

Penguin Adventure Engine Guide

This guide explains how a game that uses the *Penguin Adventure Engine* can be created.

Files and locations

All the files used should be put into a folder called *gamefiles*. The engine automatically checks for the files in that location. The most important file in that folder is the *adventure.xml*. This file contains the slides that are displayed during gameplay. How to create and format this file will be described later.

The *gamefiles* folder also contains two text files. The first file is called *credits.txt*. It contains the text displayed when clicking *About* in the file menu of the game. (Note that the first line of that window cannot be changed or edited)

The second file in that folder is called *score.txt*. It contains the point values of any items or stats that can be obtained or achieved during the game. It must be formatted like this:

```
money:5
karma:10
gameovers:-10

/items
Necklace:10
Jewel:10

/stats
Cursed:-50
Charmed:15
```

The values for *money*, *karma* and *gameovers* are multiplied with the respective numbers in the player's inventory. The points for each item or stat are then added to that score.

Lastly, the folder *gamefiles* contains another folder called *images*. This is where the engine checks for the image files specified. (In short: put all the images you are going to use in here)

adventure.xml

This file is basically your game. It contains every slide that can pop up and it tells the engine which slide should show up next. This is a generic example:

```
<?xml version="1.0" encoding="utf-8"?>
<game>
  <slide id="NUMBER_OF_THIS_SLIDE">
    <img>FILENAME_OF_IMAGE</img>
    <txt>TEXT_OF_THIS_SLIDE</txt>
```

```

    <gameover></gameover>
    <items>
        <item> +ITEM_NAME</item>
        <item> -ITEM_NAME</item>
        <item> -random</item>
    </items>
    <stats>
        <stat> +STAT_NAME</stat>
        <stat> -STAT_NAME</stat>
    </stats>
    <options>
        <option slide="LINKED_SLIDE"> BUTTON_TEXT</option>
        <option slide="LINKED_SLIDE" req="+item" name="ITEM_NAME"> BUTTON_TEXT</option>
        <option slide="LINKED_SLIDE" req="-item" name="ITEM_NAME"> BUTTON_TEXT</option>
        <option slide="LINKED_SLIDE" req="+stat" name="STAT_NAME"> BUTTON_TEXT</option>
        <option slide="LINKED_SLIDE" req="-stat" name="STAT_NAME"> BUTTON_TEXT</option>
    </options>
</slide>
...
</game>

```

The file must start with `<?xml version="1.0" encoding="utf-8"?>` and all the slides have to be in between the `<game> ... </game>` tags. Everything between `<slide>` and `</slide>` describes the slide itself. The slide ID is used so that other slides can link to this specific slide. (Note that slide `id="0"` is the Welcome slide and `id="-1"` is used for the win/score page)

Each slide has a few tags it **must** contain. These are `` (contains the filename of the image from the images folder), `<txt>` (the text that will be displayed) and `<options>` (the buttons and requirements linking to other slides). Every slide should contain at least one option.

`<options>` can, but do not have to have requirements. When `req="+item"` is used, the button will only show up, if the player has the named item in their inventory. `req="-item"` makes the button appear, if the player does **not** have the item in their inventory. The same applies to `+stat/-stat` respectively.

There are also three optional tags for slides. Slides can contain `<items>` or `<stats>`, but they are not required to. These tags are used to show changes in the player's inventory or status. "+" adds an item or stat, "-" removes it. There is also the special case `-random`, which removes a random stat or item from the player.

The `<gameover>` tag marks the slide as a Game Over screen. This will automatically increase the Game Over counter.

In summary: The `<game>` can contain multiple `<slide>`s. A `<slide>` must contain one `` and one `<txt>`. It can also contain multiple `<items>` and `<stats>` and it should almost always contain at least one `<option>`.

Advice

- While every slide should contain at least one option, it is recommended that the win/score slide does not.
- Make sure that all the options lead to proper slides.
- Check for infinite loops without escape.
- Make sure to add a button to your Game Over screens so players do not have to start a new game.
- Do not use an ampersand (&) anywhere. This is currently not supported.
- `<txt>` has basic formatting commands. This text is ****b*bold*/b****, ****i*italic*/i**** and ****u*underlined*/u****. There is also ****br**** for line breaks.
- The ****.exe*** file can be named any way you want, so feel free to name it after your game.

The Penguin Adventure Engine and this guide were created by [fallenpenguin/bird-in-a-tux](#).