**Cost Benefit Analysis**

The proposed application only needs a working android phone that has an android version of Kitkat or newer.

**I. Hardware Cost**

This is optional, if the rider or the delivery person does not have and android phone or it does not meet the required specifications to run the application.

|  |  |  |  |
| --- | --- | --- | --- |
| **Specifications** | **Quantity** | **Unit Price** | **Cost** |
| realme c11 | 1 | 4,990 | 4,990 |

**Total: 4,990**

**Table 3.1 Hardware Cost**

Source: www.Lazada.com.ph

**II. Software Development Cost**

|  |  |  |
| --- | --- | --- |
| **Personnel** | **No. of Personnel** | **Salary** |
| Programmer | 1 | 20,000 |
| System Analyst | 1 | 27,000 |

**Total:47,000**

**Table 3.2 Software Development Cost**

Source: www.jobstreet.com.ph

Personnel Salary for 60 days:

Programmer: 20,000 / 60 = PHP 333.33

System Analyst: 27,000 / 60 = PHP 450

**III. Operational Cost**

1. **System Cost**

|  |  |  |
| --- | --- | --- |
| **Items** | **Specification** | **Cost** |
| Front / Back End | Android Studio | Free |
| Database Hosting | Firebase | 533.65 / month (Small Level) |

**TOTAL:533.65 (MONTHLY)**

**Table 3.3 System Cost**

Source: www.firebase.google.com

1. **Utility Expenses**

|  |  |
| --- | --- |
| **Particulars** | **Cost** |
| Electricity | 6,000 |

**Total: 6,000**

**Table 3.4 Utility Expense**

Computer usage PHP 100 per day for 10 hours in 60 days

Source: [www.meralco.com.ph](http://www.meralco.com.ph)

1. **Training Cost**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Personnel** | **Amount per day** | **Days** | **Hours** | **Total** |
| Administrator | 180 | 3 | 3 | 540 |
| Employee | 180 | 3 | 3 | 540 |

**Total:1,080**

**Table 3.5 Training Cost**

(60 / hour \* 3hours) \* 3 days = PHP540

**IV. Summary Cost**

|  |  |
| --- | --- |
| **Cost** | **Amount** |
| Hardware Cost | 4,990 |
| Software Development Cost | 47,000 |
| System Cost | 533.65 |
| Utility Expense | 6,000 |
| Training Cost | 1,080 |

**TOTAL:** **59,603.65**

**Table 3.6 Summary Cost**

**Estimated Benefits:**

Accuracy and efficiency of the software at 85%

Total estimated benefits = 59,603.65 \* 85%

**Total = PHP 50,662.55**

**Payback Period:**

Payback period = (Total Cost / Total estimated benefits) \* 12

= (59,603.65 / 50,662.55) \* 12

**Total = 14 months or 1 year and 2 months**

**Return of Investment:**

Return of investment = (Total estimated benefits / Total Cost) \* 100

= (50,662.55 / 59,603.65) \* 100

**Total = 85%**