entity
Class name of the entity to create or update (e.g. FierceKangaroo):
> clientes
created: src/Entity/Cientes.php
created: src/Repository/CientesRepository.php
Entity generated! Now let's add some fields!
You can always add more fields later manually or by re-running this command.
New property name (press <return> to stop adding fields):
> nome
Field type (enter ? to see all types) [string]:
>
Field length [255]:
>
Can this field be null in the database (nullable) (yes/no) [no]:
>
updated: src/Entity/Cientes.php
Add another property? Enter the property name (or press <return> to stop adding fields):
> cpf
Field type (enter ? to see all types) [string]:
>
Field length [255]:
> 15
Can this field be null in the database (nullable) (yes/no) [no]:
>
updated: src/Entity/Cientes.php
```

```
File Edit Selection View Go Run Terminal Help
EXPLORER 1 UNSAVED
└─ .env.html - contabexpress
CURSO JAVASCRIPT (WORKSPACE)
├─ Node
├─ html
├─ contabexpress
│   ├── bin
│   ├── config
│   ├── migrations
│   ├── public
│   └─ src
│       ├── Controller
│       ├── .gitignore
│       ├── LuckyController.php
│       ├── Entity
│       ├── Repository
│       ├── Kernel.php
│       ├── templates
│       ├── var
│       └─ vendor
├─ .env
├─ .gitignore
├─ .php-version
├─ composer.json
├─ composer.lock
├─ symfony.lock
├─ Exemplos
├─ OUTLINE
└─ NPM SCRIPTS

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
1: bash
Add another property? Enter the property name (or press <return> to stop adding fields):
> rg

Field type (enter ? to see all types) [string]:
>

Field length [255]:
> 25

Can this field be null in the database (nullable) (yes/no) [no]:
>

updated: src/Entity/Clientes.php

Add another property? Enter the property name (or press <return> to stop adding fields):
> data_nascimento

Field type (enter ? to see all types) [string]:
> ?

Main types
+ string
+ text
+ boolean
+ integer (or smallint, bigint)
+ float

Relationships / Associations
+ relation (a wizard will help you build the relation)
+ ManyToOne
+ OneToMany
+ ManyToMany
+ OneToOne

Array/Object Types
+ array (or simple_array)
+ json
+ object
+ binary
```

```
File Edit Selection View Go Run Terminal Help
EXPLORER 1 UNSAVED
└─ .env.html - contabexpress
CURSO JAVASCRIPT (WORKSPACE)
├─ Node
├─ html
├─ contabexpress
│   ├── bin
│   ├── config
│   ├── migrations
│   ├── public
│   └─ src
│       ├── Controller
│       ├── .gitignore
│       ├── LuckyController.php
│       ├── Entity
│       ├── Repository
│       ├── Kernel.php
│       ├── templates
│       ├── var
│       └─ vendor
├─ .env
├─ .gitignore
├─ .php-version
├─ composer.json
├─ composer.lock
├─ symfony.lock
├─ Exemplos
├─ OUTLINE
└─ NPM SCRIPTS

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
1: bash
+ blob

Date/Time Types
+ datetime (or datetime_immutable)
+ datetimetz (or datetimetz_immutable)
+ date (or date_immutable)
+ time (or time_immutable)
+ dateinterval

Other Types
+ decimal
+ guid
+ json_array

Field type (enter ? to see all types) [string]:
> date

Can this field be null in the database (nullable) (yes/no) [no]:
>

updated: src/Entity/Clientes.php

Add another property? Enter the property name (or press <return> to stop adding fields):
> logradouro

Field type (enter ? to see all types) [string]:
>

Field length [255]:
>

Can this field be null in the database (nullable) (yes/no) [no]:
> yes

updated: src/Entity/Clientes.php

Add another property? Enter the property name (or press <return> to stop adding fields):
> numero
```

```
File Edit Selection View Go Run Terminal Help
EXPLORER 1 UNSAVED
└─ .env.html - contabexpress
CURSO JAVASCRIPT (WORKSPACE)
├─ Node
├─ html
├─ contabexpress
│   ├── bin
│   ├── config
│   ├── migrations
│   ├── public
│   └─ src
│       ├── Controller
│       ├── .gitignore
│       ├── LuckyController.php
│       ├── Entity
│       ├── Repository
│       ├── Kernel.php
│       ├── templates
│       ├── var
│       └─ vendor
├─ .env
├─ .gitignore
├─ .php-version
├─ composer.json
├─ composer.lock
├─ symfony.lock
├─ Exemplos
├─ OUTLINE
└─ NPM SCRIPTS

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
1: bash
Field type (enter ? to see all types) [string]:
>

Field length [255]:
> 5

Can this field be null in the database (nullable) (yes/no) [no]:
> yes

updated: src/Entity/Clientes.php

Add another property? Enter the property name (or press <return> to stop adding fields):
> complemento

Field type (enter ? to see all types) [string]:
>

Field length [255]:
> 50

Can this field be null in the database (nullable) (yes/no) [no]:
> yes

updated: src/Entity/Clientes.php

Add another property? Enter the property name (or press <return> to stop adding fields):
> bairro

Field type (enter ? to see all types) [string]:
>

Field length [255]:
> 100

Can this field be null in the database (nullable) (yes/no) [no]:
> yes

updated: src/Entity/Clientes.php
```


This screenshot shows the initial steps of a database field creation process in a terminal. The user has entered 'cidade' as the property name and 'string' as the field type. The terminal prompts for the field length, which is set to 255, and asks if the field can be null, to which 'yes' is entered. The updated file path is shown as 'src/Entity/Clientes.php'. The terminal then prompts to add another property, which is not done. It then lists available types: string, text, boolean, integer, and float. Finally, it lists relationship types: relation, ManyToOne, OneToMany, and ManyToMany.

```
File Edit Selection View Go Run Terminal Help
EXPLORER 1 UNSAVED
CURSO JAVASCRIPT (WORKSPACE)
Node
html
contabexpress
bin
config
migrations
public
src
Controller
.gltignore
LuckyController.php
Entity
Repository
Kernel.php
templates
var
vendor
.env
.gltignore
.php-version
composer.json
composer.lock
symfony.lock
Exemplos
OUTLINE
NPM SCRIPTS

1: bash
Add another property? Enter the property name (or press <return> to stop adding fields):
> cidade

Field type (enter ? to see all types) [string]:
>

Field length [255]:
> 100

Can this field be null in the database (nullable) (yes/no) [no]:
> yes

updated: src/Entity/Clientes.php

Add another property? Enter the property name (or press <return> to stop adding fields):
> uf

Field type (enter ? to see all types) [string]:
> ?

Main types
* string
* text
* boolean
* integer (or smallint, bigint)
* float

Relationships / Associations
* relation (a wizard will help you build the relation)
* ManyToOne
* OneToMany
* ManyToMany
* OneToOne

Array/Object Types
* array (or simple_array)
* json
* object
* binary
```

This screenshot shows the completion of the database field creation process. The terminal lists additional types: object, binary, and blob. It then lists Date/Time Types: datetime, datetimetz, date, time, and dateInterval. Other Types listed are decimal, guid, and json_array. The user enters '2' for the field length. The terminal confirms the field can be null ('yes') and shows the updated file path. A green 'Success!' message is displayed. The terminal then prompts to create a migration with 'php bin/console make:migration'. The user's terminal prompt is shown at the bottom.

```
File Edit Selection View Go Run Terminal Help
EXPLORER 1 UNSAVED
CURSO JAVASCRIPT (WORKSPACE)
Node
html
contabexpress
bin
config
migrations
public
src
Controller
.gltignore
LuckyController.php
Entity
Repository
Kernel.php
templates
var
vendor
.env
.gltignore
.php-version
composer.json
composer.lock
symfony.lock
Exemplos
OUTLINE
NPM SCRIPTS

1: bash
* object
* binary
* blob

Date/Time Types
* datetime (or datetime_immutable)
* datetimetz (or datetimetz_immutable)
* date (or date_immutable)
* time (or time_immutable)
* dateInterval

Other Types
* decimal
* guid
* json_array

Field type (enter ? to see all types) [string]:
>

Field length [255]:
> 2

Can this field be null in the database (nullable) (yes/no) [no]:
> yes

updated: src/Entity/Clientes.php

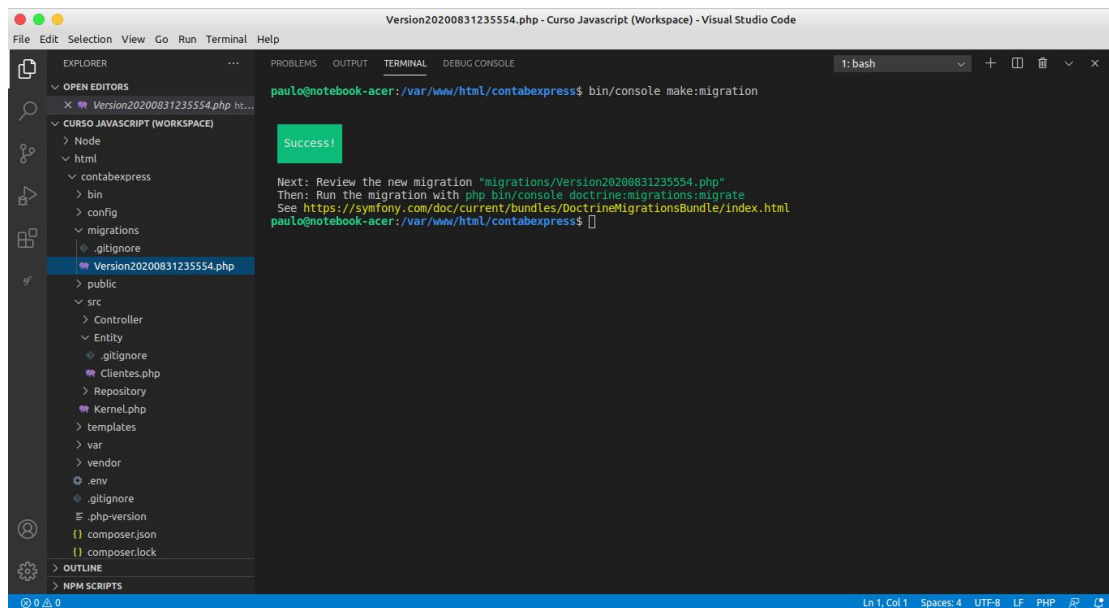
Add another property? Enter the property name (or press <return> to stop adding fields):
>

Success!

Next: When you're ready, create a migration with php bin/console make:migration

paulo@notebook-acer:/var/www/html/contabexpress$
```

Criação do arquivo de migração utilizando o seguinte comando:
bin/console make:migration:



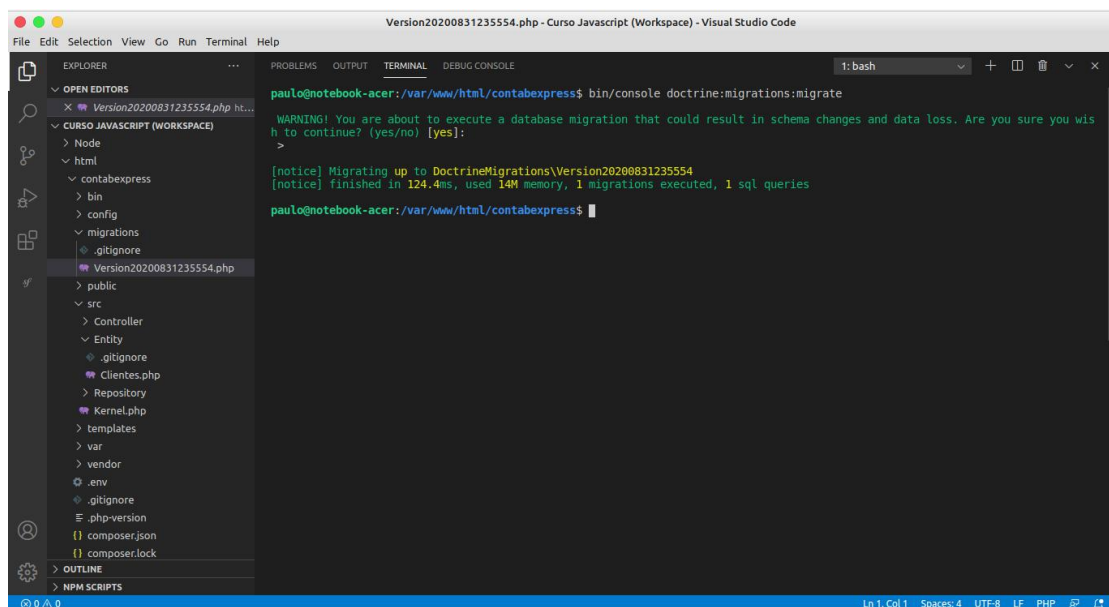
The screenshot shows the Visual Studio Code interface with the Explorer sidebar on the left displaying the project structure. The file 'Version20200831235554.php' is selected under the 'migrations' directory. The Terminal panel on the right shows the command 'bin/console make:migration' being executed in a bash shell. The output indicates success and provides instructions for the next steps: reviewing the new migration file and running the migration using 'bin/console doctrine:migrations:migrate'. A green 'Success!' message is also visible in the terminal output.

```
paulo@notebook-acer:/var/www/html/contabexpress$ bin/console make:migration

Success!

Next: Review the new migration "migrations/Version20200831235554.php"
Then: Run the migration with php bin/console doctrine:migrations:migrate
See https://symfony.com/doc/current/bundles/DoctrineMigrationsBundle/index.html
paulo@notebook-acer:/var/www/html/contabexpress$
```

Criação da entidade no banco de dados utilizando o seguinte comando: bin/console doctrine:migrations:migrate:



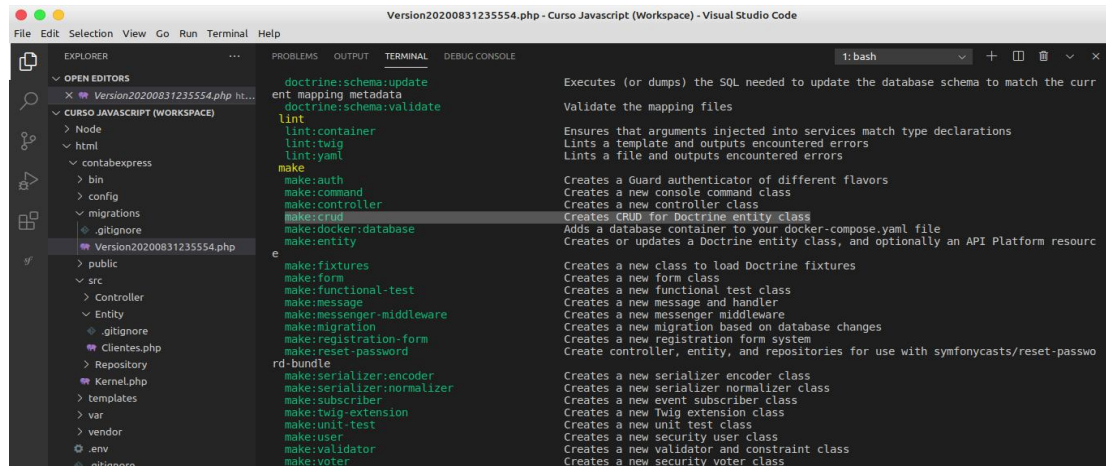
The screenshot shows the Visual Studio Code interface with the Explorer sidebar on the left displaying the project structure. The file 'Version20200831235554.php' is selected under the 'migrations' directory. The Terminal panel on the right shows the command 'bin/console doctrine:migrations:migrate' being executed in a bash shell. The output includes a warning about schema changes and data loss, followed by a confirmation prompt 'h to continue? (yes/no) [yes]:'. After confirming, the terminal shows a notice indicating the migration was successful, including details like 'finished in 124.4ms, used 14M memory, 1 migrations executed, 1 sql queries'.

```
paulo@notebook-acer:/var/www/html/contabexpress$ bin/console doctrine:migrations:migrate

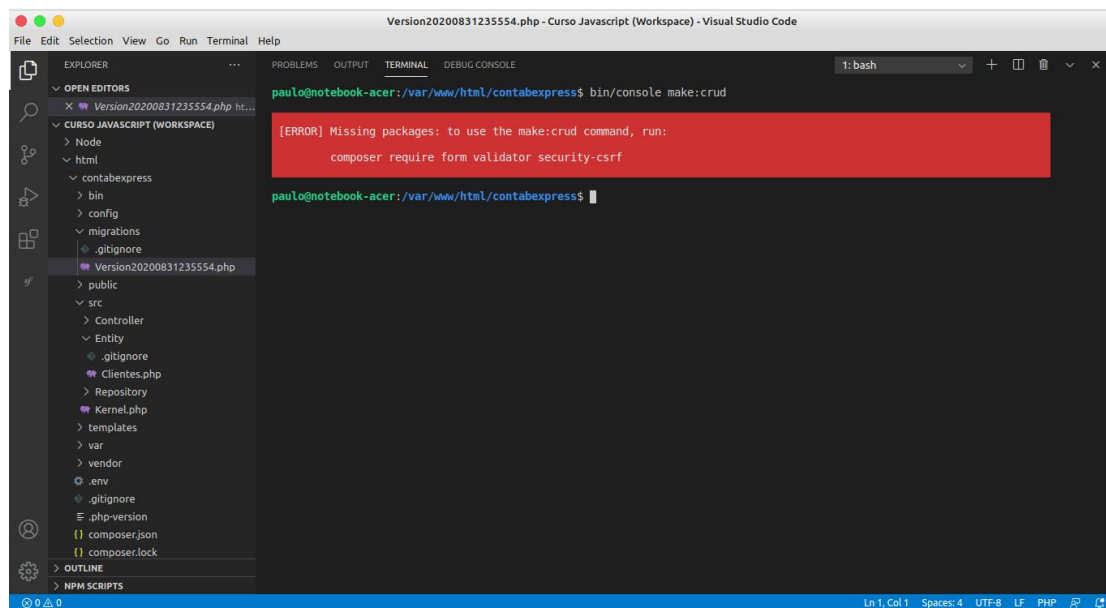
WARNING! You are about to execute a database migration that could result in schema changes and data loss. Are you sure you wis
h to continue? (yes/no) [yes]:
>

[notice] Migrating up to DoctrineMigrations\Version20200831235554
[notice] finished in 124.4ms, used 14M memory, 1 migrations executed, 1 sql queries
paulo@notebook-acer:/var/www/html/contabexpress$
```


Para a construção do controller e view utilizou-se o seguinte comando: `bin/console make:crud`:



Houve uma advertência ao usar o comando, pois o mesmo requisitava um componente chamado *form validator security-csrf*.



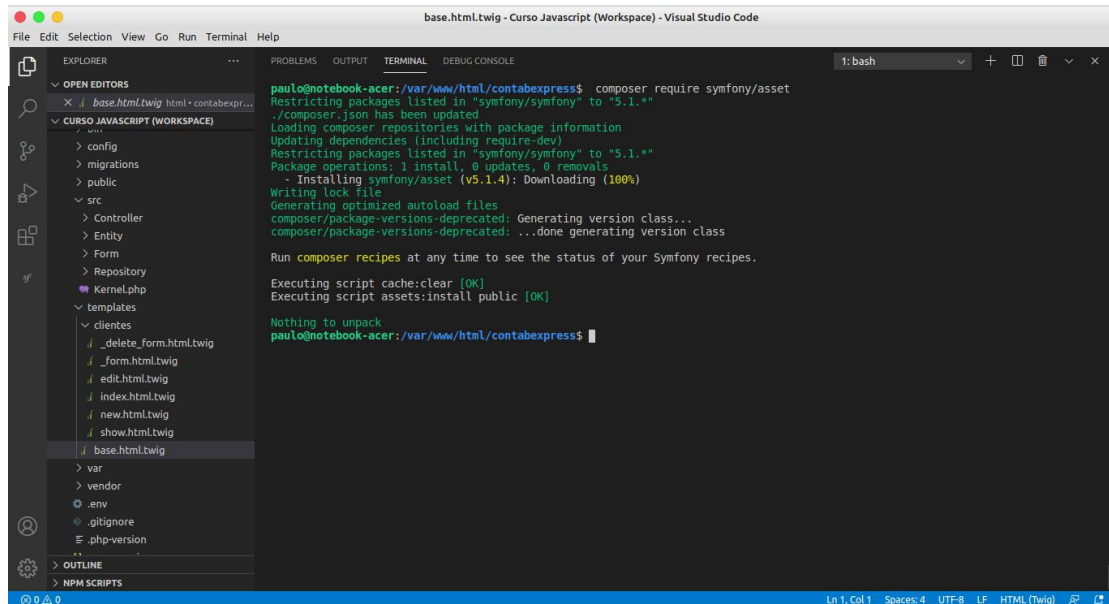
The screenshot shows a Visual Studio Code window with a terminal at the bottom. The terminal is running a bash shell. A red banner at the top of the terminal displays the command: `composer require form validator security-csrf`. Below the banner, the terminal output shows the execution of the command: `composer req form validator security-csrf`. The output indicates that the packages listed in "symfony/symfony" are being restricted to "5.1.*". It then shows the installation of 9 packages: `symfony/property-info`, `symfony/property-access`, `symfony/options-resolver`, `symfony/intl`, `symfony/polyfill-intl-icu`, `symfony/form`, `symfony/security-core`, `symfony/security-csrf`, and `symfony/validator`. The output also shows the generation of optimized autoload files and the execution of script assets: `clear` and `install public`. A green banner at the bottom of the terminal displays the command: `composer require form validator security-csrf`.

Executando o comando `bin/console make:crud` novamente:

The screenshot shows a Visual Studio Code window with a terminal at the bottom. The terminal is running a bash shell. A green banner at the top of the terminal displays the command: `bin/console make:crud`. Below the banner, the terminal output shows the execution of the command: `bin/console make:crud`. The output indicates that the class name of the entity to create CRUD is `Clientes`. It then shows the creation of the following files: `src/Controller/ClientesController.php`, `src/Form/Clientetype.php`, `templates/clientes/delete_form.html.twig`, `templates/clientes/form.html.twig`, `templates/clientes/edit.html.twig`, `templates/clientes/index.html.twig`, `templates/clientes/new.html.twig`, and `templates/clientes/show.html.twig`. A green banner at the bottom of the terminal displays the command: `bin/console make:crud`.

ARQUIVOS ATIVOS (ASSETS)

Para inserir arquivos de estilização, imagens e/ou arquivos.js é necessário, segundo a documentação oficial, instalar o componente asset com o comando `composer require symfony/asset`.



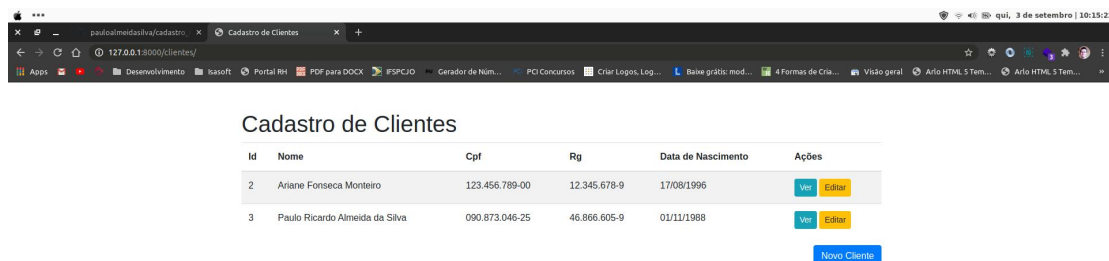
```
base.html.twig - Curso Javascript (Workspace) - Visual Studio Code
File Edit Selection View Go Run Terminal Help
EXPLORER
  OPEN EDITORS
  base.html.twig html+contabexpr...
  CURSO JAVASCRIPT (WORKSPACE)
    config
    migrations
    public
    src
      Controller
      Entity
      Form
      Repository
    Kernel.php
    templates
      clientes
        _delete_form.html.twig
        _form.html.twig
        edit.html.twig
        index.html.twig
        new.html.twig
        show.html.twig
        base.html.twig
      var
      vendor
      .env
      .gitignore
      .php-version
    OUTLINE
    NPM SCRIPTS
  PROBLEMS
  OUTPUT
  TERMINAL
  DEBUG CONSOLE
1: bash
paulo@notebook-acer:/var/www/html/contabexpress$ composer require symfony/asset
Restricting packages listed in "symfony/symfony" to "5.1.*"
./composer.json has been updated
Loading composer repositories with package information
Updating dependencies (including require-dev)
Restricting packages listed in "symfony/symfony" to "5.1.*"
Package operations: 1 install, 0 updates, 0 removals
  - Installing symfony/asset (v5.1.4): Downloading (100%)
Writing lock file
Generating optimized autoload files
composer/package-versions-deprecated: Generating version class...
composer/package-versions-deprecated: ...done generating version class
Run composer recipes at any time to see the status of your Symfony recipes.

Executing script cache:clear [OK]
Executing script assets:install public [OK]

Nothing to unpack
paulo@notebook-acer:/var/www/html/contabexpress$
```

VIEWS FINALIZADAS

Segue abaixo as views já estilizadas via framework bootstrap:



Cadastro de Clientes

Id	Nome	Cpf	Rg	Data de Nascimento	Ações
2	Ariane Fonseca Monteiro	123.456.789-00	12.345.678-9	17/08/1996	Ver Editar
3	Paulo Ricardo Almeida da Silva	090.873.046-25	46.866.605-9	01/11/1988	Ver Editar

[Novo Cliente](#)



Cadastrar Cliente

Dados Pessoais

Nome do Cliente

Data de Nascimento

CPF

RG

dd/mm/aaaa



Dados Pessoais

Endereço

Nº

Complemento

Bairro

Cidade

Estado

Salvar

Voltar



Detalhes do Cliente

Id	3
Nome	Paulo Ricardo Almeida da Silva
Cpf	090.873.046-25
Rg	46.866.605-9
Data de Nascimento	1988-11-01
Logradouro	Rua João Inácio Bicudo, 449
Complemento	Casa 1
Bairro	Vila Paulista Popular
Cidade/UF	Campos do Jordão/SP

Voltar

Editar

Deletar

Editar Clientes

Dados Pessoais

Nome do Cliente

Ariane Fonseca Monteiro

Data de Nascimento

17/08/1996

CPF

123.456.789-00

RG

12.345.678-9

Dados Pessoais

Endereço

Rua dos Bobos

Nº

0

Complemento

Bairro

Vila do Nada

Cidade

Blumenau

Estado

RS

Alterar

Voltar

Deletar