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# **AngryTux Documentation**

***Release 1.0***

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## Contents:

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<b>1</b>	<b>How to install</b>	<b>1</b>
<b>2</b>	<b>Running the game</b>	<b>3</b>
<b>3</b>	<b>Game control</b>	<b>5</b>
<b>4</b>	<b>Game objects</b>	<b>7</b>
<b>5</b>	<b>Level builder</b>	<b>9</b>
<b>6</b>	<b>Package documentation</b>	<b>11</b>
<b>7</b>	<b>Indices and tables</b>	<b>13</b>



# CHAPTER 1

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## How to install

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Installation of this game is very simple. Just download game from GitHub repository or you can install game thorough pip. Game is located at testing pip server.

### 1.1 Git install

1. Clone repository from source: `git clone git@github.com:Wilson194/Angry-tux.git`
2. Change directory to package: `cd Angry-tux`
3. Create virtual environment for game: `python -m venv __venv__`
4. Activate virtual environment: `. __venv__/bin/activate`
5. Install game: `python setup.py install`

### 1.2 Pip install

1. Create virtual environment for the game: `python -m venv __venv__`
2. Activate virtual environment: `. __venv__/bin/activate`
3. Install game from pip: `python -m pip install --extra-index-url https://test.pypi.org/pypi AngryTux`

Congratulation you have installed the game so you can play. Enjoy!



## CHAPTER 2

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### Running the game

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If you have all ready installed game, you can play! Just type in console in activated venv:

```
AngryTux
```

Here you go, you can play!

There is also some games modes that you can chose.

#### 2.1 Movement modes

You can chose from two movements modes: **basic** and **realistic**. In basic mode, missiles just lowering some angle and enemies just stand at one place and doing nothing. Booooooriiiiing!

But if you chose **realistic** mode, missiles have ballistic curve and enemies are moving. Much more fun, trust me!

You can chose mode with console parameter: `AngryTux -f mode`

#### 2.2 Levels

There is also two levels by default and you can create some new levels. You can specify, which level you want to play with console parameter: `AngryTux -l number`. There are only 2 level now, but you can help game to improve.






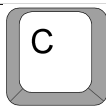
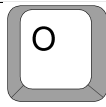





## CHAPTER 3

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### Game control

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Controlling the game is really easy and intuitive. To be sure, here you have instructions.

	Moving of the cannon
	Change firing mode
	Lower shooting power
	Increase shooting power
	Lower gravity of game
	Increase gravity of game
	Undo command
	Shoot missiles

## 3.1 Firing modes

### 3.1.1 Single mode

In single mode cannon shoot one missile in the direction of cannon. This gives you less points for hit but cost less points.

### 3.1.2 Double mode

In double mode cannon shoot two missiles. First missile have direction higher then cannon direction and second lower then cannon. This cost more points but you get much more points for hitting enemies

## 3.2 Gravity

With the keys **f** and **g** you can increase and decrease gravity. This will influence only missiles. You can use this for smart shooting. You can kill enemies behind walls.

## 3.3 Shooting power

With the keys **o** and **p** you can increase and decrease shooting power. This will effect missiles starting speed. You can combine this with gravity to achieve awesome shoots!

## 3.4 Undo command

This command is for undoing last command. You can undo everything what you did (shooting, destroying, etc.) You can use this for training but don't use for competitive plays!

## CHAPTER 4

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### Game objects

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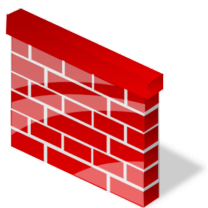
In game is several types of objects. There is description of them.

#### 4.1 Cannon



This is you weapon. Shoot them all

#### 4.2 Obstacles



This is obstacles. This obstacles windows use for defence. You must shoot this wall three times to destroy and don't get any points for destroying this.

## 4.3 Missile



This is you missile. Heroic tux prepared for destroying all windows!

## 4.4 Enemies

### 4.4.1 Dummy enemy



This is really dummy enemy. Just staying at one place and stare at you. Easy to kill!

### 4.4.2 Smart enemy



This is smart enemy. This enemy teleport after short time. You must be quick to kill this sneaky enemy.

### 4.4.3 Moving enemy



Last of them is moving enemy. This enemy are still moving. It's hard to kill them but you must do it!

# CHAPTER 5

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## Level builder

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You can use created level build for creating your own levels. In the code is abstract class `LevelCreator`. With extending this class you can create you own levels. Class have 3 methods.

### 5.1 create\_enemies

This method is for creating enemies. You can create as many enemies as you want and return list of this enemies from this method.

One enemy is created by enemy class:

```
>>> from angrytux.model.abstract_facotry.CreationFactory import CreationFactory
>>> from angrytux.model.game_objects.Position import Position
>>> CreationFactory().create_dummy_enemy(Position(450, 400))
>>> CreationFactory().create_smart_enemy(Position(700, 700))
```

where `CreationFactory` create proper enemy. You can chose smart or dummy enemy. Behaviour of enemies depends on selected mode. One parameter is position class which need two parameters, x and y position.

### 5.2 create\_obstacles

This method is for creating obstacles. Is almost same as enemies but for obstacles:

```
>>> from angrytux.model.game_objects.Obstacle import Obstacle
>>> obstacles.append(Obstacle(Position(400, 10)))
```

### 5.3 music

Last part is music for level. That is important! You can play your own music with this:

```
>>> file = os.path.join('angrytux', 'resources', 'sounds', 'song1.mp3')
>>> pygame.mixer.music.load(file)
>>> pygame.mixer.music.play()
```



## CHAPTER 6

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### Package documentation

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## 6.1 Package documentation

### 6.1.1 angrytux.config package

#### Submodules

angrytux.config.Config module

angrytux.config.Data module

#### Module contents

### 6.1.2 angrytux.controller package

#### Submodules

angrytux.controller.Keyboard module

#### Module contents

### 6.1.3 angrytux.controller.Commands package

#### Submodules

angrytux.controller.Commands.CannonAngleDownCommand module

angrytux.controller.Commands.CannonAngleUpCommand module

angrytux.controller.Commands.CannonDownCommand module

angrytux.controller.Commands.CannonStrengthDownCommand module

angrytux.controller.Commands.CannonStrengthUpCommand module

angrytux.controller.Commands.CannonUpCommand module



## CHAPTER 7

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### Indices and tables

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- `genindex`
- `modindex`
- `search`