

Unadjusted Actor Weight (UAW)

| | | |
|---------|---|------------|
| مَعْقَد | 3 | الطالب |
| مَعْقَد | 3 | المتبرع |
| مَعْقَد | 3 | مكتب عقاري |
| مَعْقَد | 3 | مدير |

$$Uaw = 4 * 3 = 12$$

Unadjusted use case Weight (UUCW)

| | | |
|---------|----|---------------------------|
| Simple | 5 | تسجيل دخول |
| average | 10 | تسجيل طلب اشتراك |
| average | 10 | اختيار بيت للاجار |
| simple | 5 | تتبع طلب الاجار |
| Simple | 5 | إضافة مبلغ للتبرع به |
| average | 10 | تتبع سجل التبرعات |
| average | 10 | إضافة عقارات للاجارات |
| simple | 5 | حذف عقار |
| simple | 5 | قبوع او رفض الطلب |
| average | 10 | إدارة عملية التبرعات |
| complex | 15 | إدارة الحسابات المستخدمين |
| average | 10 | إدارة عملية إضافة منازل |

$$UUCW = (6*10) + (5*5) + 15 = 100$$

Technical Complexity Factor

| Factor | Description | wieght | Assigned value | W * A |
|--------|--------------------------------------|--------|----------------|-------|
| T1 | Distributed system | 2 | 5 | 10 |
| T2 | Response time/performance objectives | 1 | 3 | 3 |
| T3 | End-user efficiency | 1 | 3 | 3 |
| T4 | Internal processing complexity | 1 | 2 | 2 |
| T5 | Code reusability | 1 | 3 | 3 |
| T6 | Easy to install | 0.5 | 5 | 2.5 |
| T7 | Easy to use | 0.5 | 5 | 2.5 |
| T8 | Portability to other platforms | 2 | 3 | 6 |

| | | | | |
|-----|--------------------------------|---|---|---|
| T9 | System maintenance | 1 | 4 | 4 |
| T10 | Concurrent/parallel processing | 1 | 1 | 1 |
| T11 | Security features | 1 | 2 | 2 |
| T12 | Access for third parties | 1 | 1 | 1 |
| T13 | End user training | 1 | 3 | 3 |

$$\text{TCF} = 0.6 + (0.1 * 43) = 1.03$$

Environmental Complexity Factor

| Factor | Description | Weight | Assigned value | W * A |
|--------|---|--------|----------------|-------|
| E1 | Familiarity with development process used | 1.5 | 3 | 4.5 |
| E2 | Application experience | 0.5 | 3 | 1.5 |

| | | | | |
|-----------|------------------------------------|------------|----------|------------|
| E3 | Object-oriented experience of team | 1 | 4 | 4 |
| E4 | Lead analyst capability | 0.5 | 5 | 2.5 |
| E5 | Motivation of the team | 1 | 4 | 4 |
| E6 | Stability of requirements | 2 | 1 | 2 |
| E7 | Part-time staff | -1 | 0 | 0 |
| E8 | Difficult programming language | -1 | 4 | -4 |

$$\text{ECF} = 1.4 + (-0.03 \times 14.5) = 0.965$$

Use Case Point

$$\begin{aligned}
 \text{UCP} &= (\text{UUCW} + \text{UAW}) * \text{TCF} * \text{ECF} \\
 &= (90 + 12) * 1.03 * 0.965 \\
 &= 101.3829
 \end{aligned}$$