To Whom It May Concern,

Find attached a report detailing our best estimates on what a prospective feature list would look like if we were to reduce development time to 80 or 70 person-days. These estimates assume that we are only deducting from the original 100 person-days available for development, as such represent 20 and 30 percent reductions from the original 100 person-days.

Find attached:

1. A single table outlining our original use cases.
2. A single table outlining the benefit, penalty, value, cost, risk priority, and rank of our features (use-cases) mapped to the original use-cases in the original use-case document.
3. Two feature-lists specifying viable feature lists if we were to reduce our developmental person-days to 80 and 70 days.

Feature lists are created by choosing the highest ranking features (found in attachment 2) and adding them to the feature-list until the target cost is reached. As we are targeting 80 and 70 person-days of our original 100, we have 80 and 70 percent available resources in terms of time (cost) respectively.

A few things to note when reading the feature lists:

* The original feature list (measured at 100 person-days) reflects 100% completion of all use-cases and optional features (history, graphing, payslip generation, automated scripts, etc…)
* In the reduced feature lists, some of the optional features will be taken away to keep key functionality but at a lower cost. You will find notes denoting such changes in the ‘notes’

Thank You,

Evan Louie

**100 Person Days**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Feature (UC)** | **Benefit** | **Penalty** | **Value** | **Value %** | **Cost** | **Cost %** | **Risk** | **Risk %** | **Priority** | **Rank** |
| 1 | 2 | 4 | 6 | 2.843602 | 6 | 6.818182 | 3 | 3.947368 | 0.264139 | 15 |
| 2 | 4 | 3 | 7 | 3.317536 | 5 | 5.681818 | 2 | 2.631579 | 0.399059 | 11 |
| 3 | 3 | 4 | 7 | 3.317536 | 5 | 5.681818 | 3 | 3.947368 | 0.344529 | 13 |
| 4 | 4 | 3 | 7 | 3.317536 | 7 | 7.954545 | 5 | 6.578947 | 0.228268 | 17 |
| 5 | 6 | 4 | 10 | 4.739336 | 3 | 3.409091 | 2 | 2.631579 | 0.784571 | 6 |
| 6 | 1 | 1 | 2 | 0.947867 | 7 | 7.954545 | 4 | 5.263158 | 0.071712 | 19 |
| 7 | 6 | 3 | 9 | 4.265403 | 1 | 1.136364 | 8 | 10.52632 | 0.365731 | 12 |
| 8 | 8 | 8 | 16 | 7.582938 | 3 | 3.409091 | 2 | 2.631579 | 1.255314 | 1 |
| 9 | 6 | 5 | 11 | 5.21327 | 3 | 3.409091 | 3 | 3.947368 | 0.708666 | 8 |
| 10 | 6 | 8 | 14 | 6.635071 | 4 | 4.545455 | 3 | 3.947368 | 0.781256 | 7 |
| 11 | 6 | 7 | 13 | 6.161137 | 2 | 2.272727 | 4 | 5.263158 | 0.817573 | 5 |
| 12 | 5 | 7 | 12 | 5.687204 | 7 | 7.954545 | 7 | 9.210526 | 0.331324 | 14 |
| 13 | 5 | 4 | 9 | 4.265403 | 9 | 10.22727 | 8 | 10.52632 | 0.205526 | 18 |
| 14 | 4 | 2 | 6 | 2.843602 | 1 | 1.136364 | 8 | 10.52632 | 0.243821 | 16 |
| 15 | 9 | 9 | 18 | 8.530806 | 8 | 9.090909 | 3 | 3.947368 | 0.654289 | 9 |
| 16 | 9 | 9 | 18 | 8.530806 | 5 | 5.681818 | 1 | 1.315789 | 1.219103 | 2 |
| 17 | 9 | 9 | 18 | 8.530806 | 5 | 5.681818 | 2 | 2.631579 | 1.026152 | 3 |
| 18 | 8 | 7 | 15 | 7.109005 | 3 | 3.409091 | 3 | 3.947368 | 0.966362 | 4 |
| 19 | 6 | 7 | 13 | 6.161137 | 4 | 4.545455 | 5 | 6.578947 | 0.55384 | 10 |
|  |  |  |  |  |  |  |  |  |  |  |
| **Total** |  |  | **211** |  | **88** | **100** | **76** |  |  |  |

Notes:

* ALL ‘optional’ functionality is present in this feature list (history tracking for UC1, graphing functionality for UC4, etc…)

**80 Person Days**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Feature (UC)** | **Benefit** | **Penalty** | **Value** | **Value %** | **Cost** | **Cost %** | **Risk** | **Risk %** | **Priority** | **Rank** |
| 1 | 1 | 3 | 4 | 2.061856 | 4 | 4.545455 | 3 | 4.615385 | 0.225073 | 16 |
| 2 | 4 | 3 | 7 | 3.608247 | 5 | 5.681818 | 2 | 3.076923 | 0.41196 | 11 |
| 3 | 3 | 4 | 7 | 3.608247 | 5 | 5.681818 | 3 | 4.615385 | 0.35041 | 12 |
| 4 | 3 | 3 | 6 | 3.092784 | 4 | 4.545455 | 5 | 7.692308 | 0.252725 | 14 |
| 5 | 6 | 4 | 10 | 5.154639 | 3 | 3.409091 | 2 | 3.076923 | 0.794731 | 6 |
| 7 | 6 | 3 | 9 | 4.639175 | 1 | 1.136364 | 8 | 12.30769 | 0.345073 | 13 |
| 8 | 8 | 8 | 16 | 8.247423 | 3 | 3.409091 | 2 | 3.076923 | 1.27157 | 2 |
| 9 | 6 | 5 | 11 | 5.670103 | 3 | 3.409091 | 3 | 4.615385 | 0.706601 | 8 |
| 10 | 6 | 8 | 14 | 7.216495 | 4 | 4.545455 | 3 | 4.615385 | 0.787755 | 7 |
| 11 | 6 | 7 | 13 | 6.701031 | 2 | 2.272727 | 4 | 6.153846 | 0.795226 | 5 |
| 13 | 5 | 4 | 9 | 4.639175 | 9 | 10.22727 | 8 | 12.30769 | 0.205866 | 17 |
| 14 | 4 | 2 | 6 | 3.092784 | 1 | 1.136364 | 8 | 12.30769 | 0.230048 | 15 |
| 15 | 9 | 9 | 18 | 9.278351 | 8 | 9.090909 | 3 | 4.615385 | 0.676941 | 9 |
| 16 | 9 | 9 | 18 | 9.278351 | 5 | 5.681818 | 1 | 1.538462 | 1.28504 | 1 |
| 17 | 9 | 9 | 18 | 9.278351 | 5 | 5.681818 | 2 | 3.076923 | 1.059325 | 3 |
| 18 | 8 | 7 | 15 | 7.731959 | 3 | 3.409091 | 3 | 4.615385 | 0.963547 | 4 |
| 19 | 6 | 7 | 13 | 6.701031 | 4 | 4.545455 | 5 | 7.692308 | 0.54757 | 10 |
|  |  |  |  |  |  |  |  |  |  |  |
| **Total** |  |  | **194** |  | **69** | **78.40909** | **65** |  |  |  |

Notes:

* No history tracking for UC1
* No graphing for UC4
* All other ‘additional’ functionality for present features our still intact

**70 Person days**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Feature (UC)** | **Benefit** | **Penalty** | **Value** | **Value %** | **Cost** | **Cost %** | **Risk** | **Risk %** | **Priority** | **Rank** |
| 1 | 1 | 3 | 4 | 2.061856 | 4 | 4.545455 | 3 | 4.615385 | 0.225073 | 15 |
| 2 | 4 | 3 | 7 | 3.608247 | 5 | 5.681818 | 2 | 3.076923 | 0.41196 | 11 |
| 3 | 3 | 4 | 7 | 3.608247 | 5 | 5.681818 | 3 | 4.615385 | 0.35041 | 12 |
| 4 | 3 | 3 | 6 | 3.092784 | 4 | 4.545455 | 5 | 7.692308 | 0.252725 | 14 |
| 5 | 6 | 4 | 10 | 5.154639 | 3 | 3.409091 | 2 | 3.076923 | 0.794731 | 6 |
| 7 | 6 | 3 | 9 | 4.639175 | 1 | 1.136364 | 8 | 12.30769 | 0.345073 | 13 |
| 8 | 8 | 8 | 16 | 8.247423 | 3 | 3.409091 | 2 | 3.076923 | 1.27157 | 2 |
| 9 | 6 | 5 | 11 | 5.670103 | 3 | 3.409091 | 3 | 4.615385 | 0.706601 | 8 |
| 10 | 6 | 8 | 14 | 7.216495 | 4 | 4.545455 | 3 | 4.615385 | 0.787755 | 7 |
| 11 | 6 | 7 | 13 | 6.701031 | 2 | 2.272727 | 4 | 6.153846 | 0.795226 | 5 |
| 15 | 9 | 9 | 18 | 9.278351 | 8 | 9.090909 | 3 | 4.615385 | 0.676941 | 9 |
| 16 | 9 | 9 | 18 | 9.278351 | 5 | 5.681818 | 1 | 1.538462 | 1.28504 | 1 |
| 17 | 9 | 9 | 18 | 9.278351 | 5 | 5.681818 | 2 | 3.076923 | 1.059325 | 3 |
| 18 | 8 | 7 | 15 | 7.731959 | 3 | 3.409091 | 3 | 4.615385 | 0.963547 | 4 |
| 19 | 6 | 7 | 13 | 6.701031 | 4 | 4.545455 | 5 | 7.692308 | 0.54757 | 10 |
|  |  |  |  |  |  |  |  |  |  |  |
| **Total** |  |  | **179** |  | **59** | **67.04545** | **49** |  |  |  |

Notes:

* No history tracking for UC1
* No graphing for UC4
* Following feature UC13’s feature removal, we automatically removed UC14 as it depends on UC13
* All other ‘additional’ functionality for present features our still intact