

# Code Layout

- > Only perform writes via helper funcs, never update models directly
- > Put all transactions in one file for easier auditing & testing

banking/transactions.py:

```
def transfer_money(src, dst, amt):  
    with transaction.atomic():  
        ...  
  
def merge_accounts(user_a, user_b):  
    with transaction.atomic():  
        ...  
  
def archive_account(user):  
    with transaction.atomic():  
        ...
```

```
from banking.transactions import transfer_money  
  
...
```

# Hardware Layer Concerns

- > The database can't guarantee data integrity on its own
- > Bit flips are common, use ECC RAM (and ZFS!)
- > Streaming replication or snapshots to do offsite-backups
- > Synchronizing clocks between systems is very hard

OFFSITE BACKUPS. OFFSITE BACKUPS. SET UP YOUR OFFSITE BACKUPS.  
OFFSITE BACKUPS. OFFSITE BACKUPS. TEST YOUR OFFSITE BACKUPS.  
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