

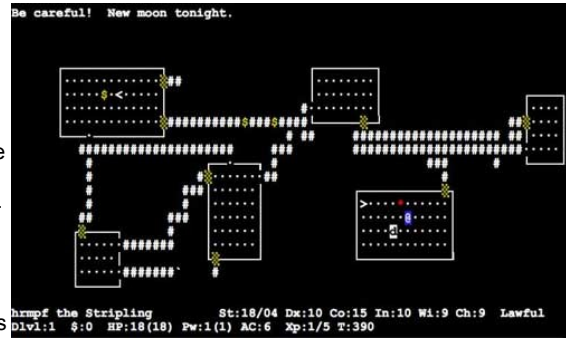
## Breakdown of User Interface Design in *Monster King!*

This is what *NetHack*, the template for roguelikes, looks like:

This is the template *Monster King!*, a 4-month game project with of 5 students, developed from. Among my responsibilities for the game were designing and implementing the interface.

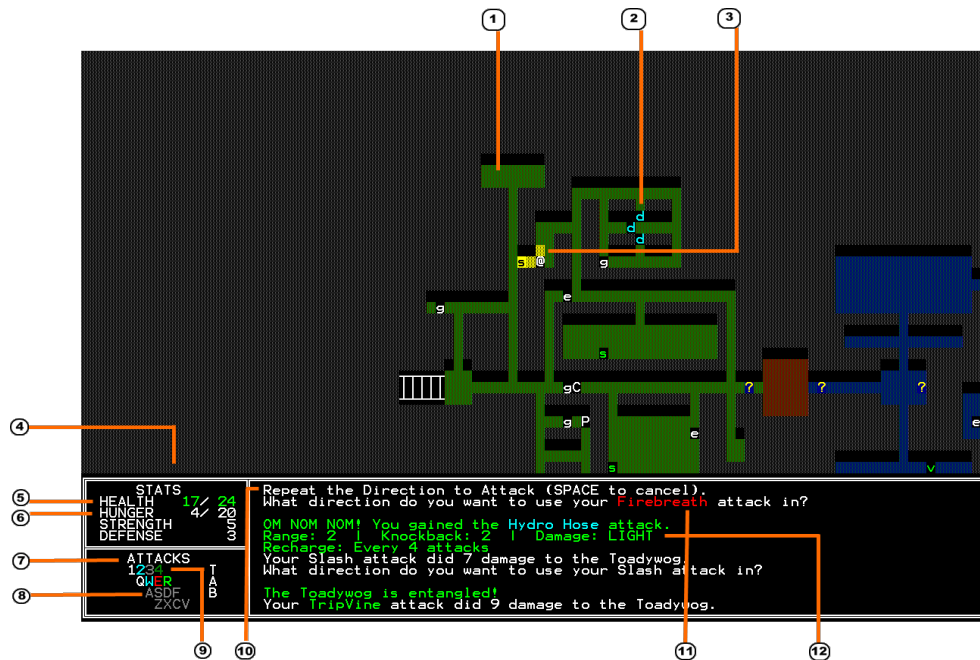
The greatest challenge in developing the interface was in transmitting all the information the player needed cleanly and efficiently without using graphics. Early versions of the game dumped information into the text box needlessly. Through multiple iterations, this information was implemented in cleaner ways and distributed throughout the screen.

Restricted to ASCII and the Windows console color palette, I decided on 5 colors to use in the text box. Standards were used so that the colors always represented a type of information – yellow representing important game knowledge, red representing damage to the player, etc.



Sound design even played a role in the user interface, allowing me to offload certain messages to sound effects cues that I implemented. Even without graphics, I was able to use color highlighting and limited animations to represent attack effects without having to print status.

Through design of *Monster King!*, I came to appreciate the role of UI as the main information pipeline to the player.



### Notable Elements of the *Monster King!* Interface:

1. Each sub-level has a different floor color. This subtly lets the player know that a new area has opened when they first see a brand new color in the game.
2. Each enemy is colored according to their element type. The letter representing the monster is always the beginning of its name. Letters are never repeated, to avoid confusion.
3. When an attack is picked, the ground is highlighted to indicate potential attack locations. This instantly transmits information about the attacks range and any area of effect it may have.
4. All stats are contained in a box to give it a screen region. After some experimentation, this box was moved to the lower-left side of the screen, because the eye has the shortest distance to travel from there to the start of the text box, which reads left-to-right.
5. Health is color coded (green, yellow, or red) to indicate status without requiring a direct scan by the player.
6. Hunger is white until it gets below 25%, to notify the player that the level is almost over. At one point it was always colored similarly to Health, but this was found to distract from the visual impact that colored Health had.
7. Attacks are laid out to correspond to the keys on the keyboard. Each column is an element style of attack, and each row is a tier of attack power.
8. Powers the player does not yet have are grayed out, transmitting the information of a goal the player can see and anticipate.
9. When a power is gained, it lights up. Certain powers have cooldowns – when they are used, they retain their color but dim (if the key is pressed, text prints informing the player when they will be able to use the attack again).
10. Text scrolls from top to bottom (new text appears on the top) to minimize the distance the eye has to travel from the player at the center of the screen to the newest messages.
11. Attacks are picked out in text as by their element color.
12. Specific formatting is used when a new attack is gained or when a player inspects a monster. It remains consistent so the player does not have to search the text for the information they need.