

Part 6 – Play modes

As of version 2.4, XVAN supports choice and hybrid play modes.

By default, the XVAN interpreter works in interpreter mode: user input is entered as sentences via the command line. In choice and hybrid mode, at the beginning of each turn the user is presented with a numbered list of options to choose from. By entering a number, the corresponding option is selected. Hybrid mode is available for IFI-XVAN. It will create a ‘quick command’ list in the side bar that is updated every turn, while keyboard input is also active.

By default, XVAN operates in interpreter mode. Choice/hybrid mode can be activated in two ways:

- In the story info section from the main story file;
- During gameplay through the `playmode()` function.

One of the differences between choice and interpreter games is that choice is about finding out ‘what’ to do and that in an interpreter game one must find out ‘how’ to do it. Porting an interpreter game to a choice game without giving away clues is not always easy.

How does choice mode work? As an example, we will activate choice mode for our bedroom location. The list of possible choices is composed by the location and its contained objects. XVAN has a predefined trigger `t_choice` and a function `addchoice()` for this purpose.

Just before user input is required (after prologue, `t_entrance` etc), the interpreter checks the play mode. If it is not interpreter mode, it will tell the location and contained objects to execute their `t_choice` trigger. In `t_choice` an object can use the `addchoice()` function to add a possible choice to the list of choices.

E.g. `addchoice("Get out", "west")` will add the text “Get out” to the choice list. When this option is selected, the text “west” will be fed into the interpreter as user input.

Back to our bedroom location example. In the bedroom there are 3 contained objects:

- the sink (`o_sink`);
- the tap (`o_tap`);
- the water (`o_water_bedroom`);
- the drain pipe (`o_drain_pipe_bedroom`)

In choice mode, the bedroom, tap and water are likely to want to contribute to the choices list:

Bedroom: leave the room;

Tap: open or close the tap;

Water: drink it.

This gives us the following `t_choice` code:

```
$LOCATION |_bedroom
.....
t_choice
```

```

    addchoice("Leave", "east")
.....
END_LOC
$OBJECT o_tap
.....
    t_choice
    if testflag(f_open) then
        addchoice("Close the tap", "close tap")
    else
        addchoice("Open the tap", "open tap")
.....
END_OBJ
$OBJECT o_water_bedroom
.....
    t_choice
    if not(testflag(f_hidden)) then
        addchoice("Drink from the water", "drink water")
.....
END_OBJ

```

But when do we best switch on and off the choice mode?

Switching on choice mode:

Choice mode has to be switched on before the interpreter checks to see where it must get the user input from. Possible moments are in `t_exit` from `l_upstairs` or in `t_entrance` from `l_bedroom`. My choice would be `t_entrance`, because in `t_exit` from `l_upstairs`, the `t_choice` has to do an additional check to make sure we are actually going west to the bedroom and not downstairs again.

Switching off choice mode:

This can be done in `t_exit` from `l_bedroom`.

```

$LOCATION l_upstairs
.....
    t_exit
    if equal(%dir, west) then
        playmode(choice)
.....
END_LOC
$LOCATION l_bedroom
.....
    t_entrance # replaces code in t_exit for l_upstairs
    ....
    playmode(choice)
    ....
    t_exit
    playmode(interpreter)
.....
END_LOC

```

Finally

This ends the tutorial. Everything we did is in the files `part6-end.xvn` and `part6-end.lib`. I hope the tutorial gave enough information to start implementing your own game. The XVAN distribution comes with a number of sample stories that can serve as examples.

For comments or questions, contact me at marnix.home@gmail.com.