

Guidelines for using set! and set-structure!

When should you use set! to solve a problem, and when should you use set-structure!? These guidelines should help you choose:

1. **If you're working with a list of structs, and the change is confined to one struct, use set-structure!**

We did this for the `deposit` function. Although you could solve `deposit` by using `set!` and writing a helper that rebuilds the entire list, why go to all that work? `set-structure!` is a better choice here.

2. **If you're working with a list of structs, and the change will affect the list as a whole, you must use set!**

We did this for the `remove-account` function. We wanted to remove an entire account, which would modify the list of accounts overall. `set-structure!` works only on structs, not on variables (such as a `ListOfStruct`) in general.

3. **If you're working with a single struct which is shared, and you want changes to the struct to be visible everywhere the struct is shared, use set-structure!**

We did this when we used `set-account-balance!` on an account that was shared by two customers, `Mcust` and `Pcust`. Changes made to the account structure using `set-account-balance!` were visible everywhere.

4. **If you're working with a single struct which is shared, and you want changes to the struct to be visible in only one place, use set!**

Say that our two customers, Maria and Phil, break up and no longer want to share the account defined by `MPacct`. We could change the definition of one of the customers by creating a new customer with `set!`:

```
(set! Mcust (make-customer "Maria" 5554321 (make-account 123 200)))
```

This replaces the definition for `Mcust` with a whole new customer structure (and a whole new account structure). The old definition for `Mcust` is no longer available.