## **Type Invariants**

The definition of Time is straightforward, but, it will cause problems. There are certain restrictions on what values members of a Time object may and may not have. Given our specification, for instance, hours must be between 0..23 and minutes must be between 0..59. We call these the type's invariants.

But, with structures, we have **no means of enforcing those restrictions**. There is **nothing to prevent** someone, (most likely you, if you aren't careful), from constructing a bogus **Time** object like this:

```
Time bed_time = {27, 95};
```

Both values supplied here makes the **Time** object, **bed\_time**, **invalid**. But, the code compiles fine; everything is perfectly legal C++, and the compiler has no idea that something bad might happen in the future.



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