```
                          ┌─────────────────┐
                          │   program mgr   │
                          └─────────────────┘
                         ╱                     ╲
          ┌─────────────────┐           ┌─────────────────┐
          │   assignemnt    │           │    engineer     │
          └─────────────────┘           └─────────────────┘
                   │                              ╲
          ┌─────────────────┐                      ╲
          │     Client      │                       ╲
          └─────────────────┘                        ╲
                    ╲              ┌─────────────────┐
                     ╲             │    Location     │
                                   └─────────────────┘
```

**engineer object:**
singleton ass;
Location l1;
bool available;
time shiftStart;
time shiftEnd;
**engineer methods:**
setAssignment(Assignment)
bool ExecAssinment();

**assignment objects:**
client c1;
time t1;
bool status;

**assignmet methods:**
bool setStatus(bool a);

**location objects:**
enum locations;
**location methods:**
setLocation(String a);

**program mgr object:**
ArrayList<assignment> assignments;
ArrayList <engineers> engineers;

**program mgr methods:**
setAllAssinments();

**client object:**
string phonenum;
Location l1;
**client methods:**
getLocation();