BAD RATS

MANUAL

Index

Warning:

No real cats or real rats were hurt during the development of this game.
Except a few ants, trying to steal our sugar, and a bat, who tried to live inside the air conditioner
cage of our office.

This game is a piece of pure fiction, actually we think all animals are great!

Never cut, explode, burn, drop acid, use a chain saw, energize or shoot real animals.
This is only nice within comic computer games!

18+

This game presents cartoon blood and violence,
and crazy rats killing poor cats, in several
different ways.
Bad Rats is a game recommended for adults.

1. Introduction

Thanks for buying "Bad Rats: The Rats' Revenge". You'll enjoy playing and finding solutions to the puzzles, while helping the Rats with their bloody revenge plans!

It's a physics puzzle game, you'll use several objects and the ten specially trained Rats to solve the maps. Everything works with a realistic physics simulation, and the objects react according their weight, form and function.

The objective changes every map, but it's basically to make an object (the key), to hit another object (the target), for example, to make a ball hit a vault - which will hit the cat.
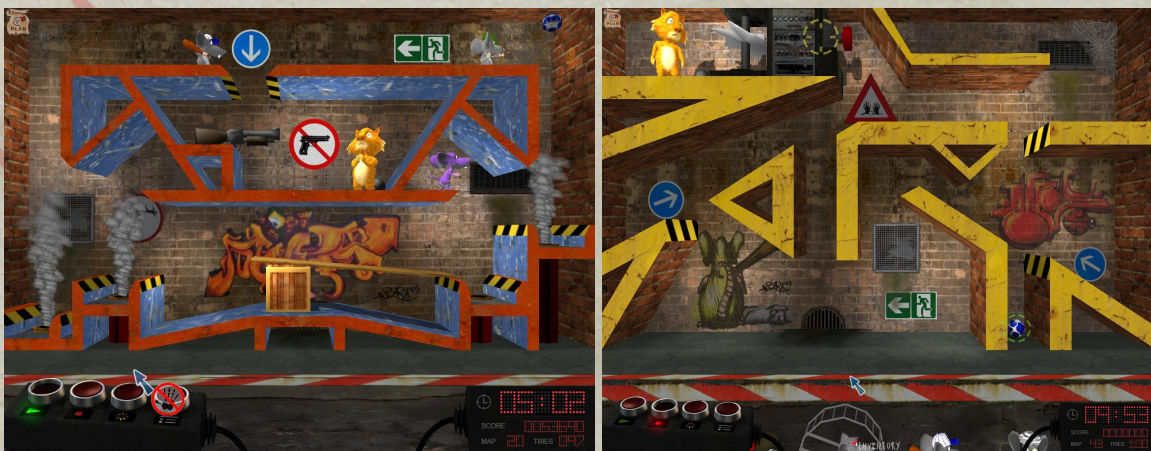
Solving a map will always result on the annihilation of a cat, with a lot of cartoon blood, and some cruelty from Rats to Cats.... Yes, Rats are bad on this game, and you'll discover what these cute animals can do for revenge.

Some laughters are surely included with all the comic cartoon violence the game presents, and with its original and charismatic characters.

The game is a challenge to your logic and creativity, presenting maps that comes from easy to very hard to solve.

There are countless possible solutions for each map, and this is one of the features you'll enjoy.

You can always invent new solutions to the maps, using the good variety of objects you have available.

You can create solutions with less objects, winning more points, or simply solutions that are more complex or funny.

This manual presents all information on the game's functionality, and you can run the in-game Tutorial, and learn how to play, while playing.

Poor Cats, but Bad Rats are now in charge!

2. Objectives

Rats are ready for revenge, cats are their prisoner, and a bloody plan was made...
Your objective is to help the rats, solving the physics puzzles, and executing their annihilation plans.
When starting a new map, your objective is fully explained, and you receive some hints to solve it.
Basically, you need to make the key object hit the target object, using physics, and the objects available in your inventory.
When the simulation starts, everything works with physics principles, so it's a question of logic and creativity to find a solution for a map.

Playing the easy mode, you have the solution's plan available, which presents a possible solution – the original map's solution.
Reaching your objective and solving the maps, the Cats will be annihilated in different crude, but funny ways.

3. Menus

When the game starts you'll access the Main menu. The options you have available are selected clicking the words in the background graffiti:


The options are:

- Play: start a new game or load a saved game.

- Help: some additional information about how to play.

- Options: select some game settings.

- Records: view the game records, the world records, and your achievements.

- Credits: who made this game.

- Exit: quit the game.

3.1 Starting a game:

You have to select "Play" on the Main menu to start playing.

A new menu is presented, and you have the following options:

- New game: to a brand new match.

- Load Game: to load a previously saved game.

- Password: to access directly any map, using the right password.
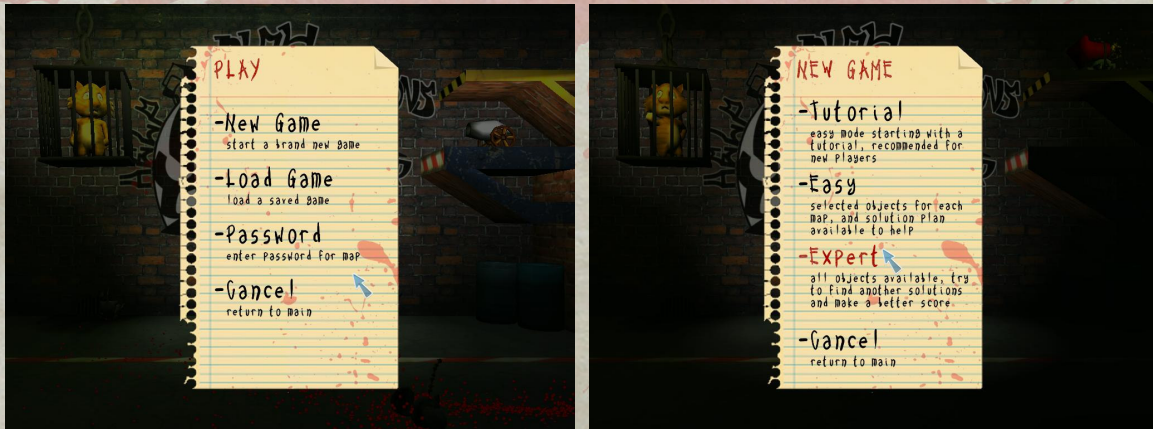
Selecting New Game, you have three options to start:

3.2 Game Modes

- Tutorial: learn how to play, playing. This option will show you how to solve the first map in an interactive way. The easy mode is selected, starting with the Tutorial. This option is recommended to new players.

- Easy Mode: playing the easy mode, you count with only a few selected objects for each map, and you can visualize the solution's plan. With selected objects, and a draft of the solution, you can win with some easiness, at least the first levels.

- Expert Mode: playing the expert mode you count with all objects in all maps. The solution plan is not available. This can be considered the funniest mode, since with all objects available, the solutions are countless. You can always invent and try new solutions to the maps.

3.3 Options:

You can access the options' menu through the Main menu, or the in-game menu.
Here you can select some game configurations, as the violence level.
You can turn of the blood and body pieces options, and play in the low violence mode.

- Show Blood: select if the game shows blood on the characters deaths.

- Show Body parts: select if body pieces should be presented when the characters explode.

- Shadow Stencil: enable the advanced shadow system. Better and realistic shadows are render with this option on, but more processing is also required. The game performance can be affected in some computers enabling this option.

- Sound and Music Volume: controls the sounds' volume.

- Video Resolution: 800x600, 1024x768 or 1240x1024. Higher resolutions presents better graphics, but more computer processing is also required.

Hints to increase game performance (FPS):

Disabling shadow stencil increases the game's performance.
Disabling blood, and body pieces increases the game's performance.
Using the smaller resolution (800x600) increases the game's performance.

Hints for better graphics:

Activate all options, including shadow stencil, and select the higher resolution (1240x1024).
A dual processor may be necessary, but you'll get the best graphics with these options.

4. How to Play

Starting a level you'll receive information on the map's
objective, and some hints to get it done.
Playing the easy mode you still have access to the solution's
plan, what is helpful for new users.
The game has basically two states: paused and playing.
You control the game's states using the buttons, on the control
panel presented bottom left of screen.

Pause: only with the game paused you can move the objects and adjust their configurations.
You have to pause the game to build your solution, and place new objects on the map.

Play: starts the physics simulation, and you'll observe if your solution works or not. When
playing, the objects react with realistic physics behavior, according their weight, form and function.

Additionally, we have two buttons in the control pannel:

Reset: the third button is used to restart the map, removing all objects added to the scene.

Menu: to access the in-game menu, where options as help and save are available.

4.1 Inventory

Moving the mouse to the middle bottom of
screen you can visualize your inventory.
Depending on the game mode, you'll have only
a few selected objects, or all objects available
(Expert mode).
The inventory has the tools you'll need to solve
the puzzles.

In order to use the objects, you have to drag them to the scene (with the left mouse button pressed) . When moving the objects, you have to respect the maps' obstacles, and perceive that every object occupies its own space.

When an object is placed in scene, you can press the right mouse button over it, and access the objects' menu. Here you can select some objects' configurations.
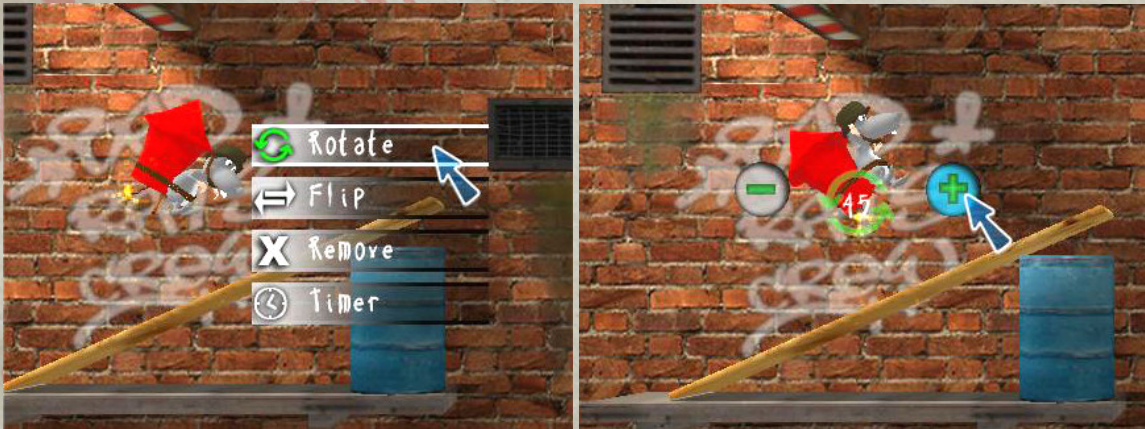
Flip: flip the object. Turns the object to the opposite side (right / left).

Rotate: for setting the objects' angle, manually.

Timer: some objects have a timer, which controls the time to start its functionality.

Remember, it's a physics simulation game, objects which are in the air will fall to the ground, and can bounce, roll or explode, and every object will have a behavior according its weight, form and functionality.

After placing the objects in scene, you have to start the experiment, using the **Play** button. To make adjustments, remove or insert new objects in scene, you have to **Pause** the game first.

4.2 Game's Rules

On the bottom right of screen you'll find the information's panel, which presents the time left, the number of tries left, your score and the actual map:
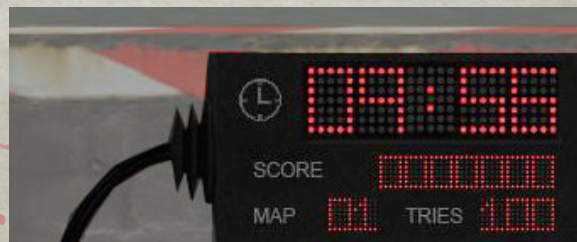
You lose if the time is over.

You lose if you spend all tries allowed for a map.

You win solving the puzzles, and killing the cats.

5. Keys and Controls

You need basically the mouse for playing the game.
You'll move the objects dragging them to the scene, while the left
mouse button is pressed.
The right mouse button can be used over the objects in scene, to
access the objects' menu.

Some additional keys work as shortcuts in the game:

F1	– access the help for the map
F2	– access the options menu
F3	– access the save game menu
F4	– access the load game menu
F5	– Play – start the physics simulation
F6	– Stop – pause the game
F7	– reset the map
F8	– save the actual solution to a external file.
F9	– load a solution from a external file.
F10	– sudden exit the game.
F11	– show FPS and memory information.
F12	– take a screenshot (saved on the game's folder).
ESC	– access the in-game menu.
M	– next music.

6. Score and Records

Finishing a map your score will be calculated. Each map gives you a bonus of 1000 points, cumulative. Solving the map 30 for instance, you'll receive 30,000 points.

You gain more points solving the map quickly. Each 30 seconds remaining will represent 10 points on Easy mode, and 30 points on Expert mode.

You gain more points solving the maps with less objects. Each map has a planned number of objects to use. Each object saved in a solution gives you 500 points on Easy mode, and 1,000 points on Expert mode.

You gain more points using less tries. Each map has a planned number of tries, and solving the map with less tries your score will be better: 500 points on Easy mode, and 1,000 points on Expert mode, for each try saved.


The highest scores are recorded to the Hall of Fame, accessed by the main menu.

Additionally, you can send your record to the Internet, and take part in the World's Ranking. The world records are recorded on the Invent4 's servers, and can be accessed by the Internet, on the game's page, or inside the game, choosing this option on the records' menu.

(http://www.invent4.com/rats)

Completing a level you can also see the original planned solution to the map.

Attention: the original solution may not work according to variations on the game performance and FPS. The original solution presents only the idea of solution planned to the map, and some small adjustments may be needed to have it working in some cases.
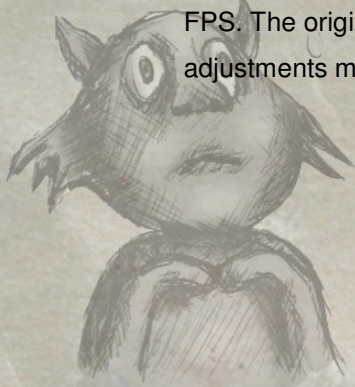
7. Achievements

There are some achievements that you can make in Bad Rats, and reach a better score.

Each achievement will give you 5,000 points, and the goals are explained here:

Fast Thinker
Think fast and solve five maps using less than one minute.

Super Fast Thinker
Think still faster, and solve ten maps within the first minute.

Master Super Fast Thinker
Show that you are a master and solve fifteen maps on the first minute.

Bad Rat Junior
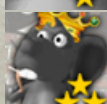Solve 10 game maps.

Very Bad Rat
Solve 20 maps.

Serious Bad Rat
Solve 30 maps, and become a serious Bad Rat.

Bad Bad Rat
Solve 40 maps. This is for Bad Bad Rats.

Bad Rats' King
Solve all game maps, and become the king. With this achievement you also receive a new bonus object, the Super Nails, and you can use it to find still new solutions to the maps.

One Single Move
Solve two maps using a single object.

Economic Bad Rat
Solve 5 maps using one object less than planned.

Extra Economic Bad Rat
Solve 10 maps saving at least one object than planned.

Genius Economic Bad Rat
Solve 15 maps using less objects. Must be genius.

One Click One Death
Solve 10 maps on the first try.

8. Objects

You'll find all objects you'll need in your inventory, that is located down the screen.

The measures we'll use to explain the functionality of some objects are expressed in RFU (Rats Power Unit), for force, RMM (Rats Mean Meters) for distance, and RT (Rats Time) for time.

There are inanimate objects, as the boxes, barrels, the wood board, and the wood sticks.

These objects have specific weights and forms, and can be used to support another objects, to build ramps, levers, paths, and anything more you can imagine.
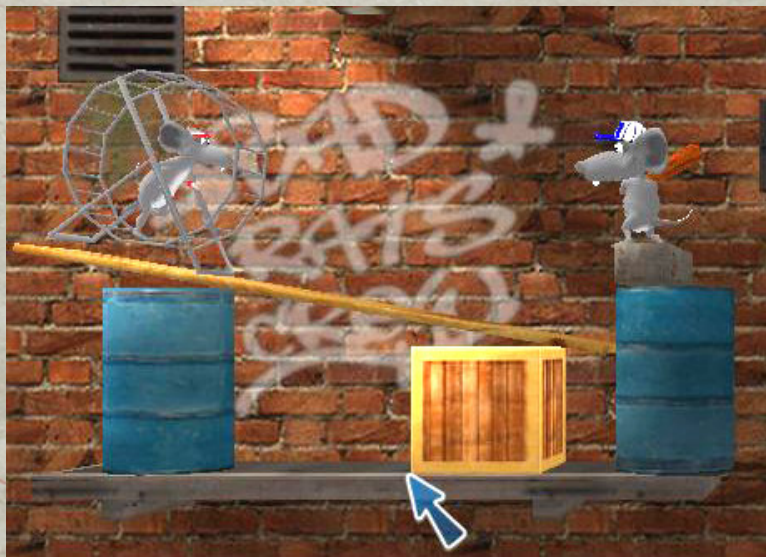
There are also functional objects, as the balloon, umbrella, trampoline and the super nails.

The balloon has a magic functionality, and can lift up any objects of any weight. You can connect the balloon to any object, and they will fly with a force about 20 RFU.

The umbrella can be connected to any other object as well, and have the property to reduce the fall velocity, working as a parachute. The umbrella can reduce about 90% of the gravity velocity effect.

Connecting Objects

The balloon and the umbrella can be connected to any other object. You have to move the balloon (or umbrella) a little over the object to be connected, inside the map. A sum sign "+" will be presented, and the objects will be connected.
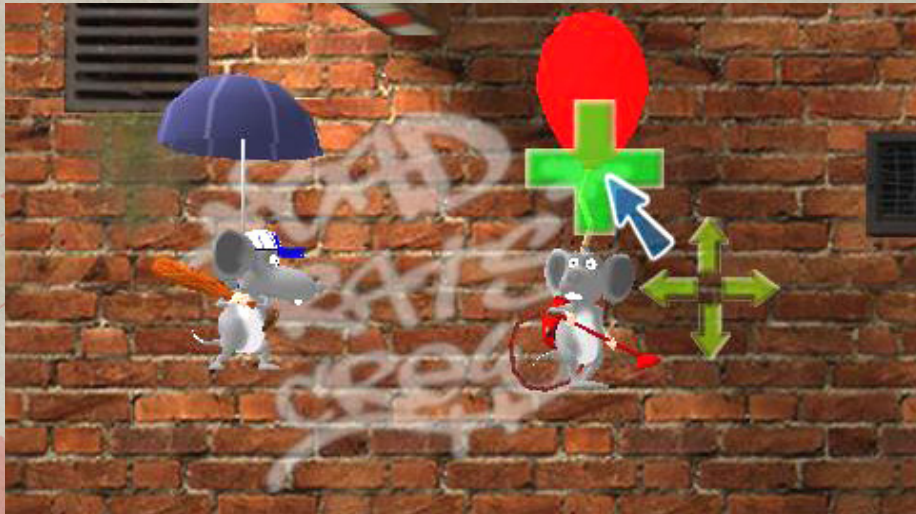
The trampoline repels objects which collides with its surface, with about 90% of the collision velocity.
The thrust direction depends on the trampoline angle, and the objects collision velocity.

The Super Nails are a bonus item, which you can win completing the "Bad Rats' King" achievement - winning all levels.
The Nails resist to any weight, and can be fixed anywhere on the maps' walls.
They are very useful to find new and more economic solutions to the maps.

9. The Rats

There are ten Rats specially trained, anxious for revenge, ready to help you on the game:

Batter

The Batter hits any object forward, according his angle.
The Batter hits objects in an area of 50 RMM on its front, and
the hit's force can reach 200 RPU.
The force of a bat varies with the distance to the objects,
nearest objects receives more force.
The object hit receives also a force about 55 RPU upwards,
moving up, with about 10 degrees.

Bomber

The Bomber Rat explodes when collides with any
other object, since a minimal collision speed is
reached.
The Bomber explosion reaches an area of about 100
RMM, and the special explosives can lift up objects
with a force until 450 RPU. The distance to the
explosion affects the force the objects receive.
Objects inside the explosion area are launched
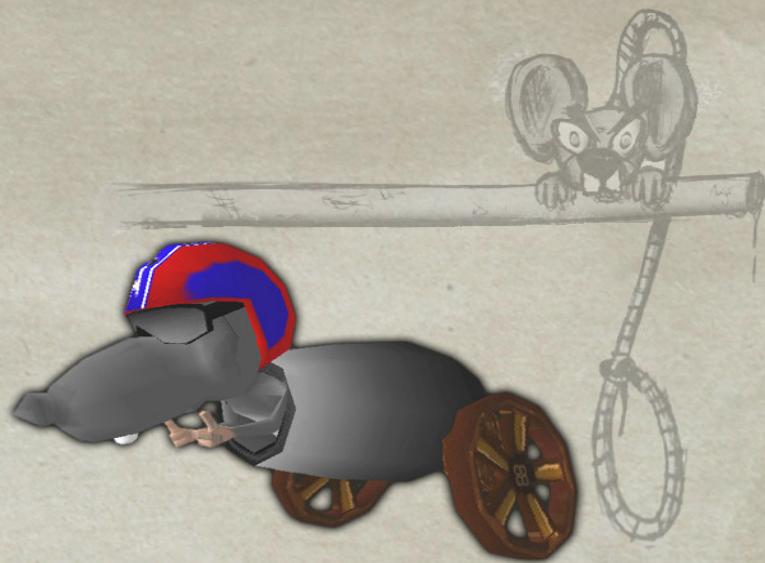upwards, according the Bomber's angle.

Cannon Rat

The Cannon Rat is launched with a force of 700 RPU, to the canon's direction and angle.
You can adjust the cannon's timer, and control its launch time. Values from 1 to 250 RT are allowed.
The Cannon Rat has some weight, so for distant shots, you should calculate some additional fall angle, because of gravity.

Rocket Rat

The Rocket Rat moves with a propulsion of about 450 RPU.
You can adjust the Rocket timer, and synchronize its launch.
The Rocket Rat, different from others, don't try to get up, and stay with the angle it's placed or supported.
With a time of 60 RT after launched, the Rocket explodes, and an explosion's effect happens, similar to the bomber.

Tractor Rat

The Tractor Rat moves forward with a constante force of 25 RPU.
The Tractor moves slowly, but has a a strong force for moving and dragging other objects.
The Tractor can explode if it suffers high falls, and its explosion has an effect similar to the bomber's explosion.

Archer Rat

The Archer perceive objects moving on its front,
and shoot arrows when something is in its aim.
The arrows are shot with a very high force,
about 1000 RPU.
The archer has some delay shooting, since he
needs to charge and prepare the shot.
Arrows can explode the balloons, also.

Lung Rat

The Lung Rat is owner of a powerful blow.
He can repel objects with a force about 50 RPU,
in an area of 80 RMM, at his front.
Lung Rat doesn't have a timer, but some
adjustments can be needed using its position,
since he need some time to breath before each
blow.

Vacuum Rat

The Vacuum Rat can pull any object to its
direction, with its equipment .
Objects are pulled by the vacuum with a force of
20 RFU, and it reaches an area of about 500
RMM, the entire map from right to left.
Vacuum Rat, different from others, don't try to
get up, he stay with the angle he has, or is
supported. You can pull objects to any direction
using the Vacuum Rat.
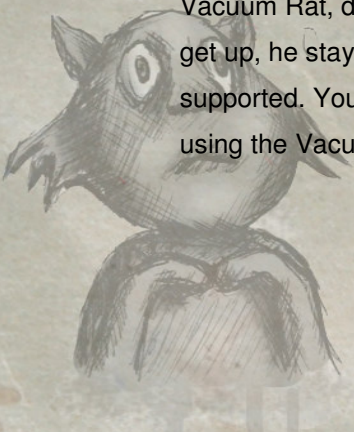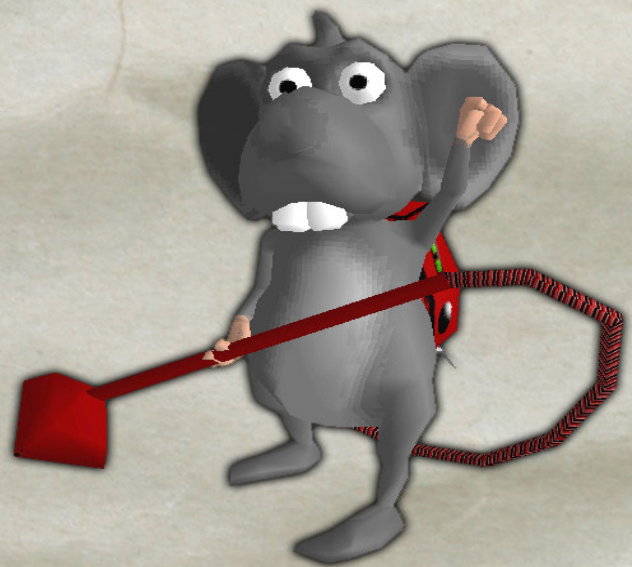
Fat Rat

Fat Rat is basically a big weight object.
With its big body, he can be used as a
barrier, he's useful as counter-weight for
levers, or same to support other objects.
This is the object of more weight in game.
In the case you need something of weight,
this is the Rat you should use.

Runner Rat

The Runner Rat pushes any object that
collides with its metal wheel, with a force until
about 80 RPU.
The force the objects are pushed can be
considered unstable, since it depends on the
time and kind of collision.
For pushing objects with the strongest force,
collisions should last more time possible, for
example, colliding from the middle to the end
of the Rat's wheel.
More collision time, more friction, more
forced thrusts.

10. Saving Games and Solutions

You can save your games through the Save menu, choosing the option Save.

You should choose one of the seven Slots available, type a name, and choose Save.

The saved games can be loaded by the Main menu, choosing play, then the Load game option.

You can also save a solution you have made to a map, and share this with other users by the Internet. For saving a solution, you should be playing a valid map, then you have to press the key "F8", and type a name to the saved file. The file with the name you choose will be available on the game's folder, with the extension ".SOL". You can send this file to any other game user, by e-mail for example, and thus share the solution you've invented.

You can load a solution from an external file, pressing the "F9" key, when playing a valid map. The solution file must be copied to game's folder, in order to be loaded rightly.

You should type the correct file name, and choose load. When a solution is loaded, you'll go automatically to the right map, and you can play it.

11. The Cats

With "Bad Rats", Cats have no chance!

If the Rats' plans goes right, Cats will be annihilated in 11 different, cruel and bloody ways.

The traps prepared by Rats includes the following deaths:

1- smashed by a vault

2- guillotine full cut

3- micro-waves oven

4- automatic chain-saw

5- acid bath

6- electro-shock

7- super bomb

8- murderer dog

9- total burn

10- head shot

11- cut off

12. Troubleshooting

The minimal and recommended systems to play the game are the following:

Operating system: Windows XP or Vista

Processor: Pentium IV 1.6 GHz or better (dual core recommended)

Memory: 512MB RAM (1GB recommended)

Hard disk space: 300MB

Video: DirectX®9-compatible graphics adapter with 128 MB (256 MB recommended)

Sound: DirectX®9-compatible

DirectX®: DirectX®9 or superior

Using a system within the standards mentioned, and certifying to have DirectX®9c installed in your computer, you should have no problems while playing.

If you have doubts or problems with the game, you should first visit the game's forum, where perhaps your problem is already answered: http://forum.invent4.com

If you need additional support, e-mail our support team: sup@invent4.com
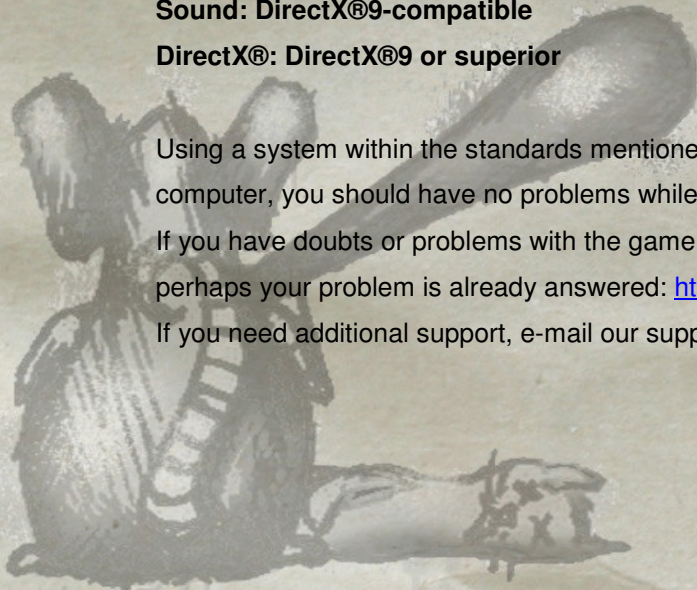
13. Credits

BAD RATS:
The Rats' Revenge
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a production of
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   www.invent4.com

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