# Тестовое задание в Честный знак Documentation Release v1.0.0

Дымников Михаил

# CONTENTS

1	app	1
2	config	2
3	database	3
4	logger	6

CHAPTER

ONE

APP

#### 1.1 main

```
\label{eq:continuity} \begin{split} \operatorname{app.main.find\_non\_processed\_document(document\_type: \ str \mid None = \ 'transfer\_document') \rightarrow \\ \operatorname{Documents} \mid None \end{split} Retrieve the earliest non-processed document from the database.
```

```
Parameters
```

 $\label{lem:condition} document\_type~(Optional[str]) - The~type~of~document~to~filter~by.~Defaults~to~`transfer\_document'.$ 

Returns

The first document that matches the criteria, or None if no document is found.

Return type

Optional[Documents]

app.main.process document objects(document: Documents)  $\rightarrow$  bool

Processes data objects linked to the given document.

Validates the document's data, updates matching Data objects per operation details, marks the document as processed, and returns the processing status.

```
Parameters
```

document (Documents) – The document to process.

Returns

True if processing is successful, otherwise False.

 ${\rm Return\ type}$ 

bool

 $app.main.process\_document() \rightarrow bool$ 

Main function to process a single document.

This function retrieves a non-processed document and processes its associated objects. If there is no document to process or an error occurs, it returns False.

Returns

True if a document was processed successfully; False otherwise.

Return type

bool

## ${\rm CHAPTER}$

TWO

# CONFIG

# 2.1 variables

### 2.1.1 Constants

 $config.variables.DB\_HOST$ 

 $config.variables.DB\_NAME$ 

 $config.variables.DB\_USER$ 

 $config. variables. DB\_PASSWORD$ 

 $config.variables.DB\_PORT$ 

 $config. variables. DATABASE\_INFO$ 

#### DATABASE

# 3.1 base model

#### 3.1.1 Constants

```
database.base model.T
class database.base model.BaseModel(**kwargs: Any)
      Bases: Base, Generic[T]
      Base model for all database objects with common methods
      classmethod get session()
      classmethod get(pk: object) \rightarrow T | None
           Retrieve an instance by primary key
      classmethod all() \rightarrow List[T]
      classmethod query set() \rightarrow QuerySet[T]
      classmethod filter(*args, **kwargs) \rightarrow QuerySet[T]
           Returns a query set for filtering, which can then be chained with .order by(), .all(), or .first()
      classmethod order by (*args) \rightarrow QuerySet[T]
           Returns a query set with order by applied, allowing further calls to .all() or .first()
      classmethod first(*args, **kwargs) \rightarrow T | None
           Convenient method to immediately retrieve the first object matching the filter
      classmethod values(*columns) \rightarrow List[tuple]
           Retrieve selected columns from the database
      delete() \rightarrow None
           Delete the current instance from the database
      classmethod create(**kwargs) \rightarrow T
           Create a new instance of the model
      classmethod add all(instances: List[T]) \rightarrow List[T]
           Add a list of model instances to the database in a single operation
      save() \rightarrow T
           Save the current instance to the database
```

```
classmethod count (*args, **kwargs) \rightarrow int
           Return the count of records matching the filter or the total number of records
     classmethod update all(filter condition, update values: dict) \rightarrow int
class database.base model.QuerySet(query, session)
     Bases: Generic[T]
     filter(*args, **kwargs) \rightarrow QuerySet[T]
     order by(*args) \rightarrow QuerySet[T]
     all() \to List[T]
     first() \to T \mid None
3.2 data filler
database.data filler.make data() \rightarrow dict
     Генерация рандомных данных для таблицы data в базе, вернёт list, внутри dict по каждой записи
database.data filler.make documents(data: dict) \rightarrow list
     Генерация рандомных данных для таблицы documents в базе, вернёт list, внутри dict по каждой
     записи
3.3 database config
class\ database\_config. DatabaseConfig(database\_info:\ dict,\ database\ \ name:\ str='default')
     Bases: object
     Database configuration
     get engine url() \rightarrow str
     get session() \rightarrow scoped session
3.4 models
database.models.fill tables(model, data tbl, documents tbl)
database.models.create tables()
class database.models.Data(**kwargs)
     Bases: BaseModel
     object
     status
     level
     parent
```

Chapter 3. database

owner

```
class database.models.Documents(**kwargs)

Bases: BaseModel

doc_id

recieved_at

document_type

document_data

processed_at
```

3.4. models 5

CHAPTER

FOUR

#### LOGGER

### 4.1 LOGGER INIT

#### IMPORT LIBRARIES

```
4.1.1 loging_functions
logger.loging functions.print error(e: Exception) \rightarrow None
     Log and display detailed information about an error asynchronously.
           Parameters
               e (Exception) – The exception to log.
class\ logger.loging\_functions.Logger
     Bases: object
     A class to configure and manage asynchronous logging.
     get_logger() \rightarrow Logger
           Retrieve the configured logger instance.
                   The logger instance.
               Return type
                   logging.Logger
     shutdown()
           Shutdown the queue listener gracefully.
```