inquirer Documentation

Release 2.6.3

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Contents

CHAPTER 1

Overview

Born as a Inquirer.js clone, it shares part of the goals and philosophy.

So, **Inquirer** should ease the process of asking end user **questions**, **parsing**, **validating** answers, managing **hierarchical prompts** and providing **error feedback**.

You can *download the code from GitHub*.

CHAPTER 2

Contents

2.1 Installation

To install it, just execute:

```
pip install inquirer
```

Usage example:

```
import inquirer

if __name__ == '__main__':

    questions = [
        inquirer.Text('user', message='Please enter your github username',␣
↪validate=lambda _, x: x != '.'),
        inquirer.Password('password', message='Please enter your password'),
        inquirer.Text('repo', message='Please enter the repo name', default='default
↪'),
        inquirer.Checkbox('topics', message='Please define your type of project?',␣
↪choices=['common', 'backend', 'frontend'], ),
        inquirer.Text('organization', message='If this is a repo from a organization␣
↪please enter the organization name, if not just leave this blank'),
        inquirer.Confirm('correct',  message='This will delete all your current␣
↪labels and create a new ones. Continue?', default=False),
    ]

    answers = inquirer.prompt(questions)

    print(answers)
```

2.2 Usage

The idea is quite simple:

1. Create an array of `Questions`
2. Call the prompt render.

Each `Question` require some common arguments. So, you just need to know which kind of `Questions` and `Arguments` are available.

2.2.1 Question types

TEXT	Expects a text answer.
EDITOR	Expects a text answer, entered through external editor.
PASSWORD	Do not prompt the answer.
CONFIRM	Requires a boolean answer.
LIST	Show a list and allow to select just one answer.
CHECKBOX	Show a list and allow to select a bunch of them.
PATH	Requires valid path and allows additional validations.

There are pictures of some of them in the examples section.

2.2.2 Question Arguments

The main object is `Question`, but it should not be instantiated. You must use any of the subclasses, listed below. All of them have the next attributes that can be set in the initialization:

name

It will be the key in the hash of answers. So, it is **mandatory**.

You can use any `String` or `hashable` code as value.

message

Contains the prompt to be shown to the user, and is **mandatory** too.

You can use a new style formatted string, using the previous answers, and it will be replaced automatically:

```
questions = [
    Text(name='name', message="What's your name?"),
    Text(name='surname', message="What's your surname, {name}")
]
```

The value can be a `function`, with the next sign:

```
def get_message(answers): return str()
```

Example:

```
def get_message(answers):
    return "What's your name?"

Text(name='name', message= get_message)
```

Where `answers` is the dictionary with previous answers.

If the `message` is too long for the terminal, it will be cut to fit.

default

Stores the default value to be used as answer. This allow the user just to press *Enter* to use it. It is optional, using `None` if there is no input and no default value.

As in ‘‘message‘ , you can use a new format string or a function with the sign:

```
def get_default(answers): return str()
```

Where `answers` is a `dict` containing all previous answers.

Remember that it should be a list for *Checkbox* questions.

choices

Mandatory just for `Checkbox` and `List` questions; the rest of them do not use it.

It contains the list of selectable answers.

Its value can be a `list` of strings, new format style strings or pairs(tuples) or a *function* that returns that list, with the sign:

```
def get_choices(answers): return list(str())
```

If any of the list values is a pair, it should be a tuple like: `(label, value)`. Then the `label` will be shown but the `value` will be returned.

As before, the `answers` is a *dict* containing the previous answers.

validate

Optional attribute that allows the program to check if the answer is valid or not. It requires a *boolean* value or a *function* with the sign:

```
def validate(answers, current): return boolean()
```

Where `answers` is a *dict* with previous answers again and `current` is the current answer. If you want to customize the validation message, you can raise your own error with specific reason: `inquirer.errors.ValidationError('', reason='your reason that will be displayed to the user')` inside the validation function, but be aware that if the validation passes you still have to return *True*!

Example:

ignore

Questions are statically created and some of them may be optional depending on other answers. This attribute allows to control this by hiding the question.

It's value is *boolean* or a *function* with the sign:

```
def ignore(answers): return boolean()
```

where `answers` contains the *dict* of previous answers again.

2.2.3 Path Question

Path Question accepts any valid path which can be both absolute or relative. By default it only validates the validity of the path. Except of validation it return normalized path and it expands home alias (~).

The Path Question have additional arguments for validating paths.

path_type

Validation argument that enables to enforce if the path should be aiming to file (`Path.FILE`) or directory (`Path.DIRECTORY`).

By default nothing is enforced (`Path.ANY`).

```
Path('log_file', 'Where should be log files located?', path_type=Path.DIRECTORY)
```

exists

Validation argument that enables to enforce if the provided path should or should not exists. Expects `True` if the path should exists, or `False` if the path should not exists.

By default nothing is enforced (`None`)

```
Path('config_file', 'Point me to your configuration file.', exists=True, path_
↪type=Path.File)
```

normalize_to_absolute_path

Argument which will enable normalization on the provided path. When enabled, in case of relative path would be provided the Question will normalize it to absolute path.

Expects `bool` value. Default `False`.

```
Path('config_file', 'Point me to your configuration file.', normalize_to_absolute_
↪path=True)
```

2.2.4 Creating the Question object

With this information, it is easy to create a `Question` object:

```
Text('name', "What's your name?")
```

It's possible to load the `Question` objects from a `dict`, or even the whole list of them, with the method `load_from_dict` and `load_from_list`, respectively.

The method `load_from_json` has been added as commodity to use JSON inputs instead. Here you have an example:

```
import os
import sys
import re
import json
sys.path.append(os.path.realpath('.'))
from pprint import pprint

import inquirer

with open('examples/test_questions.json') as fd:
    questions = inquirer.load_from_json(fd.read())

answers = inquirer.prompt(questions)

pprint(answers)
```

2.2.5 The prompter

The last step is to call the *prompter* With the list of `Question`:

```
answers = inquirer.prompt(questions)
```

This line will ask the user for information and will store the answeres in a dict, using the question name as **key** and the user response as **value**.

Remember the `prompt` always require a list of `Question` as input.

2.2.6 Themes

You can change the colorscheme and some icons passing a theme object defined in inquirer.themes There are Default and GreenPassion themes, but you can define your own via class, dict or json!

```
import inquirer
from inquirer.themes import GreenPassion

q = [
    inquirer.Text('name',
                  message='Whats your name?',
                  default='No one'),
    inquirer.List('jon',
                  message='Does Jon Snow know?',
                  choices=['yes', 'no'],
                  default='no'),
    inquirer.Checkbox('kill_list',
                      message='Who you want to kill?',
                      choices=['Cersei', 'Littlefinger', 'The Mountain']
                      )
```

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```
]

inquirer.prompt(q, theme=GreenPassion())
```

Result:

2.2.7 Shortcut functions

For one-off prompts, you can use the shortcut functions.

```
text = inquirer.text(message="Enter your username")
password = inquirer.password(message='Please enter your password'),
choice = inquirer.list_input("Public or private?",
                             choices=['public', 'private'])
correct = inquirer.confirm("This will delete all your current labels and "
                           "create a new ones. Continue?", default=False)
```

2.3 Examples

You can find all these examples at `examples` directory.

2.3.1 text.py

```
import os
import sys
import re
from pprint import pprint

import inquirer
from inquirer import errors

sys.path.append(os.path.realpath('.'))


def phone_validation(answers, current):
    if not re.match('\+?\d[\d ]+\d', current):
        raise errors.ValidationError('', reason='I don\'t like your phone number!')

    return True


questions = [
    inquirer.Text('name',
                  message="What's your name?"),
    inquirer.Text('surname',
                  message="What's your surname, {name}?"),
    inquirer.Text('phone',
                  message="What's your phone number",
                  validate=phone_validation,
```

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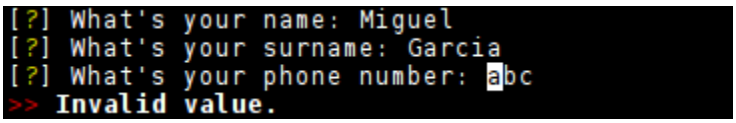
```
                    )
]

answers = inquirer.prompt(questions)

pprint(answers)
```

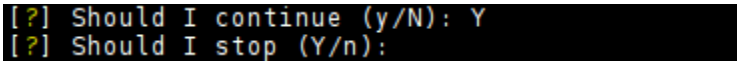
Result on something like:



2.3.2 confirm.py

```
import os
import sys
import re
sys.path.append(os.path.realpath('.'))
from pprint import pprint

import inquirer

questions = [
    inquirer.Confirm('continue',
                     message="Should I continue"),
    inquirer.Confirm('stop',
                     message="Should I stop", default=True),
]

answers = inquirer.prompt(questions)

pprint(answers)
```

Result on something like:



2.3.3 list.py

```
import os
import sys
import re
sys.path.append(os.path.realpath('.'))
from pprint import pprint

import inquirer

questions = [
    inquirer.List('size',
                  message="What size do you need?",
                  choices=['Jumbo', 'Large', 'Standard', 'Medium', 'Small', 'Micro'],
```

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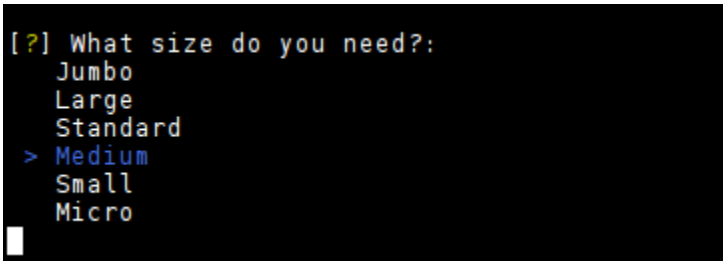
```
            ),
]

answers = inquirer.prompt(questions)

pprint(answers)
```

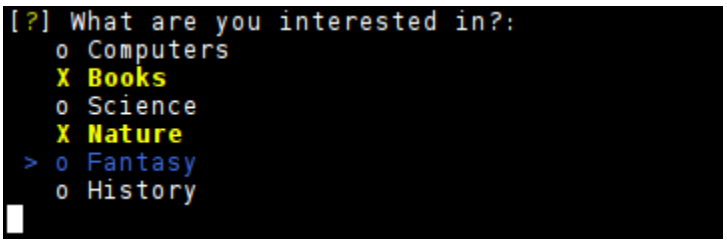
Result on something like:



2.3.4 checkbox.py

```
import os
import sys
import re
sys.path.append(os.path.realpath('.'))
from pprint import pprint

import inquirer

questions = [
    inquirer.Checkbox('interests',
                      message="What are you interested in?",
                      choices=['Computers', 'Books', 'Science', 'Nature', 'Fantasy',
↪'History'],
                      default=['Computers', 'Books']),
]

answers = inquirer.prompt(questions)

pprint(answers)
```

Result on something like:



The `choices` list can also be a list of tuples. The first value in each tuple should be the label displayed to the user. The second value in each tuple should be the actual value for that option. This allows you to have the user choose options that are not plain strings in the code.

```
import os
import sys
import re
sys.path.append(os.path.realpath('.'))
from pprint import pprint

import inquirer

questions = [
    inquirer.Checkbox('interests',
                      message="What are you interested in?",
                      choices=[
                          ('Computers', 'c'),
                          ('Books', 'b'),
                          ('Science', 's'),
                          ('Nature', 'n'),
                          ('Fantasy', 'f'),
                          ('History', 'h'),
                      ],
                      default=['c', 'b']),
]

answers = inquirer.prompt(questions)

pprint(answers)
```

2.3.5 theme.py

```
import inquirer
from inquirer.themes import GreenPassion

q = [
    inquirer.Text('name',
                  message='Whats your name?',
                  default='No one'),
    inquirer.List('jon',
                  message='Does Jon Snow know?',
                  choices=['yes', 'no'],
                  default='no'),
    inquirer.Checkbox('kill_list',
                      message='Who you want to kill?',
                      choices=['Cersei', 'Littlefinger', 'The Mountain']
                      )
]

inquirer.prompt(q, theme=GreenPassion())
```

Result on something like:

2.4 Changelog

2.4.1 2.1.11(2014/12/18)

Features

- #18 The `Prompt` shout raise `KeyboardInterrupt` if required.

2.4.2 2.1.3 (2014/12/27)

Bugs

- The `Question` start was not shown.

2.4.3 2.1.2 (2014/12/16)

Features

- #7 Adding default values for *Checkbox*, by ptbrowne

2.4.4 2.1.1 (2014/12/11)

Bugs

- Status bar was hiden by question
- Fixed a `force_new_line` problem with some environments.

2.4.5 2.1.0 (2014/12/10)

Features

- code refactors
- Adding ReadTheDocs documentation

Bugs

- #6 Removed new line after questions
- Confirmations will not raise an exception on unknown value

2.4.6 2.0.2 (2014/11/27)

Features

- Using pytest instead of nose
- Documentation updated

- Added `changes.rst` file with the changelog

Bugs

- #5: Fixed `List` and `Checkbox`, that were overriden if there was more `Questions`.

2.4.7 2.0.1 (2014/10/31)

Features

- **'#4'_**: Instantiate from JSON
  - Internal refactors
  - added load_from_dict and load_from_json factories, by mfwarren

2.4.8 2.0.0 (2014/10/19)

Features

- Complete refactor of `Question`, `ConsoleRender` and the way it was rendered with `blessings` library.

2.4.9 1.X.X

Special thanks to matiboy by his contributions to these releases.

2.5 Hall Of Fame

Contributors:

- matiboy
- mfwarren
- ptbrowne

2.6 The MIT License (MIT)

2.7 inquirer

2.7.1 inquirer package

Subpackages

inquirer.render package

Subpackages

inquirer.render.console package

Submodules

inquirer.render.console.base module

class inquirer.render.console.base.**BaseConsoleRender**(*question*, *theme=None*, *terminal=None*, *show_default=False*, **args*, ***kwargs*)

Bases: object

get_current_value()

get_header()

get_options()

handle_validation_error(*error*)

process_input(*pressed*)

title_inline = False

Module contents

class inquirer.render.console.**ConsoleRender**(*event_generator=None*, *theme=None*, **args*, ***kwargs*)

Bases: object

clear_bottombar()

clear_eos()

height

print_line(*base*, *lf=True*, ***kwargs*)

print_str(*base*, *lf=False*, ***kwargs*)

render(*question*, *answers=None*)

render_error(*message*)

render_factory(*question_type*)

render_in_bottombar(*message*)

width

Module contents

class inquirer.render.**Render**(*impl=<class 'inquirer.render.console.ConsoleRender'>*)

Bases: object

render(*question*, *answers*)

Submodules

inquirer.errors module

exception inquirer.errors.**Aborted**

Bases: *inquirer.errors.InquirerError*

exception inquirer.errors.**EndOfInput**(*selection*, **args*)

Bases: *inquirer.errors.InquirerError*

exception inquirer.errors.**InquirerError**

Bases: exceptions.Exception

exception inquirer.errors.**ThemeError**

Bases: exceptions.AttributeError

exception inquirer.errors.**UnknownQuestionTypeError**

Bases: *inquirer.errors.InquirerError*

exception inquirer.errors.**ValidationError**(*value*, *reason=None*, **args*)
Bases: *inquirer.errors.InquirerError*

inquirer.events module

class inquirer.events.**Event**
Bases: object

class inquirer.events.**KeyEventGenerator**(*key_generator=None*)
Bases: object

next()

class inquirer.events.**KeyPressed**(*value*)
Bases: *inquirer.events.Event*

class inquirer.events.**Repaint**
Bases: *inquirer.events.Event*

inquirer.prompt module

inquirer.prompt.**prompt**(*questions*, *render=None*, *answers=None*, *theme=<inquirer.themes.Default object>*, *raise_keyboard_interrupt=False*)

inquirer.questions module

Module that implements the questions types

class inquirer.questions.**Checkbox**(*name*, *message=''*, *choices=None*, *default=None*, *ignore=False*, *validate=True*, *show_default=False*)
Bases: *inquirer.questions.Question*

kind = 'checkbox'

class inquirer.questions.**Confirm**(*name*, *default=False*, ***kwargs*)
Bases: *inquirer.questions.Question*

kind = 'confirm'

class inquirer.questions.**Editor**(*name*, *message=''*, *default=None*, ***kwargs*)
Bases: *inquirer.questions.Text*

kind = 'editor'

class inquirer.questions.**List**(*name*, *message=''*, *choices=None*, *default=None*, *ignore=False*, *validate=True*, *carousel=False*)
Bases: *inquirer.questions.Question*

kind = 'list'

class inquirer.questions.**Password**(*name*, *echo='*'*, ***kwargs*)
Bases: *inquirer.questions.Text*

kind = 'password'

class inquirer.questions.**Path**(*name*, *default=None*, *path_type='any'*, *exists=None*, *normalize_to_absolute_path=False*, ***kwargs*)
Bases: *inquirer.questions.Text*

ANY = 'any'

DIRECTORY = 'directory'

FILE = 'file'

kind = 'path'

normalize_value(*value*)

validate(*current*)

class inquirer.questions.**Question**(*name*, *message=''*, *choices=None*, *default=None*, *ignore=False*, *validate=True*, *show_default=False*)

Bases: object

choices

choices_generator

default

ignore

kind = 'base question'

message

validate(*current*)

class inquirer.questions.**TaggedValue**(*label*, *value*)

Bases: object

class inquirer.questions.**Text**(*name*, *message=''*, *default=None*, ***kwargs*)

Bases: *inquirer.questions.Question*

kind = 'text'

inquirer.questions.**is_pathname_valid**(*pathname*)

True if the passed pathname is a valid pathname for the current OS; *False* otherwise.

inquirer.questions.**load_from_dict**(*question_dict*)

Load one question from a dict. It requires the keys 'name' and 'kind'. :return: The Question object with associated data. :return type: Question

inquirer.questions.**load_from_json**(*question_json*)

Load Questions from a JSON string. :return: A list of Question objects with associated data if the JSON

contains a list or a Question if the JSON contains a dict.

Return type List or Dict

inquirer.questions.**load_from_list**(*question_list*)

Load a list of questions from a list of dicts. It requires the keys 'name' and 'kind' for each dict. :return: A list of Question objects with associated data. :return type: List

inquirer.questions.**question_factory**(*kind*, **args*, ***kwargs*)

inquirer.shortcuts module

inquirer.shortcuts.**checkbox**(*message*, *render=None*, ***kwargs*)

inquirer.shortcuts.**confirm**(*message*, *render=None*, ***kwargs*)

inquirer.shortcuts.**editor**(*message*, *render=None*, ***kwargs*)

inquirer.shortcuts.**list_input**(*message*, *render=None*, ***kwargs*)

inquirer.shortcuts.**password**(*message*, *render=None*, ***kwargs*)

inquirer.shortcuts.**path**(*message*, *render=None*, ***kwargs*)

inquirer.shortcuts.**text**(*message*, *render=None*, ***kwargs*)

inquirer.themes module

class inquirer.themes.**Default**
Bases: *inquirer.themes.Theme*

class inquirer.themes.**GreenPassion**
Bases: *inquirer.themes.Theme*

class inquirer.themes.**Theme**
Bases: object

inquirer.themes.**load_theme_from_dict**(*dict_theme*)
Load a theme from a dict. Expected format: {

"Question": { "mark_color": "yellow", "brackets_color": "normal", ...

}, "List": {

"selection_color": "bold_blue", "selection_cursor": "->"

}

}

Color values should be string representing valid blessings.Terminal colors.

inquirer.themes.**load_theme_from_json**(*json_theme*)
Load a theme from a json. Expected format: {

"Question": { "mark_color": "yellow", "brackets_color": "normal", ...

}, "List": {

"selection_color": "bold_blue", "selection_cursor": "->"

}

}

Color values should be string representing valid blessings.Terminal colors.

Module contents

inquirer.**prompt**(*questions*, *render=None*, *answers=None*, *theme=<inquirer.themes.Default object>*, *raise_keyboard_interrupt=False*)

class inquirer.**Text**(*name*, *message=''*, *default=None*, ***kwargs*)
Bases: *inquirer.questions.Question*

kind = 'text'

class inquirer.**Editor**(*name*, *message=''*, *default=None*, ***kwargs*)
Bases: *inquirer.questions.Text*

kind = 'editor'

class inquirer.**Password**(*name*, *echo='*'*, ***kwargs*)
Bases: *inquirer.questions.Text*

kind = 'password'

class inquirer.**Confirm**(*name*, *default=False*, ***kwargs*)
Bases: *inquirer.questions.Question*

kind = 'confirm'

class inquirer.**List**(*name*, *message=''*, *choices=None*, *default=None*, *ignore=False*, *validate=True*, *carousel=False*)
Bases: *inquirer.questions.Question*

kind = 'list'

class inquirer.**Checkbox**(*name*, *message=''*, *choices=None*, *default=None*, *ignore=False*, *validate=True*, *show_default=False*)
Bases: *inquirer.questions.Question*

kind = 'checkbox'

class inquirer.**Path**(*name*, *default=None*, *path_type='any'*, *exists=None*, *normalize_to_absolute_path=False*, ***kwargs*)
Bases: *inquirer.questions.Text*

ANY = 'any'

DIRECTORY = 'directory'

FILE = 'file'

kind = 'path'

normalize_value(*value*)

validate(*current*)

inquirer.**load_from_list**(*question_list*)
Load a list of questions from a list of dicts. It requires the keys 'name' and 'kind' for each dict. :return: A list of Question objects with associated data. :return type: List

inquirer.**load_from_dict**(*question_dict*)
Load one question from a dict. It requires the keys 'name' and 'kind'. :return: The Question object with associated data. :return type: Question

inquirer.**load_from_json**(*question_json*)
Load Questions from a JSON string. :return: A list of Question objects with associated data if the JSON

contains a list or a Question if the JSON contains a dict.

Return type List or Dict

inquirer.**text**(*message*, *render=None*, ***kwargs*)

inquirer.**editor**(*message*, *render=None*, ***kwargs*)

inquirer.**password**(*message*, *render=None*, ***kwargs*)

inquirer.**confirm**(*message*, *render=None*, ***kwargs*)

inquirer.**list_input**(*message*, *render=None*, ***kwargs*)

inquirer.**checkbox**(*message*, *render=None*, ***kwargs*)

CHAPTER 3

Indices and tables

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Python Module Index

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Index

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