

TECHNICAL GUIDE

Proposed System
Courier Service Bill Calculation

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Introduction

‘Parcel Maters’ is the system of courier service. In our service you can delivered any type of parcels and documents. You can booked us by using this system and after you inputs all the details you can see the charge of our service.

System Requirments

You may run the system in Code blocks or Devc++.

Technology Stack

- C programming language
- Functions, Loops, Switch and If statements, Arrays

Use Case Diagram

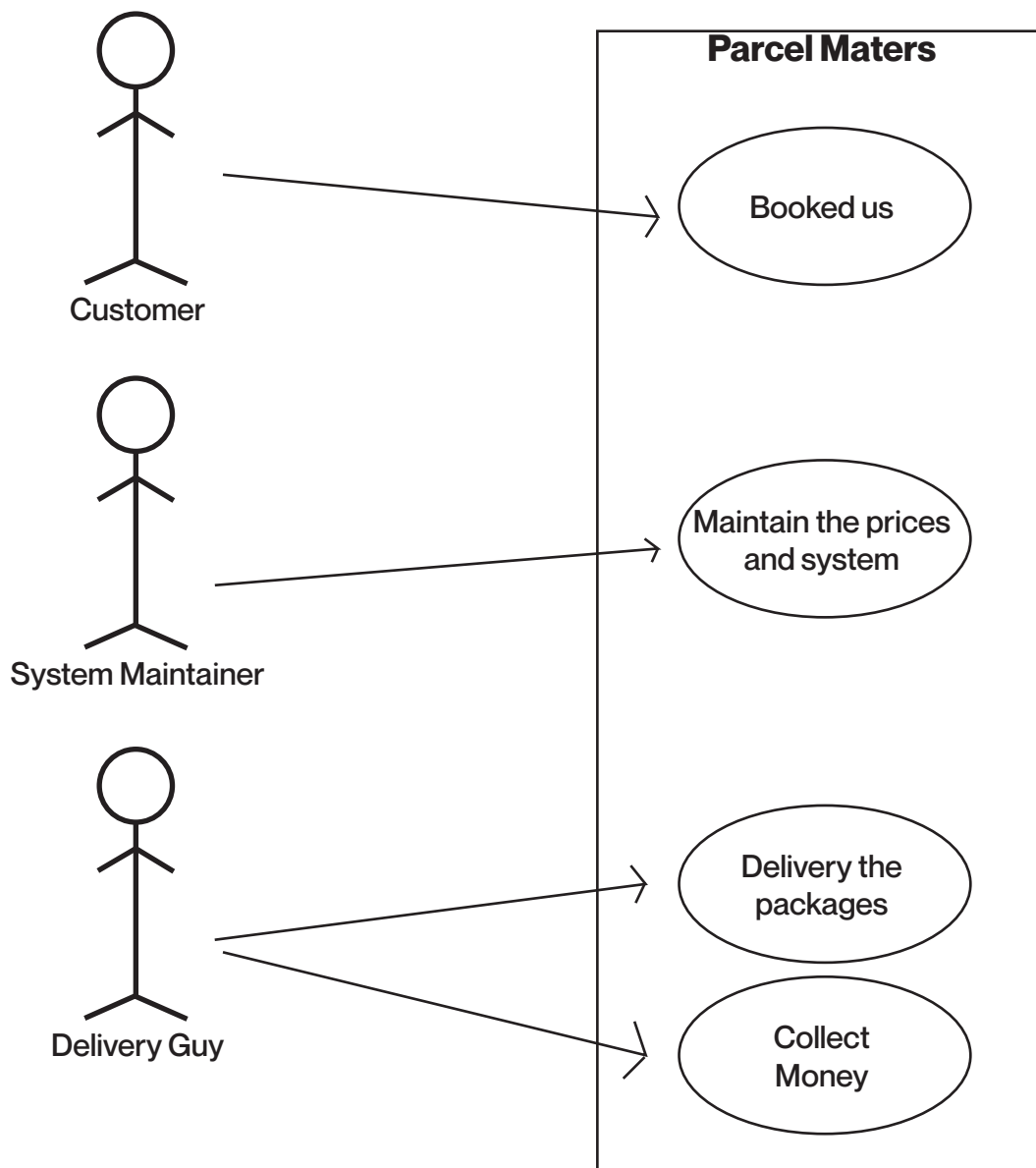


figure 1

Flow Chart

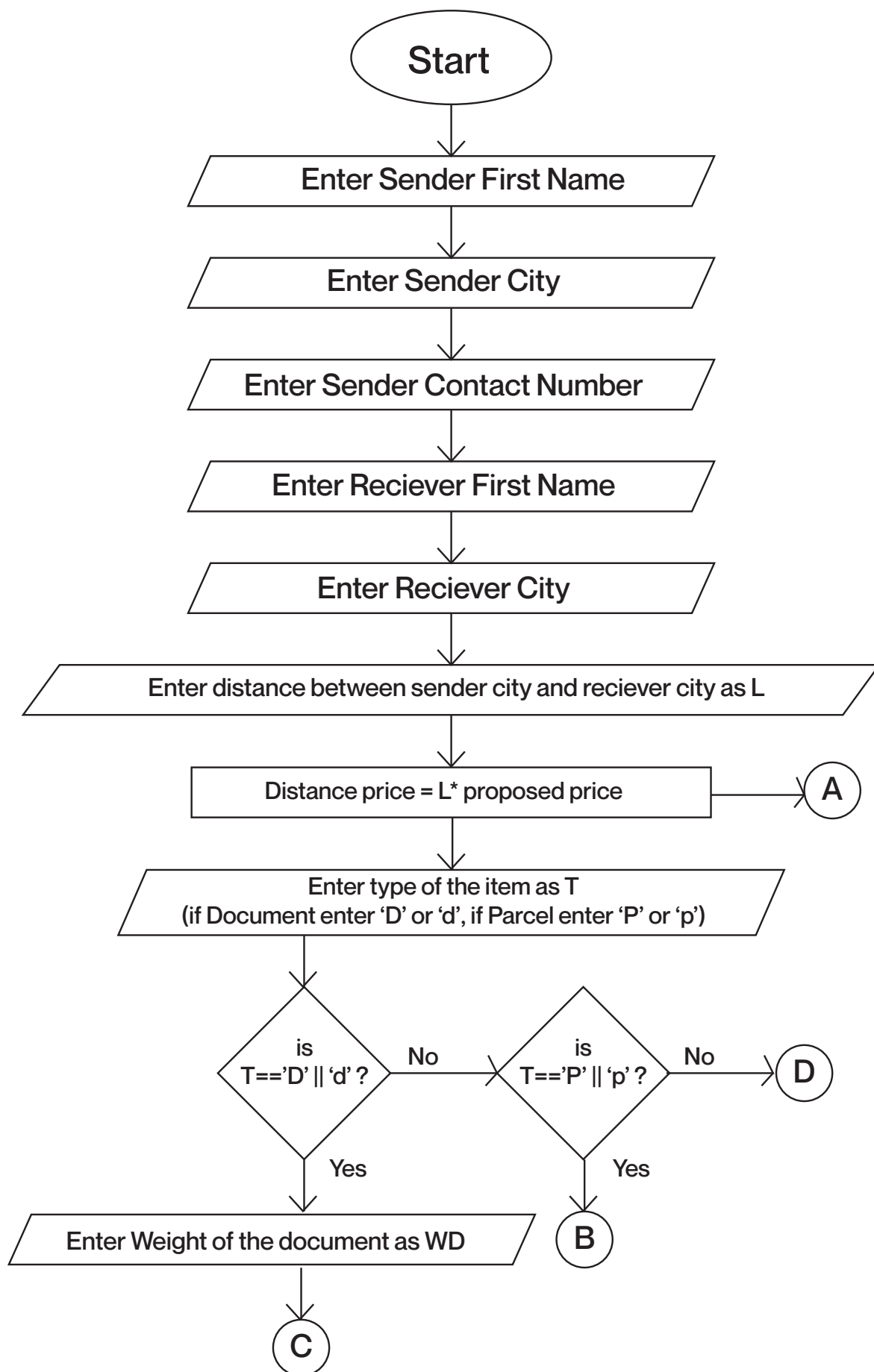


figure 2

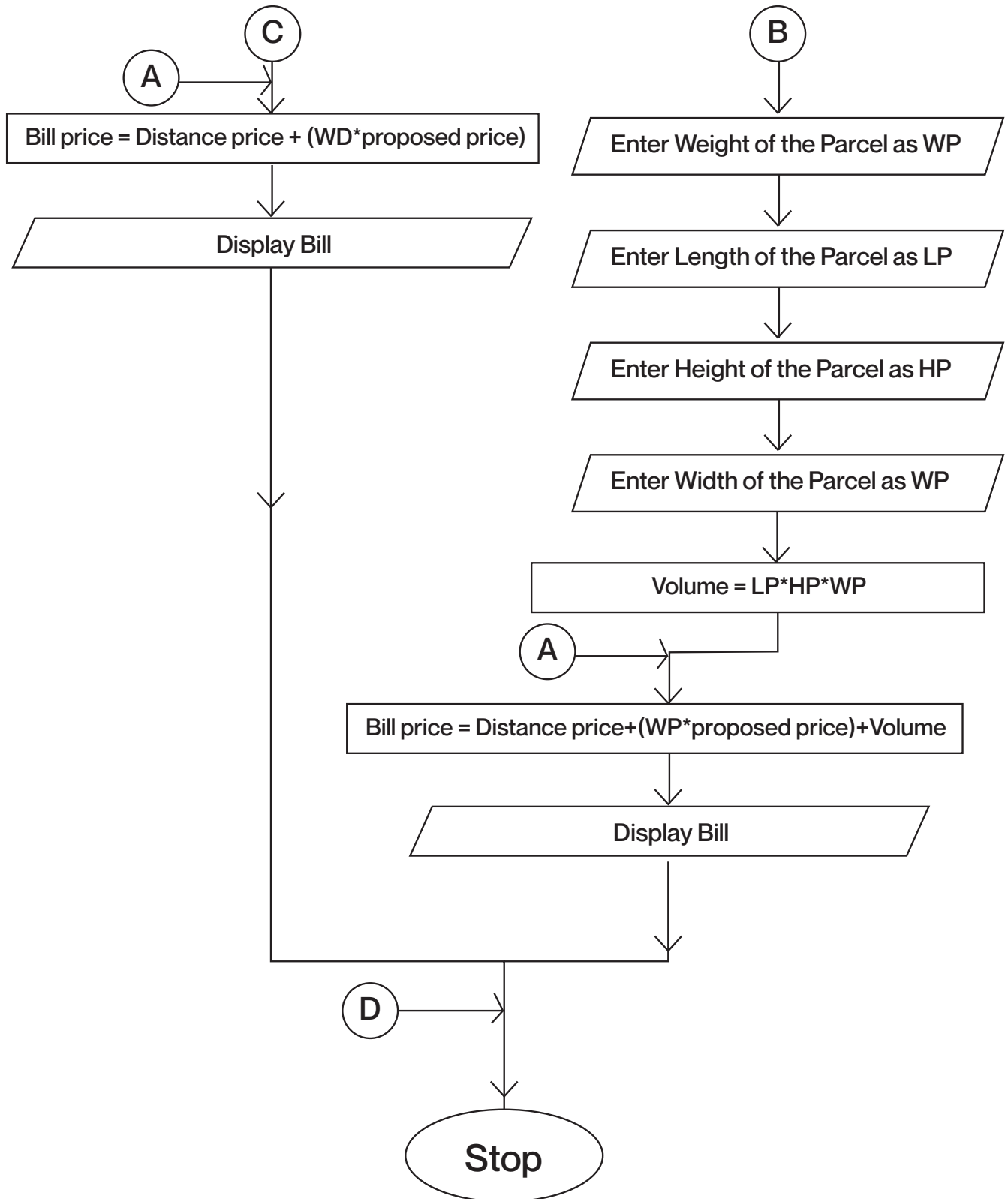


figure 3

Functions

Name	Return Type	Parameters	Description
distancepricecalculation()	integer	Distance (float fltdistance)	This is the price list for according to the cities distance
WandVpricecalculation()	integer	length, height, width, weight of the parcel and array (float fltlength, float fltheight, float fltwidth, float fltweight, int intWtandV_Array [17][8])	This is the price calculations for according to the parcel weight and the volume.
DocumentPrices()	integer	weight of the parcel (float fltweight)	This is the price calculations for Document delivery.
discountCalculate()	float	Total price (float fltTotprice)	This is the price calculations for Discount

Edit Prices

1. First, in main function (intWtandV_Array) array keep the prices of according to the package weight and volume if need to change prices then edit array. And the function of WandVpricecalculation() support to some prices of that.

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int intWtandV_Array [17][8]=
{
    {150,160,170,180,190,200,210,220},
    {250,260,270,280,290,300,310,320},
    {300,310,320,330,340,350,360,370},
    {350,360,370,380,390,400,410,420},
    {400,410,420,430,440,450,460,470},
    {450,460,470,480,490,500,510,520},
    {500,510,520,530,540,550,560,570},
    {550,560,570,580,590,600,610,620},
    {600,610,620,630,640,650,660,670},
    {650,660,670,680,690,700,710,720},
    {700,710,720,730,740,750,760,770},
    {750,760,770,780,790,800,810,820},
    {800,810,820,830,840,850,860,870},
    {850,860,870,880,890,900,910,920},
    {900,910,920,930,940,950,960,970},
    {950,960,970,980,990,1000,1010,1120},
    {1000,1010,1020,1030,1040,1050,1060,1070}
};

```

figure 4

```

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int WandVpricecalculation(float fltlength, float fltheight, float fltwidth, float fltweight, int intWtandV_Array [17][8])
{
    float fltvolume=fltlength*fltwidth*fltheight;
    //printf("%.2f\n",fltvolume);
    int introundvolume = ceil(fltvolume);
    int introundweight = ceil(fltweight);
}

```

figure 5

2. The function of distancepricecalculation() keep the prices according to the distance we are not delivery within 1KM, For change prices then edit function.

```

177 // This is only calculate for weight and not the doc price is weight*distance*delivery fee
178 // we can change the prices by changing this switch
179 int distancepricecalculation(float fltdistance)
180 {
181     int intdistanceprice;
182     int introunddistance;
183     introunddistance=ceil(fltdistance);
184     switch(introunddistance)

```

figure 6

3. The function of DocumentPrices() helps to calculate price of the document package, For change prices then edit function.

```

315 // This is only calculate for weight and not the doc price is weight*distance*delivery fee
316 // we can change the prices by changing this function
317 int DocumentPrices (float fltweight)
318 {
319     int introundweight = ceil(fltweight);
320     int intDocprice = (introundweight*150);
321     return intDocprice;
322 }

```

figure 7

4. The function of discountCalculate() helps to calculate the discount of bill package, For change discount then edit function.

```

330 // we can change the prices by changing this function
331 float discountCalculate(float fltTotprice)
332 {
333     float fltDiscount;
334     if (fltTotprice>=5000)
335     {
336         fltDiscount = ((fltTotprice*15)/100.0);
337     }

```

figure 8

Simple Explanation of System

There are two type of packages first one is document type and other is parcel. In this system calculate parcel in 3 parts, there are Weight, Volume and Distance. Volume calculate by using user inputs parcel width, height and length. There is a array according to the volume and weight it keeps prices. But in the document calculation it used only weight and distance. There is a 10% delivery fee for each package from bill. If the total bill is greater than 5000 then there is a 15% discount for bill.

If there are any doubts then contact - as2020903@sci.sjp.ac.lk