



MINI PROJECT BCI1023 PROGRAMMING TECHNIQUES

DOMAIN: RESOURCE

TITLE: PREPAID AND POSTPAID IN TUNE TALK

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Case Study

Tune Talk is a Malaysian-based telecommunications company that offers both prepaid and postpaid plans to its customers. Tune Talk focuses on providing affordable and flexible mobile plans to its customers. This case study explores the evolution and impact of Tune Talk's prepaid and postpaid plans on the mobile connectivity landscape in Malaysia. It highlights the company's strategies, customer benefits and the competitive advantages gained through these offerings. The company offers both prepaid and postpaid plans, catering to the diverse needs of mobile users in Malaysia. Tune Talk Prepaid Plan offered by Tune Talk allows customers to purchase a SIM card and pay for voice calls, SMS and data usage in advance. This plan provides flexibility and control over expenses, as customers can choose from various data packages and top-up options. The prepaid plan does not require customers to sign a contract, providing them with the freedom to use the service without long-term commitments. Tune Talk Postpaid Plan offers customers the convenience of a monthly billing cycle. It provides a fixed monthly allowance of voice calls, SMS and data usage, eliminating the need for frequent top-ups. Customers enjoy uninterrupted connectivity and additional benefits like international roaming and premium customer support. This allows customers to enjoy uninterrupted connectivity without worrying about running out of credits. Tune Talk also may offer shared postpaid plans that allow multiple devices or family members to share the same monthly allowance. Tune Talk may offer postpaid plans with contract options, typically for a fixed duration. This option may provide customers with subsidized device offers or other benefits. Customers can choose the plan that best suits their usage patterns, budget and preferences, ensuring they have the flexibility and convenience they need for their mobile communication needs.

Prepaid Plans

Top Up	Rewards Points	Validity (days)
RM 5	8	5
RM 10	20	10
RM 15	30	20
RM 20	40	20
RM 30	70	30
RM 50	120	50
RM 100	240	100
RM 200	480	200

Table 1: Top Up Info

Points	Rewards
100	300MB valid for 1 day
	3 days validity – valid for 3 days
	Unlimited Calls – valid for 1 day
150	Get 35% OFF and 35% cashback for bus and ferry ticket when using ‘RedBus’ app
	Get 10% OFF with minimum purchase RM50 capped at RM8 when using ‘YouBeli’ app
200	Get 10% OFF total bill at ‘NinJaz’ store
	Get RM5 OFF with minimum spend RM50 when purchase at ‘Caring’ Pharmacy
300	Enjoy RM8 OFF storewide for a minimum spend of RM80 at Pensonic online
	Enjoy 10% off your total bill at Tealive
	Can switching to Fokus plan
500	2GB valid for 3 days
	10GB YouTube valid for 1 day
2000	8GB valid for 15 days
3000	1 year validity
10000	120GB Data (10GB/month) valid for 1 year

Table 2: Reward Points

Prepaid Plans	Internet	Hotspot	Costs
Daily	500MB	-	RM1
Weekly	Unlimited	-	RM12
Monthly	3GB	-	RM15
	10GB	-	RM20
	30GB	-	RM30
	35GB	-	RM35
	Unlimited	3GB	RM38
	Unlimited	5GB	RM48
	Unlimited	18GB	RM68
Yearly	2GB/month	-	RM99
	10GB/month	-	RM200

Table 3: Normal Prepaid Plans

Fokus Plan	Booster Promotion	Hotspot	Cost
Fokus 33	10GB	4GB	RM33
			RM35
			RM38
Fokus 40	20GB	6GB	RM40
			RM43
			RM48
Bebas 55	20GB	Unlimited	RM55
			RM60
			RM68

Table 4: Fokus Plans

Postpaid Plans

PostPaid Plan	Cost	Internet
PostPaid 40	RM40	30 GB
PostPaid 60	RM60	50 GB
PostPaid 90	RM90	60 GB
PostPaid 120	RM120	105 GB
PostPaid 150	RM150	135 GB

Table 5: Personal Postpaid Plans

Family Plan	Internet	Cost
Family 20	10GB	RM20
Family 30	25GB	RM30
Family 40	50GB	RM45

Table 6: Family Postpaid Plans

Family Lines	Fibre (Mbps)	Cost
3	100	RM290
	500	RM330
	1000	RM430
4	100	RM335
	500	RM375
	1000	RM475
5	100	RM380
	500	RM420
	1000	RM520
6	100	RM425
	500	RM465
	1000	RM565
7	100	RM470
	500	RM510
	1000	RM610

Table 7: Family Unlimited Bundle Plans

Add-Ons	Cost	Internet	Validity
Boosters	RM1	1GB	1 hours
	RM3	1.5GB	1 day
	RM10	10GB	7 days
Hotspots	RM1	60GB	1 hours
	RM3	100GB	1 day
	RM10	1000GB	7 days

Table 8: Add Ons Plans

Objectives

- To investigate user preferences when choosing between prepaid and postpaid plans in Tune Talk
- Compare and contrast Tune Talk's prepaid and postpaid plan offerings in term of pricing, data allowances and features.
- To secure a substantial portion of the telecommunications market in Malaysia by providing competitive prepaid and postpaid plans.
- Focused on delivering affordable, reliable and feature-rich plans to meet diverse customer needs.

Input Screenshot

```

C:\Mini Project - PT assigna >
Number of customer: 2

Customer 1

Enter your name: Elly
Purchase how many time for internet plan: 2

Enter phone number 1: 81154632525
Enter phone number 2: 81141255478

Phone Number 1: 81154632525

Enter Type of plan [1: Prepaid, 2: PostPaid]: 1

Enter your amount of top-up
1-RM5
2-RM10
3-RM15
4-RM20
5-RM30
6-RM50
7-RM100
8-RM200 : 8

Rewards points:488

Do you want to claim your reward (y=yes,n=No): y

Reward:
1-300RM valid for 1 day
2-3 days validity(valid for 3 days)
3-Unlimited Calls(valid for 1 day)

Do you want to claim your reward (y=yes,n=No): y

Choose your reward: 2

Are you using Fokus Plan? [y:Yes, n:No]: y

Select Fokus Plan [1: Fokus 23, 2: Fokus 40, 3: Fokus 55]: 1

Select plan [1: RM33/12 months, 2: RM35/3 months, 3: RM38/1 month]: 1

Do you want to Add-ons? [y:Yes, n:No]: n

Your balance is insufficient
Enter your amount of top-up
1-RM5
2-RM10
3-RM15
4-RM20
5-RM30
6-RM50
7-RM100
8-RM200 : 8
Balance = RM4.00

Phone Number 2: 81141255478

Enter Type of plan [1: Prepaid, 2: PostPaid]: 1

Enter your amount of top-up
1-RM5
2-RM10
3-RM15
4-RM20
5-RM30
6-RM50
7-RM100
8-RM200 : 5

Rewards points:70

Are you using Fokus Plan? [y:Yes, n:No]: n

Select Periodical [1:Daily, 2:Weekly, 3:Monthly, 4:Yearly]: 3

Select monthly package
[1: 3GB
2: 10GB
3: 30GB
4: 35GB
5: Unlimited Internet with 3GB hotspots
6: Unlimited Internet with 5GB hotspots
7: Unlimited Internet with 10GB hotspots]: 5

Do you want to Add-ons? [y:Yes, n:No]: y

Select Add-Ons Plan [1: Roamers, 2: Hotspots]: 2

Select Internet [4:60GB, 5:100GB, 6:1000GB]: 4
```

```

Your balance is insufficient
Enter your amount of top-up
1-RM5
2-RM10
3-RM15
4-RM20
5-RM30
6-RM50
7-RM100
8-RM200 : 3
Balance + RM6.88

Customer 3

Enter your name: Hanis Ahi
Purchase how many time for internet plan: 3

Enter phone number 1: 01125699631

Enter phone number 2: 01122036122

Enter phone number 3: 01121123500

Phone Number 1: 01125699631

Enter type of plan [1: Prepaid, 2: PostPaid]: 2

Please enter your plan [1:Personal plans, 2:Family plan, 3:Family Unlimited Bundle]: 1

Please enter the package you want [1:PostPaid 00, 2:PostPaid 60, 3:PostPaid 90, 4:PostPaid 120, 5:PostPaid 150]: 3

Do you want to Add-ons? [y:Yes, n:No]: n

```

```

Phone Number 2: 01122036122

Enter Type of plan [1: Prepaid, 2: PostPaid]: 2

Please enter your plan [1:Personal plans, 2:Family plan, 3:Family Unlimited Bundle]: 2

Please enter your plan [1:Family 20, 2:Family 30, 3:Family 00]: 2

Do you want to Add-ons? [y:Yes, n:No]: n

```

```

Phone Number 3: 01121123500

Enter Type of plan [1: Prepaid, 2: PostPaid]: 2

Please enter your plan [1:Personal plans, 2:Family plan, 3:Family Unlimited Bundle]: 3

Please enter your Family lines
1:Family lines 3
2:Family lines 4
3:Family lines 5
4:Family lines 6
5:Family lines 7 : 4

Select Fibre [1:100Mbps, 2:500Mbps, 3:1000Mbps]: 2

Do you want to Add-ons? [y:Yes, n:No]: y

Select Add-Ons Plan [1: Boosters, 2: Hotspots]: 1

Select Internet [1:1GB, 2:1.5GB, 3:10GB]: 1

```

Output Screenshot

```
Customer 1
Name: Elly
Phone Number 1: 01150432520
Type of Plan = PrePaid
Total Amount of Top-up = RM200
Validity days: 200 days
Total Reward point = 300
Periodical = Monthly
Internet = Unlimited
Hotspot = 4GB
Booster Promotion = 10GB
Total Cost = RM396.00
Balance = RM-196.00

Your balance is insufficient
Enter your amount of top-up
1-RM5
2-RM10
3-RM15
4-RM20
5-RM30
6-RM50
7-RM100
8-RM200 : 8
Balance = RM0.00
```

```
Customer 1
Name: Elly
Phone Number 2: 01141255478
Type of Plan = PrePaid
Total Amount of Top-up = RM30
Validity days: 1 hours
Total Reward point = 300
Periodical = Monthly
Internet = 4GB
Hotspot = 3GB
Booster Promotion = 10GB
Add-Ons Package = Hotspot
Add-Ons Internet = 6GB
Add-Ons Validity = 1 hours
Total Cost = RM59.00
Balance = RM-9.00

Your balance is insufficient
Enter your amount of top-up
1-RM5
2-RM10
3-RM15
4-RM20
5-RM30
6-RM50
7-RM100
8-RM200 : 3
Balance = RM6.00
```

```
Customer 2
Name: Hanis Ani
Phone Number 1: 01126699631
PostPaid Package = PostPaid 90
Internet = 6GB
Total amount that needs to be paid = RM91.00
```

```
Customer 2
Name: Hanis Ani
Phone Number 2: 01123536322
PostPaid Package = Family 30
Internet = 25GB
Total amount that needs to be paid = RM31.00
```

```
Customer 3
Name: Hanis Ani
Phone Number 3: 01121120500
PostPaid Package = Family Lines 6
Fiber = 100Mbps
Add-Ons Package = Boosters
Add-Ons Internet = 1GB
Add-Ons Validity = 1 hours
Total amount that needs to be paid = RM66.00

Process returned -10737941810 (0xC0000005)   execution time : 361.045 s
Press any key to continue.
```

Codes

```
#include<stdio.h>

void TopUpInfo ();
int RewardPoint (char*claimReward, int point);
double NormalPlan ();
void FokusPlan (double*cost);
void personalPostpaidPlan ();
double FamilyPlan (int*postpaidType);
void FamilyBundle (int familyUnlimitedBundle);
char AddOns ();

char *internet, *hotspot, *planName, *boosterPromo,*postPaidPlan,
redeem, specialPlan, *dayName, claimReward, wishReward;
char name[20], addOns, *add_ons, *fibreName, *validity,
*familyLines;
int prepaidType[5], fokusPlan[5], topUp[5], point, reward,
postpaidType[5], customer, purchase, i, j;
int addOnsPlan[5], fibre, familyUnlimitedBundle, input[3], exit,
rpoint;
double cost, balance, total_balance, totalAmount, addOnsCost;

int main()
{
    int phoneNum[customer][purchase][30];

    printf("Number of customer: ");
    scanf("%d", &customer);

    for (i=0; i<customer; i++){

        fflush(stdin);
        FILE *info = fopen ("userInfo.txt", "w");

        if (info == NULL){
            printf("\nFile does not exists\n");
            return;}

        printf("\nCustomer %d \n", i+1);
        fprintf(info, "\nCustomer %d", i+1);

        fflush(stdin);
        printf("\nEnter your name: ");
        gets(name);
        fprintf(info, "\nName: %s", name);

        printf("Purchase how many time for internet plan: ");
        scanf("%d", &purchase);

        fclose(info);
```

```

        fflush(stdin);
        for (j=0; j<purchase; j++){

            printf("\nEnter phone number %d: ", j+1);
            scanf("%s", &phoneNum[i][j]);}

        fflush(stdin);

        for(j=0; j<purchase; j++){

            printf("\nPhone Number %d: %s\n", j+1, phoneNum[i][j]);

            printf("\nEnter Type of plan [1: Prepaid, 2: PostPaid]: ");
            scanf("%d", &input[1]);

            if (input[1] == 1){ // Top-up amount, validity and reward
point
                printf("\nEnter your amount of top-up\n1-RM5\n2-RM10\n3-
RM15\n4-RM20\n5-RM30\n6-RM50\n7-RM100\n8-RM200 : ");
                scanf("%d",&topUp[1]);

                TopUpInfo ();

                printf("\nRewards points:%d\n",point);

                fflush(stdin);

                RewardPoint (&claimReward, point);

                planName = "PrePaid";

                printf("\nAre you using Fokus Plan? [y:Yes, n:No]: ");
                scanf(" %c", &specialPlan);

                fflush(stdin);
                if (specialPlan == 'n' || specialPlan=='N'){ // normal
internet plan (prepaid)

                    printf("\nSelect Periodical [1:Daily, 2:Weekly,
3:Monthly, 4:Yearly]: ");
                    scanf("%d", &prepaidType[3]);

                    NormalPlan ();}

                fflush(stdin);
                if (specialPlan == 'y' || specialPlan == 'Y') { // fokus
plan (prepaid)

                    printf("\nSelect Fokus Plan [1: Fokus 33, 2: Fokus 40,
3: Bebas 55]: ");
                    scanf("%d", &fokusPlan[2]);

```

```

        FokusPlan (&cost);}}

    fflush(stdin);

    if (input[1] == 2){ //postpaid plan

        printf("\nPlease enter your plan [1:Personal plans,
2:Family plan, 3:Family Unlimited Bundle]: ");
        scanf("%i",&postpaidType[3]);

        if(postpaidType[3]==1){

            printf("\nPlease enter the package you want
[1:PostPaid 40, 2:PostPaid 60, 3:PostPaid 90, 4:PostPaid 120,
5:PostPaid 150]: ");
            scanf("%i",&postpaidType[1]);
            personalPostpaidPlan ();}

        else if ( postpaidType[3] == 2 ){

            printf("\nPlease enter your plan [1:Family 20,
2:Family 30, 3:Family 40]: ");
            scanf("%i",&postpaidType[2]);
            FamilyPlan (&postpaidType);}

        else {
            printf("\nPlease enter your Family lines\n1:Family
lines 3\n2:Family lines 4\n3:Family lines 5\n4:Family lines
6\n5:Family lines 7 : ");
            scanf("%i",&familyUnlimitedBundle);

            FamilyBundle (familyUnlimitedBundle);}}

    AddOns ();

    // output
    info = fopen("userInfo.txt", "r");
    char line[200];
    fflush(stdin);
    while(!feof(info)){
        fgets(line, 200, info);
        puts(line);}
    fclose(info);
    printf("\nPhone Number %d: %s\n", j+1, phoneNum[i][j]);

    if (input[1] == 1){

```

```

printf("Type of Plan = %s\n", planName);
printf("Total Amount of Top-up = RM%d\n", topUp[2]);
printf("Validity days: %s\n", validity);
printf("Total Reward point = %d\n", rpoint);

totalAmount = cost + addOnsCost;
balance = topUp[2] - totalAmount;

printf("Periodical = %s \n", dayName);
printf("Internet = %s\n", internet);
fflush(stdin);
if(fokusPlan[2] == 1 || fokusPlan[2] == 2 ||
fokusPlan[2] == 3 || prepaidType[1] == 5 || prepaidType[1] == 6 ||
prepaidType[1] == 7){
    printf("Hotspot = %s\n", hotspot);}
if(fokusPlan[2] == 1 || fokusPlan[2] == 2
||fokusPlan[2] == 3 ){
    printf("Booster Promotion = %s\n", boosterPromo);}
if(addOns == 'y' || addOns == 'Y'){
    printf("Add-Ons Package = %s\n", add_ons);
    printf("Add-Ons Internet = %s\n", internet);
    printf("Add-Ons Validity = %s\n", validity);}

printf("Total Cost = RM%.2lf \n", totalAmount);
printf("Balance = RM%.2lf\n", balance);

while(balance<0){

    printf("\nYour balance is insufficient");
    printf("\nEnter your amount of top-up\n1-RM5\n2-
RM10\n3-RM15\n4-RM20\n5-RM30\n6-RM50\n7-RM100\n8-RM200 : ");
    scanf("%d",&topUp[1]);
    TopUpInfo ();
    balance = balance + topUp[2];
    printf("Balance = RM%.2lf\n", balance);
    fflush(stdin);}

if (input[1] == 2){

    totalAmount = cost + addOnsCost;
    if (postpaidType[3] == 1 || postpaidType[3] == 2){

        printf("\nPostPaid Package = %s\n", postPaidPlan);
        printf("Internet = %s\n", internet);

        if(addOns == 'y' || addOns == 'Y'){
            printf("Add-Ons Package = %s\n", add_ons);
            printf("Add-Ons Internet = %s\n", internet);
            printf("Add-Ons Validity = %s\n", validity);}

        printf("Total amount that needs to be paid =
RM%.2lf\n", totalAmount);}

```

```

else {

    printf("\nPostPaid Package = %s\n", familyLines);
    printf("Fibre = %s\n", fibreName);

    if(addOns == 'y' || addOns == 'Y'){
        printf("Add-Ons Package = %s\n", add_ons);
        printf("Add-Ons Internet = %s\n", internet);
        printf("Add-Ons Validity = %s\n", validity);}

        printf("Total amount that needs to be paid =
RM%.2lf\n", totalAmount);}}

}}

return 0;}

void TopUpInfo (){

    if(topUp[1] == 1){
        topUp[2] = 5;
        validity = "5 days";
        point = 8;}
    else if (topUp[1] == 2){
        topUp[2] = 10;
        validity = "10 days";
        point=20;}
    else if (topUp[1] == 3){
        topUp[2] = 15;
        validity = "20 days";
        point=30;}
    else if (topUp[1] == 4){
        topUp[2] = 20;
        validity = "20 days";
        point=40;}
    else if (topUp[1] == 5){
        topUp[2] = 30;
        validity = "30 days";
        point=70;}
    else if (topUp[1] == 6){
        topUp[2] = 50;
        validity = "50 days";
        point=120;}
    else if (topUp[1] == 7){
        topUp[2] = 100;
        validity = "100 days";
        point=240;}
    else if (topUp[1] == 8){
        topUp[2] = 200;
        validity = "200 days";

```



```

        point=480;}}
    else {
        printf("Invalid");}}

int RewardPoint (char*claimReward, int point){

    if (point >= 100){

        printf("\nDo you want to claim your reward (y=yes,n-No):
"); // claim reward points
        scanf(" %c",&*claimReward);}

        if (*claimReward=='Y' || *claimReward=='y'){
            if (point>=100)
            {
                printf("\nReward:\n1-300MB valid for 1 day\n2-3 days
validity(valid for 3 days)\n3-Unlimited Calls(valid for 1
day)\n");
                printf("\nDo you want to claim your reward (y=yes,n-
No): ");
                scanf(" %c",&wishReward);
                if (wishReward=='y')
                {
                    printf("\nChoose your reward: ");
                    scanf("%d",&reward);
                    rpoint=point-100;
                }
            }
            if(point>=150 && wishReward == 'n')
            {
                printf("\n4-Get 35% OFF and 35% cashback for bus and
ferry ticket when using 'RedBus' app\n5-Get 10% OFF with minimum
purchase RM50 capped at RM8 when using 'YouBeli'app\n");
                printf("\nDo you want to claim your reward (y=yes,n-
No): ");
                scanf(" %c",&wishReward);
                if (wishReward=='y')
                {
                    printf("\nChoose your reward: ");
                    scanf("%d",&reward);
                    rpoint=point-150;
                }
            }
            if(point>=200 && wishReward == 'n')
            {
                printf("\n6-Get 10% OFF total bill at 'NinJaz'
store\n7-Get RM5 OFF with minimum spend RM50 when purchase at
'Caring' Pharmacy\n");
                printf("\nDo you want to claim your reward (y=yes,n-
No): ");
                scanf(" %c",&wishReward);
                if (wishReward=='y')
                {
                    printf("\nChoose your reward: ");
                    scanf("%d",&reward);
                    rpoint=point-200;
                }
            }
        }
    }
}

```

```

        if(point>=300 && wishReward == 'n')
        {
            printf("\n8-Enjoy RM8 OFF storewide for a minimum
spend of RM80 at Pensonic online\n9-Enjoy 10% off your total bill
at Tealive\n10-Can switching to Fokus plan\n");
            printf("\nDo you want to claim your reward (y=yes,n-
No): ");
            scanf(" %c",&wishReward);
            if (wishReward=='y')
            {
                printf("\nChoose your reward: ");
                scanf("%d",&reward);
                rpoint=point-300;
            }
        }
        if(point>=500 && wishReward == 'n')
        {
            printf("\n11-2GB valid for 3 days\n12-10GB YouTube
valid for 1 day\n");
            printf("\nDo you want to claim your reward (y=yes,n-
No): ");
            scanf(" %c",&wishReward);
            if (wishReward=='y')
            {
                printf("\nChoose your reward: ");
                scanf("%d",&reward);
                rpoint=point-500;
            }
        }
        if(point>=2000 && wishReward == 'n')
        {
            printf("\n13GB valid for 15 days\n");
            printf("\nDo you want to claim your reward (y=yes,n-
No): ");
            scanf(" %c",&wishReward);
            if (wishReward=='y')
            {
                rpoint=point-2000;
            }
        }
        if(point>=3000 && wishReward == 'n')
        {
            printf("\n14-1 year validity\n");
            printf("\nDo you want to claim your reward (y=yes,n-
No): ");
            scanf(" %c",&wishReward);
            if (wishReward=='y')
            {
                rpoint=point-3000;
            }
        }
        if(point>=10000 && wishReward == 'n')
        {
            printf("\n15-120GB Data (10GB/month) valid for 1
year\n");
            printf("\nDo you want to claim your reward (y=yes,n-
No): ");

```

```

        scanf(" %c",&wishReward);
    if (wishReward=='y')
    {
        rpoint=point-10000;}}}

return reward;}

double NormalPlan (){

    if (prepaidType[3] == 1){
        dayName = "Daily";
        internet = "500MB";
        cost = 1;}
    else if (prepaidType[3] == 2){
        dayName = "Weekly";
        internet = "Unlimited";
        cost = 12;}
    else if (prepaidType[3] == 3){
        dayName = "Monthly";
        printf("\nSelect monthly package\n[1: 3GB\n2:
10GB\n3: 30GB\n4: 35GB\n5: Unlimited Internet with 3GB
hotspots\n6: Unlimited Internet with 5GB hotspots\n7: Unlimited
Internet with 18GB hotspots]: ");
        scanf("%d", &prepaidType[1]);
        if (prepaidType[1] == 1){
            internet = "3GB";
            cost = 15;}
        else if (prepaidType[1] == 2){
            internet = "10GB";
            cost = 20;}
        else if (prepaidType[1] == 3){
            internet = "30GB";
            cost = 30;}
        else if (prepaidType[1] == 4){
            internet = "35GB";
            cost = 35;}
        else if (prepaidType[1] == 5){
            internet = "Unlimited";
            hotspot = "3GB";
            cost = 38;}
        else if (prepaidType[1] == 6){
            internet = "Unlimited";
            hotspot = "5GB";
            cost = 48;}
        else {
            internet = "Unlimited";
            hotspot = "18GB";
            cost = 68;}}
    else{

        dayName = "yearly";
        printf("\nSelect yearly package [1:2GB/month,
2:10GB/month]: ");
        scanf("%d", &prepaidType[2]);

```

```

        if (prepaidType[2] == 1){
            internet = "2GB";
            cost = 99;}
        else {
            internet = "10GB";
            cost = 200;}}

    return cost;}

void FokusPlan (double*cost){

    if(fokusPlan[2] == 1){

        dayName = "Monthly";
        printf("\nSelect plan [1: RM33/12 months, 2:
RM35/3 months, 3: RM38/1 month]: ");
        scanf("%d", &fokusPlan[1]);
        boosterPromo = "10GB";
        internet = "Unlimited";
        hotspot = "4GB";

        if (fokusPlan[1] == 1){
            *cost = 33*12;}
        else if (fokusPlan[1] == 2){
            *cost = 35*3;}
        else {
            *cost = 38;}}

    else if (fokusPlan[2] == 2){

        dayName = "Monthly";
        printf("\nSelect plan [4: RM40/12 months, 5:
RM43/3 months, 6: RM48/1 month]: ");
        scanf("%d", &fokusPlan[1]);
        boosterPromo = "20GB";
        internet = "Unlimited";
        hotspot = "6GB";

        if (fokusPlan[1]== 4){
            *cost = 40*12;}
        else if (fokusPlan[1] == 5){
            *cost = 43*3;}
        else {
            *cost = 48;}}

    else {

        fflush(stdin);
        dayName = "Monthly";
        printf("\nSelect plan [7: RM55/12 months, 8:
RM60/3 months, 9: RM68/1 month]: ");
        scanf("%d", &fokusPlan[1]);
        boosterPromo = "20GB";
        internet = "Unlimited";
        hotspot = "Unlimited";

```

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        if (fokusPlan[1] == 7){
            *cost = 55*12;}
        else if (fokusPlan[1] == 8){
            *cost = 60*3;}
        else {
            *cost = 68;}}}

void personalPostpaidPlan (){

    if(postpaidType[1]==1){
        cost=40;
        internet="30GB";
        postPaidPlan = "PostPaid 40";}
    else if(postpaidType[1]==2){
        cost=60;
        internet="50GB";
        postPaidPlan = "PostPaid 60";}
    else if(postpaidType[1]==3){
        cost=90;
        internet= "60GB";
        postPaidPlan = "PostPaid 90";}
    else if(postpaidType[1]==4){
        cost=120;
        internet= "105GB";
        postPaidPlan = "PostPaid 120";}
    else{
        cost=150;
        internet="135GB";
        postPaidPlan = "PostPaid 150";}}}

double FamilyPlan (int*postpaidType){

    if(postpaidType[2]==1){
        cost=20;
        internet= "10GB";
        postPaidPlan = "Family 20";}
    else if(postpaidType[2]==2){
        cost=30;
        internet= "25GB";
        postPaidPlan = "Family 30";}
    else{
        cost=45;
        internet= "50GB";
        postPaidPlan = "Family 40";}
    return cost;}

void FamilyBundle (int familyUnlimitedBundle){

    if(familyUnlimitedBundle == 1){

        familyLines = "Family Lines 3";
        printf("\nSelect Fibre [1:100Mbps, 2:500Mbps,
3:1000Mbps]: ");
        scanf("%d", &fibre);

```

```

        if (fibre == 1){
            fibreName = "100Mbps";
            cost = 290;}
        else if (fibre == 2){
            fibreName = "500Mbps";
            cost = 330;}
        else {
            fibreName = "1000Mbps";
            cost = 430;}}

    else if (familyUnlimitedBundle == 2){

        familyLines = "Family Lines 4";
        printf("\nSelect Fibre [1:100Mbps, 2:500Mbps,
3:1000Mbps]: ");
        scanf("%d", &fibre);

        if (fibre == 1){
            fibreName = "100Mbps";
            cost = 335;}
        else if (fibre == 2){
            fibreName = "500Mbps";
            cost = 375;}
        else {
            fibreName = "1000Mbps";
            cost = 475;}}

    else if (familyUnlimitedBundle == 3){

        familyLines = "Family Lines 5";
        printf("\nSelect Fibre [1:100Mbps, 2:500Mbps,
3:1000Mbps]: ");
        scanf("%d", &fibre);

        if (fibre == 1){
            fibreName = "100Mbps";
            cost = 380;}
        else if (fibre == 2){
            fibreName = "500Mbps";
            cost = 420;}
        else {
            fibreName = "1000Mbps";
            cost = 520;}}

    else if (familyUnlimitedBundle == 4){

        familyLines = "Family Lines 6";
        printf("\nSelect Fibre [1:100Mbps, 2:500Mbps,
3:1000Mbps]: ");
        scanf("%d", &fibre);

        if (fibre == 1){
            fibreName = "100Mbps";
            cost = 425;}

```

```

        else if (fibre == 2){
            fibreName = "500Mbps";
            cost = 465;}
        else {
            fibreName = "1000Mbps";
            cost = 565;}}

    else {

        familyLines = "Family Lines 7";
        printf("\nSelect Fibre [1:100Mbps, 2:500Mbps,
3:1000Mbps]: ");
        scanf("%d", &fibre);

        if (fibre == 1){
            fibreName = "100Mbps";
            cost = 470;}
        else if (fibre == 2){
            fibreName = "500Mbps";
            cost = 510;}
        else {
            fibreName = "1000Mbps";
            cost = 610;}}}}

char AddOns (){

    printf("\nDo you want to Add-ons? [y:Yes, n:No]: ");
    scanf(" %c", &addOns);

    fflush(stdin);
    if (addOns == 'y' || addOns == 'Y') { // Add-Ons plan
(prepaid)

        printf("\nSelect Add-Ons Plan [1: Boosters, 2:
Hotspots]: ");
        scanf("%d", &addOnsPlan[2]);

        if(addOnsPlan[2] == 1){

            add_ons = "Boosters";
            printf("\nSelect Internet [1:1GB, 2:1.5GB,
3:10GB]: ");
            scanf("%d", &addOnsPlan[1]);

            if (addOnsPlan[1] == 1){
                internet = "1GB";
                validity = "1 hours";
                addOnsCost = 1;}
            else if (addOnsPlan[1] == 2){
                internet = "1.5GB";
                validity = "1 day";
                addOnsCost = 3;}
            else {
                internet = "10GB";
                validity = "7 days";

```

```

        addOnsCost = 10;}}

    else {

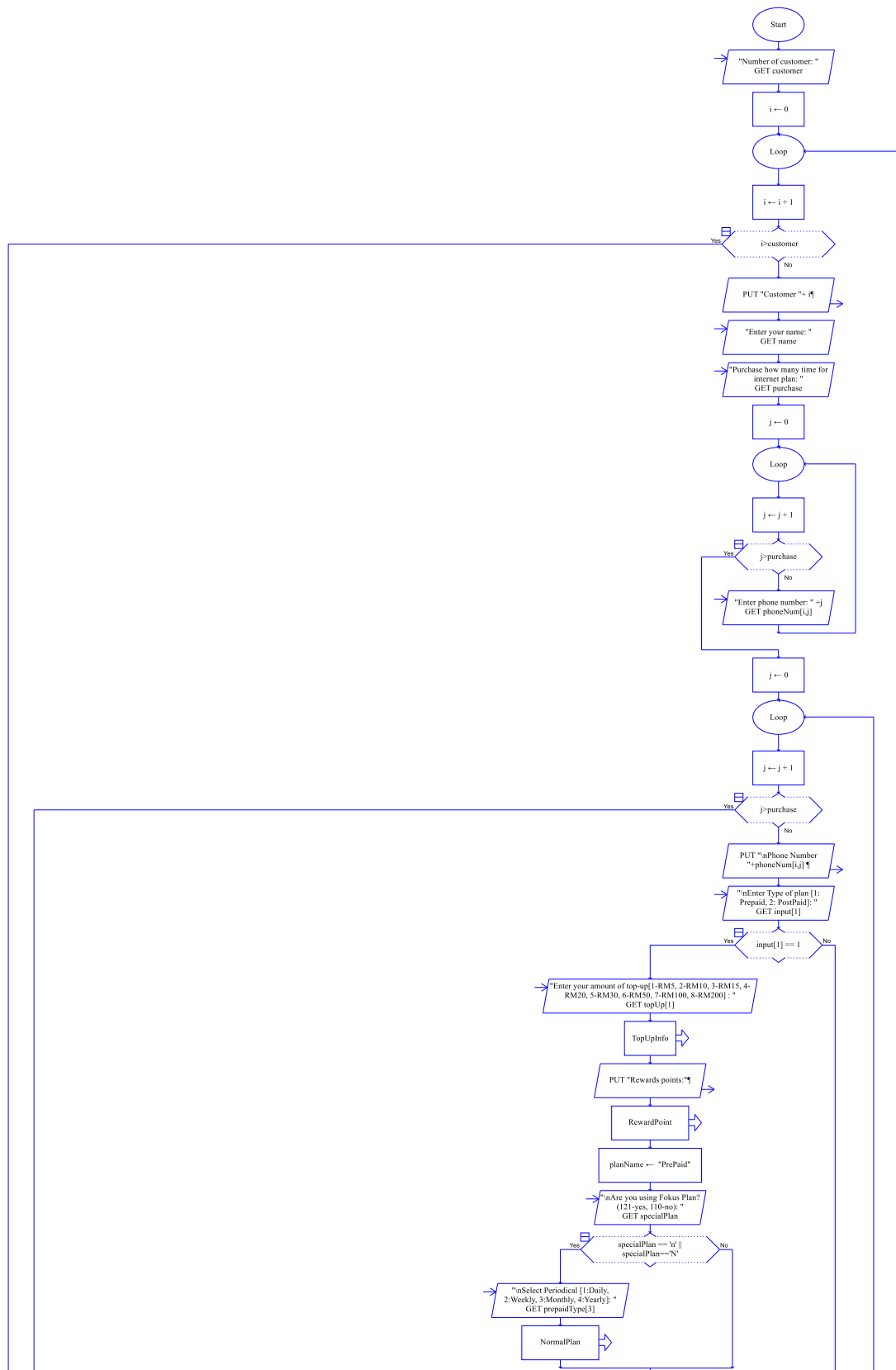
        printf("\nSelect Internet [4:60GB, 5:100GB,
6:1000GB]: ");
        scanf("%d", &addOnsPlan[1]);
        add_ons = "Hotspot";

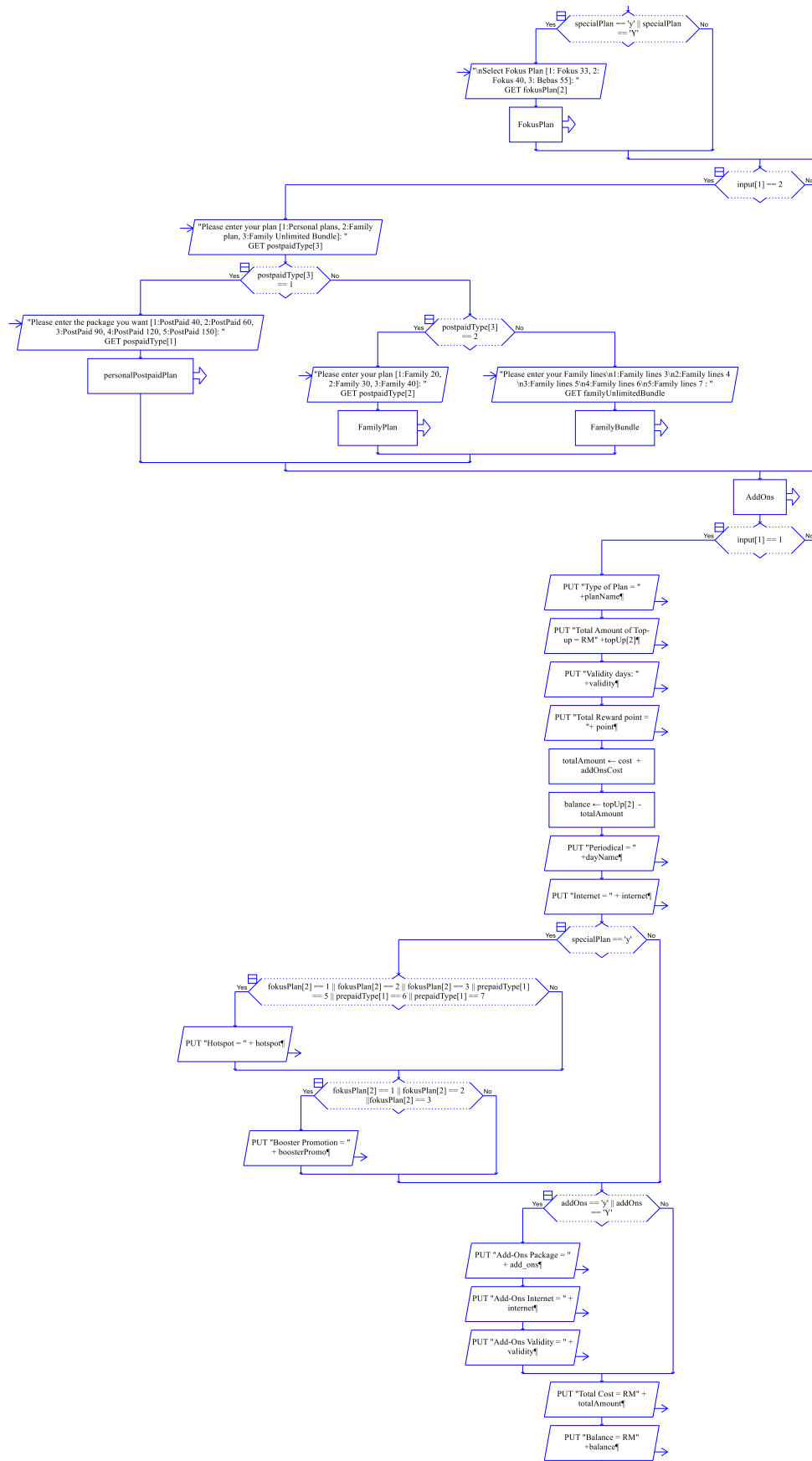
        if (addOnsPlan[1] == 4){
            internet = "60GB";
            validity = "1 hours";
            addOnsCost = 1;}
        else if (addOnsPlan[1] == 5){
            internet = "100GB";
            validity = "1 day";
            addOnsCost = 3;}
        else {
            internet = "1000GB";
            validity = "7 days";
            addOnsCost = 10;}}}}

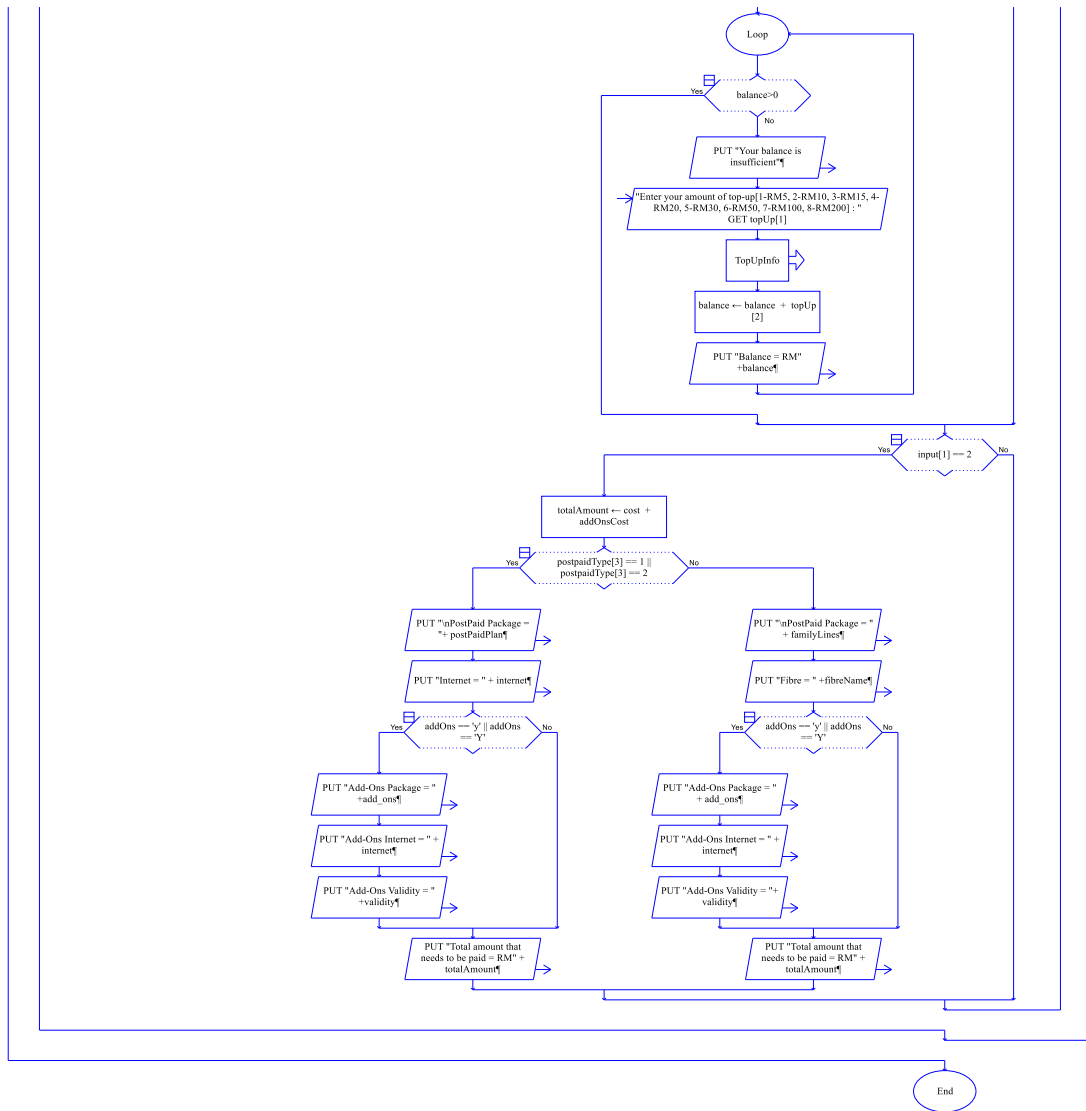
    return validity;}

```

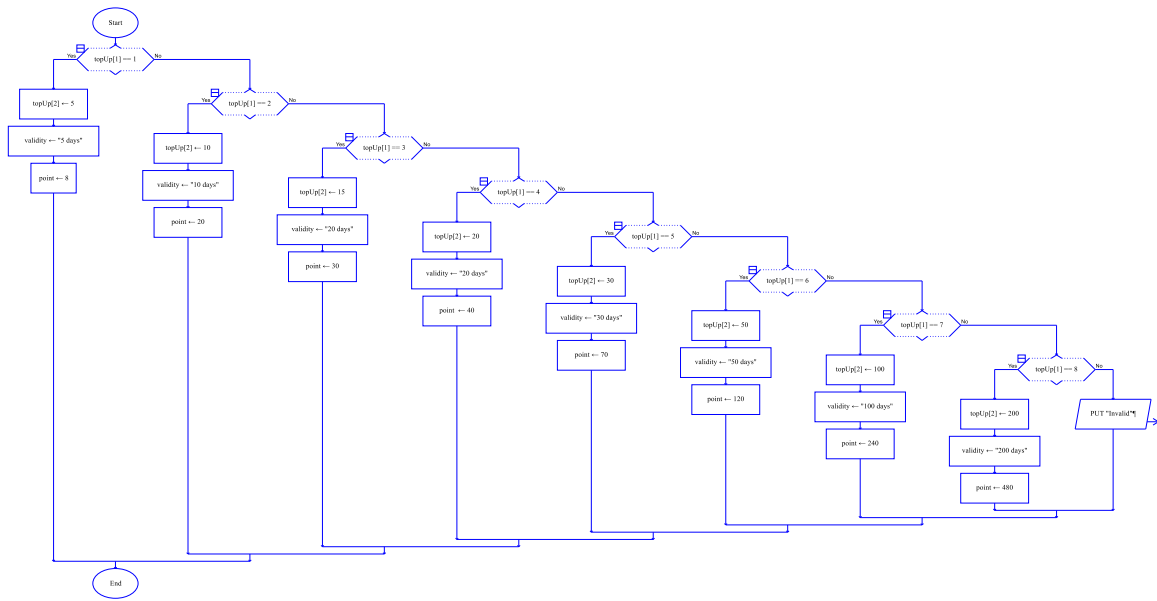

Flowchart



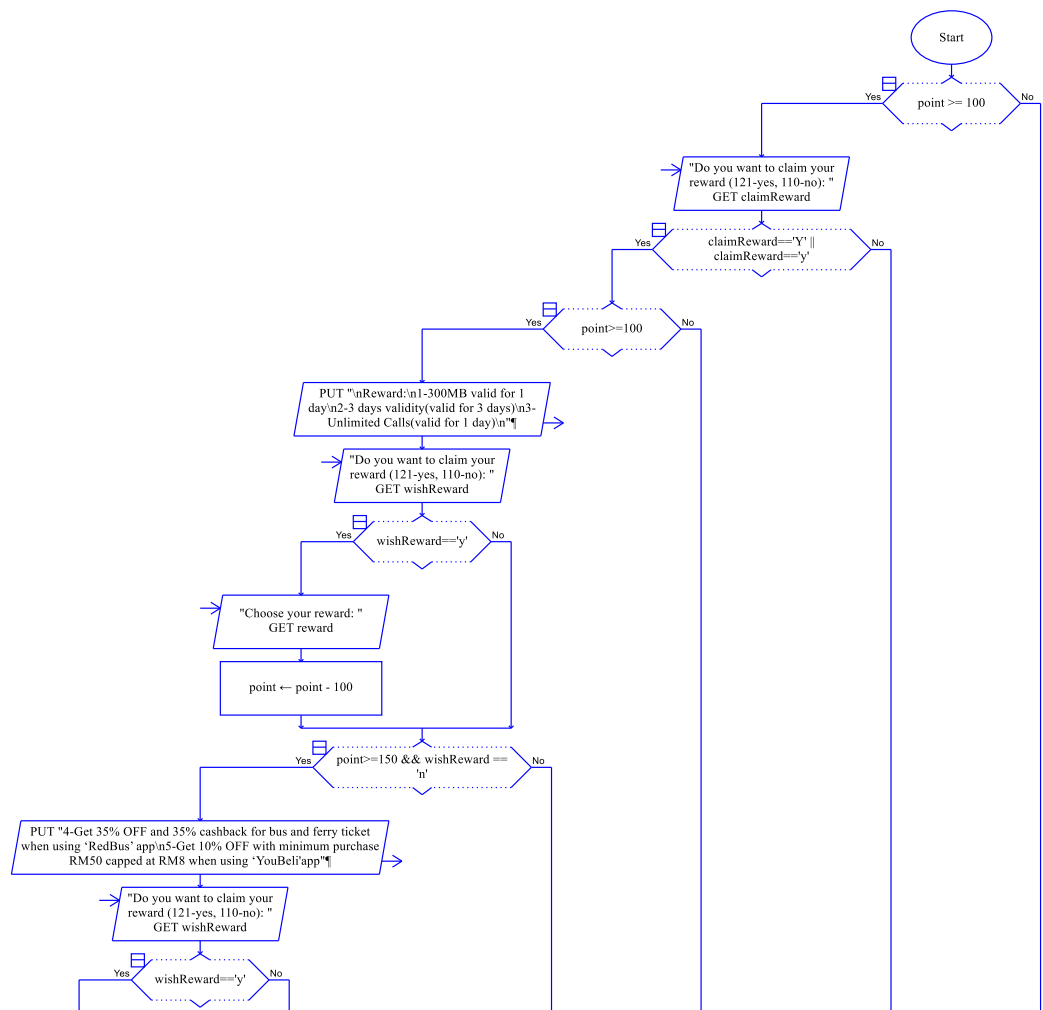


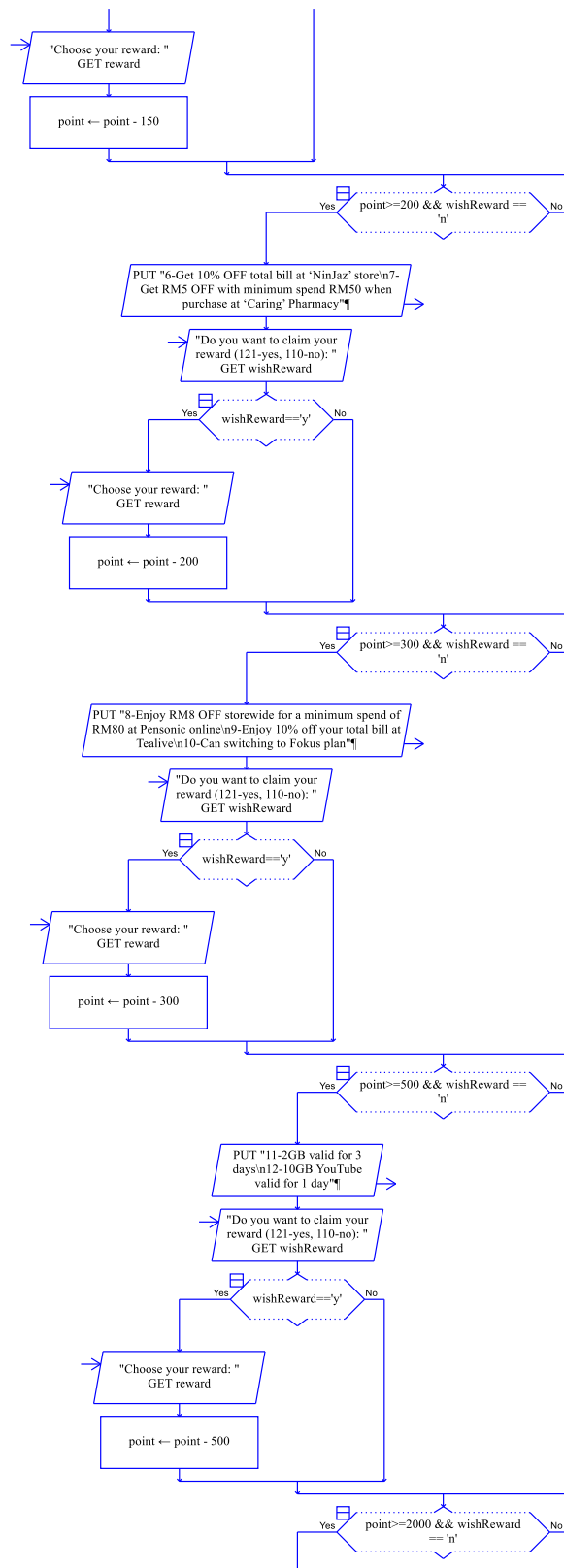


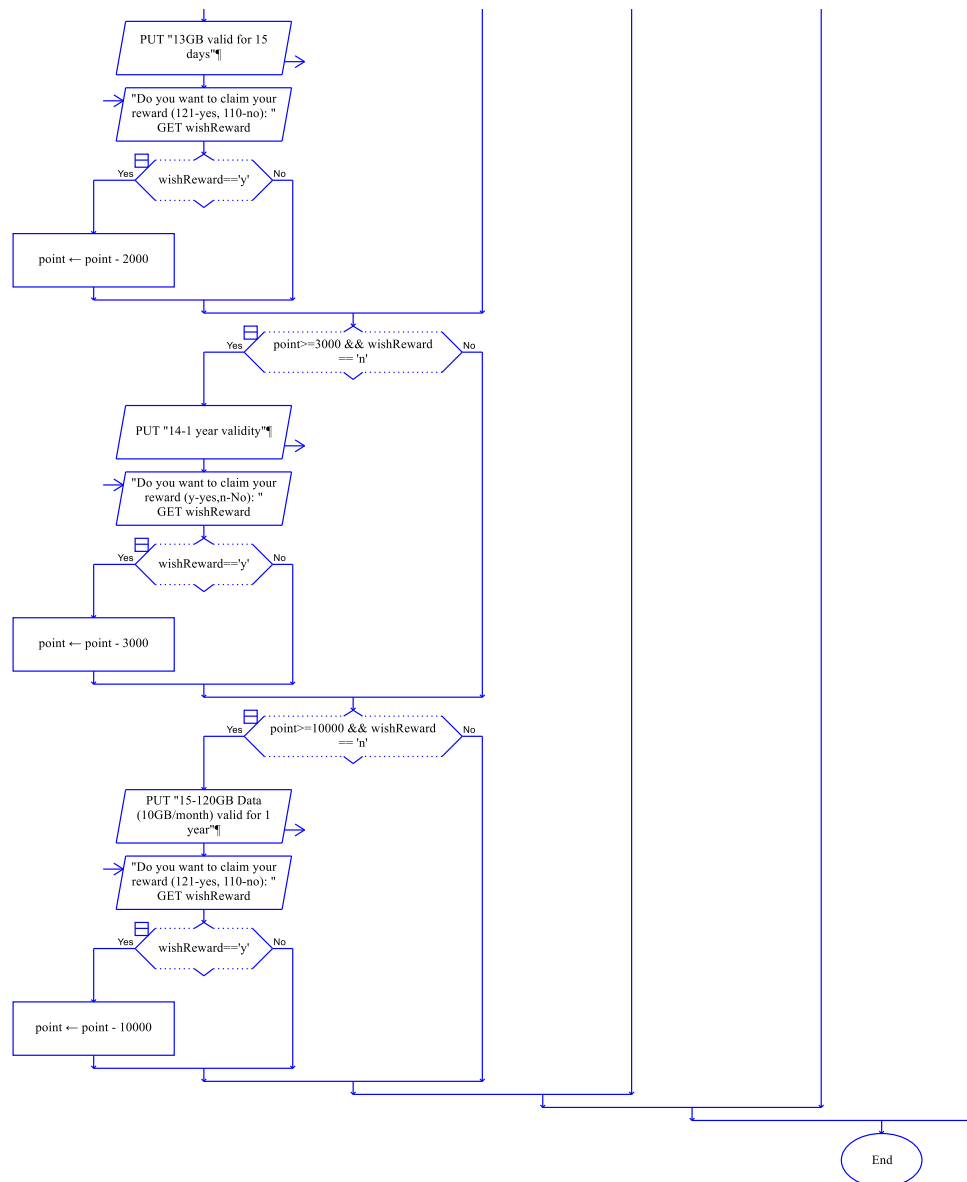
Main Function



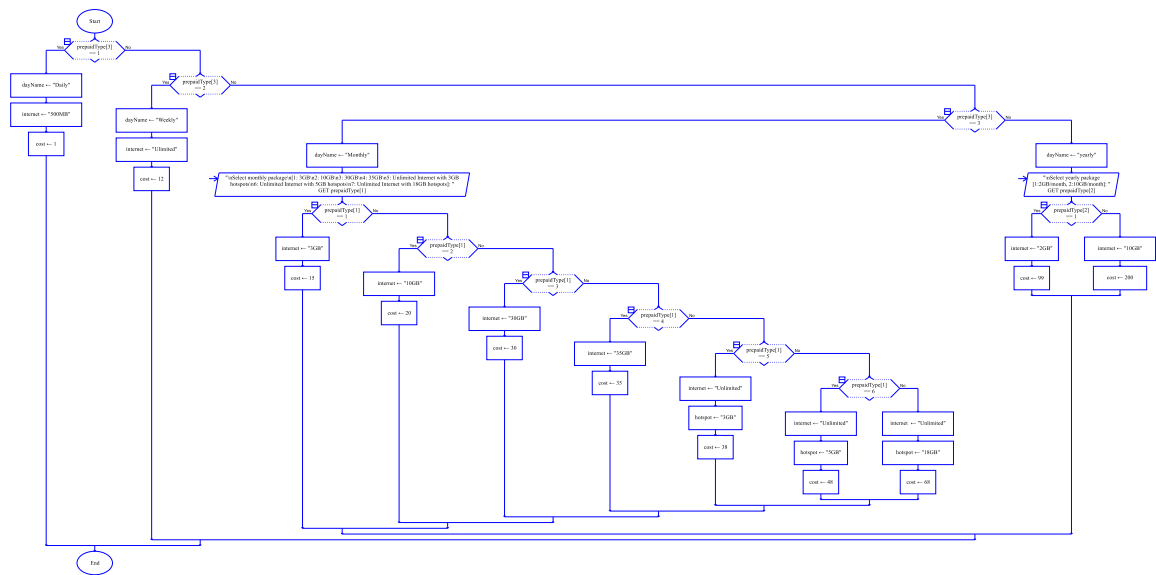
TopUpInfo



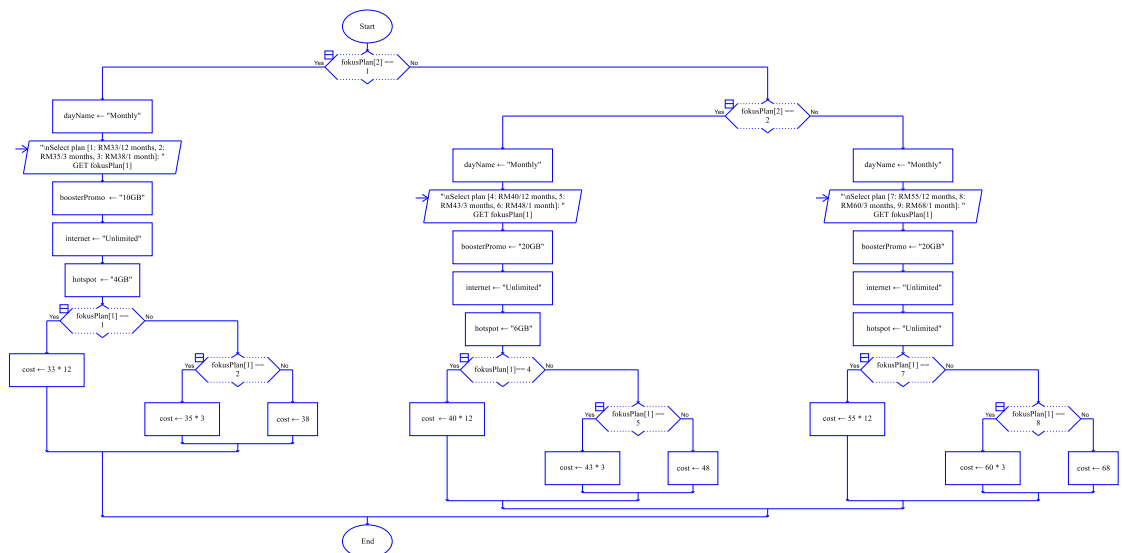




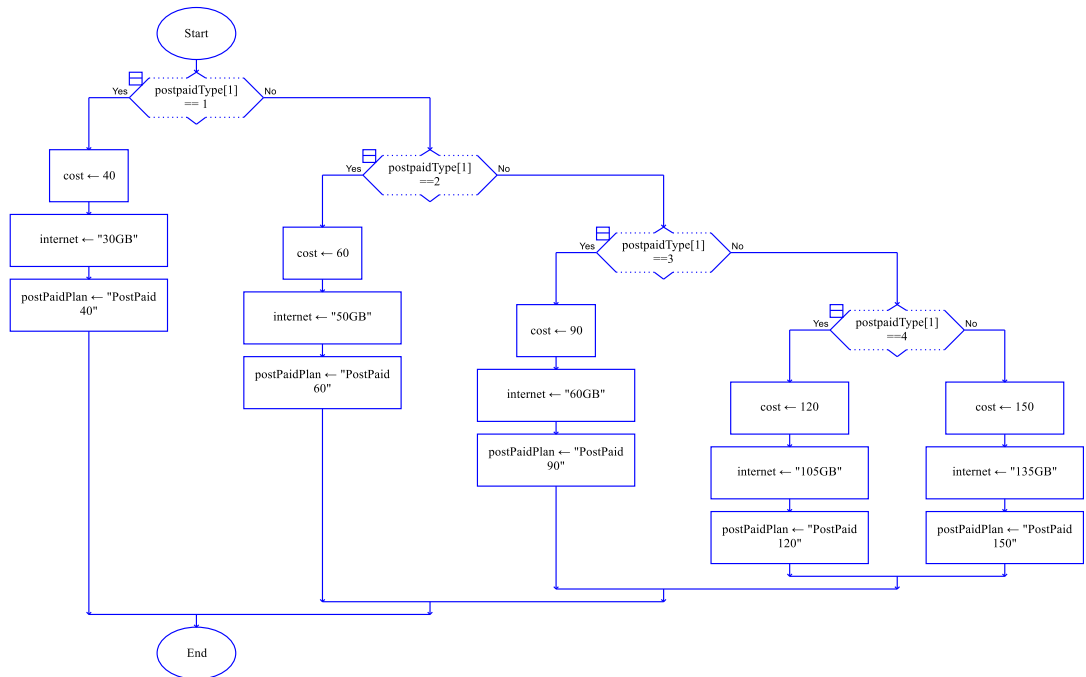
RewardPoint



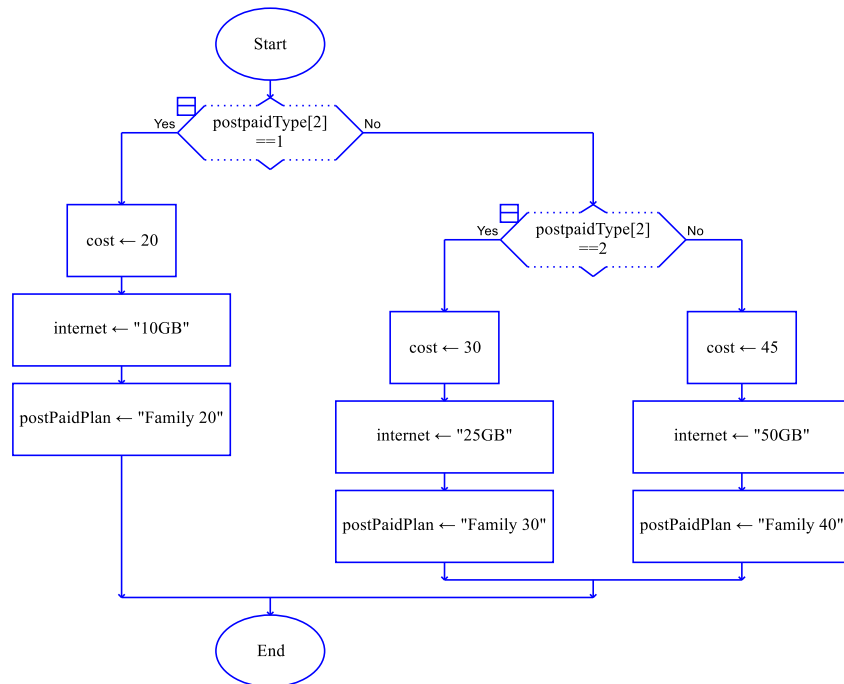
NormalPlan



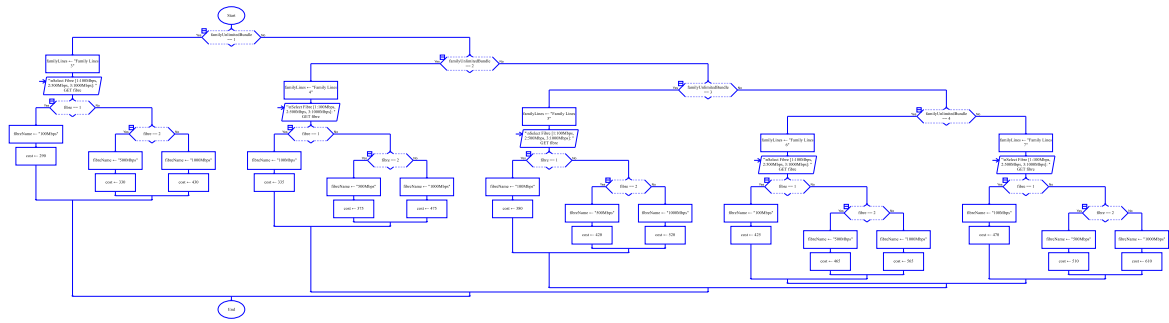
FokusPlan



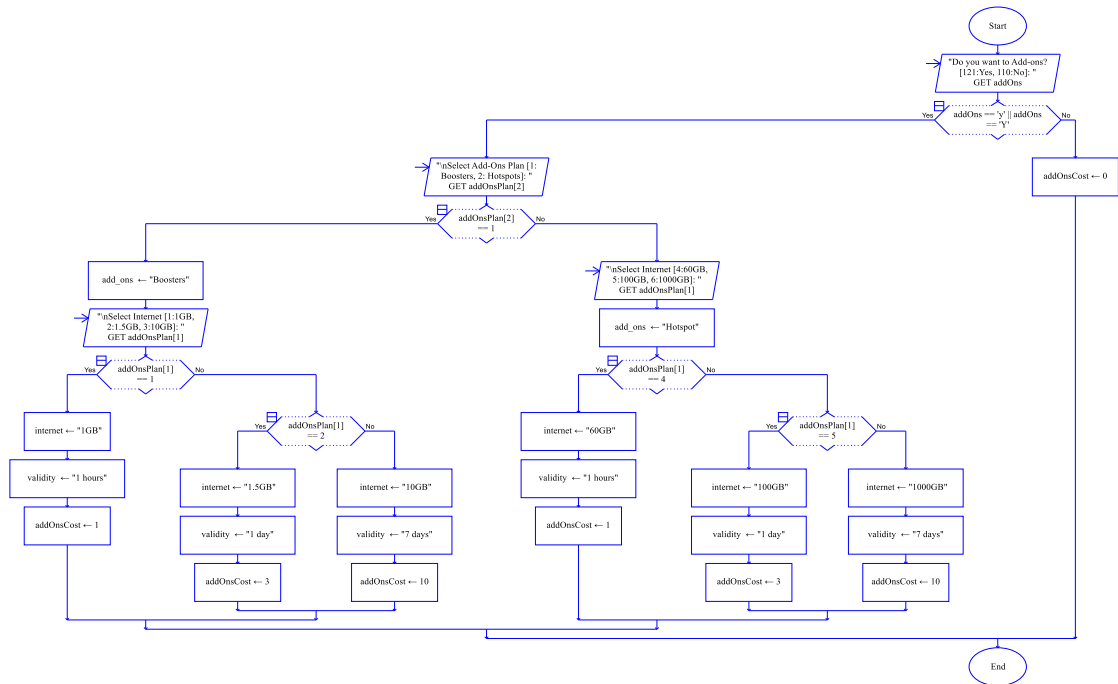
personalPostpaidPlan



FamilyPlan



FamilyBundle



AddOns

References

1. Tune Talk - Malaysia Mobile Prepaid. (2023). Tune Talk - Malaysia Mobile Prepaid. *Tune Talk - Malaysia Mobile Prepaid*. <https://www.tunetalk.com/>
2. Digi | Postpaid, Prepaid, 5G Phones & Broadband Plans Malaysia. (n.d.). <https://www.digi.com.my/>
3. Home | U Mobile. (n.d.). <https://www.u.com.my/en/personal/home>
4. Admin, & Admin. (2021, March 21). Nested Loop Flowchart Using RAPTOR. *TestingDocs.com*. <https://www.testingdocs.com/questions/nested-loop-flowchart-using-raptor/>
5. *String Comparisons*. (2004, January 3). https://raptor.martincarlisle.com/docs/AdvancedTopics/Strings/String_Comparisons.shtml