Green University of Bangladesh
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Lab Project Name: Mobile Store Management System.

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Lab Project Status

Marks: …… **Signature: .....**

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Chapter 1
Introduction

1.1 Introduction

Mobile store management System is a software solution for tracking and managing Mobile data. (M.S.M.S) is specifically designed for mobile's basic information settings, and its many features enable shop's efficient functioning on a daily basis. The computerization of the mobile record will improve the efficiency and reduce human stress, and also indirectly improving the human recourses. This system helps the user to easily access through all the information about mobiles.

1.2 Design Goals/Objective

- The main focus of this project is to reduce time and lessen human efforts.
- To provide a user-friendly environment where a user can be serviced better easy.
- To gathers all the valuable mobile-related information on a single platform, enables quick retrieval of essential data, and filters their availability by the access level.
- To keep all the information organized and keep them in a batter place, and reduce the chance of mistake.

Chapter 2

2.1 Mobile store management System

The Mobile Store Management System I made using C program will be look like this.

2.1.1 Interface

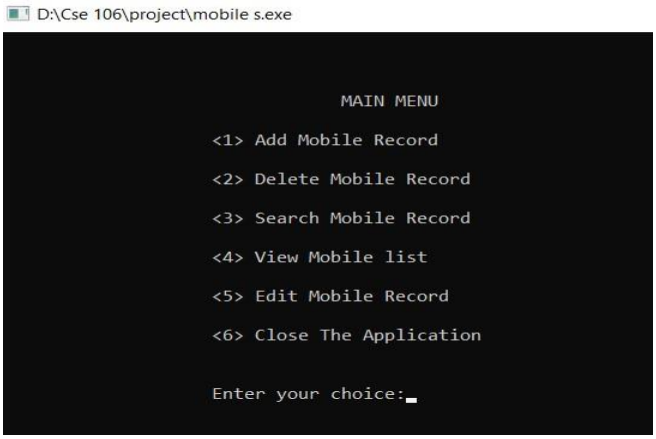


Figure 2.1: S.R.S.

2.2 Algorithm

.

Step 1: Start.

Step 2: Declare a Structure data type named staff to store different types of variables under a single datatype.

Step 3: Declare 4-character type array named as name [], ID [], available [], stname [].

Step4: And we use system(“CLS”) to clear the output box.

Step 5: In the main function we show users the option which he wants to work on.

- 1 for Add mobile
- 2 for Delete Mobile.
  - 3 for Search Mobile List.
  - 4 for View Mobile List.
- 5 for Modify Mobile list.

- 6 to close application.

Step 6: Get a choice from users.

Step 7: Use a switch case with the value from users.

Step 8: case ‘1’ then call addstaff() function for add data and then break.

Step 9: case ‘2’ then call deletestaff() function for delete data and then break.

Step 10: case ‘3’ then call searchstaff() function for search data and then break.

Step 11: case ‘4’ then call viewstaff() function for view data and then break.

Step 12: case ‘5’ then call editstaff() function for edit data and then break.

Step 13: case ‘6’ close the application:

Step 14: default (“Invalid input. Please try again.”); then break;

Step 15: Named a function called addstaff().

Step 16: In the definition of the function, We get the information of a mobile’s name, ID, quantity, price, availability from users using gets() library function

Step 17: Increase l++

Step 18: Named function called deletestaff().

Step19: In the definition of the function, we read the name or id to check that information.

Step 20: If any of the information match the function will clear the value in that variable by remove () function.

Step 21: Named a function called searcstaff ().
Step 22: In the definition of the function, we read the information about that mobile and then search by Id or Name. If those information match any of the value in the variable, then print the mobile is available. And if the information didn't match then it will print
that "The Search Information not found on the record"

Step 23: Named a function called viewstaff ().
Step 24: In the definition of the function, we show all the value we get from users. By opening the file Mobile list.
Print Brand, Id, mobile name, Availability, Quantity, Price.

Step 25: Named a function called editstaff().
Step 26: In the definition of the function, read name or ID that if it's match any of the mobile's information. Then update the information by getting new value from user.

Step27: Declare a return function to return all information about mobile to the main function.

Step 28: End.

2.3 Implementation of the Project:

mobile s.cpp

```
1  #include<windows.h>
2  #include<stdio.h>
3  #include<conio.h>
4  #include <stdlib.h>
5  #include<string.h>
6  #include<ctype.h>
7  #define RETURNTIME 15
8
```

mobile s.cpp

```
10 char catagories[][15]={"Samsung","Apple","Xiaomi","Vivo","OPPO","Tecno"};
11
12 void returnfunc(void);
13
14 void mainmenu(void);
15
16 void addstaff(void);
17
18 void deletestaff(void);
19
20 void editstaff(void);
21
22 void searchstaff(void);
23
24 void viewstaff(void);
25
26 void closeapplication(void);
27
28 int  getdata();
29
30 int  checkid(int);
31
32 int t(void);
33
34 void Password();
35
36 void issuerecord();
37
38 void loaderanim();
39
```

mobile s.cpp

```
40
41  FILE *fp,*ft,*fs;
42
43  COORD coord = {0, 0};
44
45  int s;
46
47  char findstaff;
48
49  char password[10]={"pass"};
50
51
52  void gotoxy (int x, int y)
53
54  {
55
56      coord.X = x; coord.Y = y;
57
58      SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE), coord);
59
60  }
61
62   struct staff
63
64  {
65
66      int id;
67
68      char stname[20];
69
70      char name[20];
71
72      char available[20];
73
74      int qty;
75
76      int price;
77
78      int count;
79
80      char *cat;
81
82  };
```

[*] mobile s.cpp

```
85
86     int main()
87
88     {
89         getch();
90
91         return 0;
92
93     }
94
95  void mainmenu()
96
97  {
98         system("cls");
99
100        int i;
101
102        gotoxy(20,3);
103        printf(" \t\tMAIN MENU \n ");
104        gotoxy(20,5);
105        printf("<1> Add Mobile Record   ");
106        gotoxy(20,7);
107        printf("<2> Delete Mobile Record");
108
109        gotoxy(20,9);
110
111        printf("<3> Search Mobile Record");
112
113        gotoxy(20,11);
114
115        printf("<4> View Mobile list");
116
117        gotoxy(20,13);
118
119        printf("<5> Edit Mobile Record");
120
121        gotoxy(20,15);
122
123        printf("<6> Close The Application");
124
125        gotoxy(20,22);
126
127        t();
128
129        gotoxy(20,18);
130
131        printf("Enter your choice:");
132
133
```

[*] mobile s.cpp

```
141     switch(getch())
142
143     {
144
145         case '1':
146
147         addstaff();
148
149         break;
150
151         case '2':
152
153         deletestaff();
154
155         break;
156
157         case '3':
158
159         searchstaff();
160
161         break;
162
163         case '4':
164
165         viewstaff();
166
167         break;
168
169         case '5':
170
171         editstaff();
172
173         break;
174
175         case '6':
176
177             {
178
179                 system("cls");
180
181                 gotoxy(16,3);
182
183                 printf("\tThank You");
184
185                 gotoxy(16,4);
186
187                 exit(0);
```

[*] mobile s.cpp

```
238             printf("<5> OPPO");
239
240             gotoxy(20,17);
241
242             printf("<6> Tecno");
243
244             gotoxy(20,19);
245
246             printf("<7> Back to main menu");
247
248             gotoxy(20,21);
249
250
251
252             printf("Enter your choice:");
253
254             scanf("%d",&s);
255
256         if(s==7)
257
258         mainmenu() ;
259
260         system("cls");
261
262         fp=fopen("stf.dat","ab+");
263
264         if(getdata()==1)
265
266         {
267
268             a.cat=catagories[s-1];
269
270             fseek(fp,0,SEEK_END);
271
272             fwrite(&a,sizeof(a),1,fp);
273
274             fclose(fp);
275
276             gotoxy(21,14);
277
278             printf("The record is sucessfully saved");
279
280             gotoxy(21,15);
281
282             printf("Save any more?(Y / N):");
283
284             if(getch()=='n')
```

[*] mobile s.cpp

```
191         default:
192         {
193
194             gotoxy(10,25);
195
196             printf("\aWrong Entry!!Please re-entered correct opti
197
198             if(getch())
199
200             mainmenu();
201
202         }
203
204     }
205
206 }
207
208 void addstaff(void)
209
210 {
211
212         system("cls");
213
214         int i;
215
216         gotoxy(20,5);
217
218         printf("SELECT BRANDS");
219
220         gotoxy(20,7);
221
222         printf("<1> Samsung");
223
224         gotoxy(20,9);
225
226         printf("<2> Apple");
227
228         gotoxy(20,11);
229
230         printf("<3> Xiaomi");
231
232         gotoxy(20,13);
233
234         printf("<4> Vivo");
235
236         gotoxy(20,15);
237
```

[*] mobile s.cpp

```
286             mainmenu();
287
288             else
289
290             system("cls");
291
292             addstaff();
293
294     }
295
296 }
297
298 void deletestaff()
299
300 {
301
302     system("cls");
303
304     int d;
305
306     char another='y';
307
308     while(another=='y')
309
310     {
311
312         system("cls");
313
314         gotoxy(10,5);
315
316         printf("Enter the Id to  delete:");
317
318         scanf("%s",&d);
319
320         fp=fopen("stf.dat","rb+");
321
322         rewind(fp);
323
324         while(fread(&a,sizeof(a),1,fp)==1)
325
326         {
327
328             if(a.id==d)
329
330             {
331                 gotoxy(10,7);
332
```

[*] mobile s.cpp

```
333                 printf("The Mobile record is available");
334
335                 gotoxy(10,8);
336
337                 printf("Staff name is %s",a.name);
338
339                 gotoxy(10,9);
340
341                 findstaff='t';
342
343             }
344
345         }
346
347         if(findstaff!='t')
348
349         {
350
351             gotoxy(10,10);
352
353             printf("No record is found modify the search");
354
355             if(getch())
356
357             mainmenu();
358
359         }
360
361         if(findstaff=='t' )
362
363         {
364
365             gotoxy(10,9);
366
367             printf("Do you want to delete it?(Y/N):");
368
369             if(getch()=='y')
370
371             {
372
373                 ft=fopen("test.dat","wb+");
374
375                 rewind(fp);
376
377                 while(fread(&a,sizeof(a),1,fp)==1)
378
379             {
```

[*] mobile s.cpp

```
429         }
430
431         gotoxy(10,15);
432
433         mainmenu();
434
435     }
436
437     void searchstaff()
438
439     {
440
441     system("cls");
442
443     int d;
444
445     printf("\nSearch Mobile\n");
446
447
448     gotoxy(20,10);
449
450     printf("1. Search By ID");
451
452     gotoxy(20,14);
453
454     printf("2. Search By Name");
455
456     gotoxy( 15,20);
457
458     printf("Enter Your Choice");
459
460     fp=fopen("stf.dat","rb+");
461
462     rewind(fp);
463
464     switch(getch())
465
466     {
467
468     case '1':
469
```

[*] mobile s.cpp

```
381                 if(a.id!=d)
382
383                 {
384
385                     fseek(ft,0,SEEK_CUR);
386
387                     fwrite(&a,sizeof(a),1,ft);
388
389                 }
390
391             }
392
393             fclose(ft);
394
395             fclose(fp);
396
397             remove("stf.dat");
398
399             rename("test.dat","stf.dat");
400
401             fp=fopen("stf.dat","rb+");
402
403             if(findstaff=='t')
404
405                 {
406
407                 gotoxy(10,10);
408
409                 printf("The record is sucessfully deleted");
410
411                 gotoxy(10,11);
412
413                 printf("\n\tDelete another record?(Y/N)");
414
415                 }
416
417             }
418
419             else
420
421             mainmenu();
422
423             fflush(stdin);
424
425             another=getch();
426
427         }
```

[*] mobile s.cpp

```
468     case '1':
469
470     {
471
472     system("cls");
473
474     gotoxy(25,4);
475
476     printf("Search Mobile By Id");
477
478     gotoxy(20,5);
479
480     printf("Enter the Mobile id:");
481
482     scanf("%d",&d);
483
484     gotoxy(20,7);
485
486     while(fread(&a,sizeof(a),1,fp)==1)
487
488     {
489
490     if(a.id==d)
491
492     {
493
494     Sleep(2);
495
496     gotoxy(20,6);
497
498     printf("The Mobile is available\n");
499
500     gotoxy(20,8);
501
502     printf("ID:%d",a.id);
503
504     gotoxy(20,9);
505
506     printf("Brand:%s",a.cat);
507
508     gotoxy(20,10);
509
510     printf("Name:%s",a.name);
511
512     gotoxy(20,11);
513
514     printf("Availability:%s ",a.available);
```

[*] mobile s.cpp

```
516     gotoxy(20,12);
517
518     printf("Quantity:%i ",a.qty);
519
520     gotoxy(20,13);
521
522     printf("Price:%i ",a.price);
523
524     gotoxy(20,14);
525
526     findstaff='t';
527
528     }
529
530
531
532     }
533
534     if(findstaff!='t')
535
536     {
537
538     printf("\aNo Record Found");
539
540     }
541
542     gotoxy(20,17);
543
544     printf("Try another search?(Y/N)");
545
546     if(getch()=='y')
547
548     searchstaff();
549
550     else
551
552     mainmenu();
553
554     break;
555
556     }
```

[*] mobile s.cpp

```
558     case '2':
559
560     {
561
562     char s[15];
563
564     system("cls");
565
566     gotoxy(25,4);
567
568     printf("\nSearch Mobile By Name\n");
569
570     gotoxy(20,5);
571
572     printf("Enter Mobile Name:");
573
574     scanf("%s",s);
575
576     int d=0;
577
578     while(fread(&a,sizeof(a),1,fp)==1)
579
580     {
581
582     if(strcmp(a.name,(s))==0)
583
584     {
585
586         gotoxy(20,d+7);
587
588         printf("The Staff is available");
589
590         gotoxy(20,d+8);
591
592         printf("ID:%d",a.id);
593
594         gotoxy(20,d+10);
595
596         printf("Name:%s",a.name);
597
598         gotoxy(20,d+11);
599
600         printf("Availability:%s",a.available);
601
602         gotoxy(20,d+12);
603
604         printf("Quantity:%i",a.qty);
```

[*] mobile s.cpp

```
606         gotoxy(20,d+13);
607
608         printf("Price:%i",a.price);
609
610         gotoxy(20,d+14);
611
612         getch();
613
614         d+=6;
615
616     }
617
618
619
620     }
621
622     if(d==0)
623
624
625
626     printf("\aNo Record Found");
627
628
629
630     gotoxy(20,d+11);
631
632     printf("Try another search?(Y/N)");
633
634     if(getch()=='y')
635
636         searchstaff();
637
638     else
639
640         mainmenu();
641
642     break;
643
644     }
645
646     default :
647
648     getch();
649
650     searchstaff();
651
652     }
```

[*] mobile s.cpp

```
654     fclose(fp);
655
656     }
657
658
659
660     void viewstaff(void)
661
662     {
663
664     int i=0,j=4;
665
666     system("cls");
667
668     gotoxy(1,1);
669
670     printf("\n Mobile List \n");
671
672     gotoxy(2,2);
673
674     printf(" BRAND     ID    MODEL NAME    AVAILABILITY  QUANTITY   PRICE ");
675
676     fp=fopen("stf.dat","rb");
677
678     while(fread(&a,sizeof(a),1,fp)==1)
679
680     {
681
682     gotoxy(3,j);
683
684     printf("%s",a.cat);
685
686     gotoxy(16,j);
687
688     printf("%d",a.id);
689
690     gotoxy(22,j);
691
692     printf("%s",a.name);
693
694     gotoxy(36,j);
695
696     printf("%s",a.available);
697
698     gotoxy(50,j);
699
700     printf("%i",a.qty);
```

[*] mobile s.cpp

```
702     gotoxy(61,j);
703
704     printf("%i",a.price);
705
706     gotoxy(60,j);
707
708     printf("\n\n");
709
710     j++;
711
712   }
713
714   fclose(fp);
715
716   gotoxy(35,25);
717
718   returnfunc();
719
720 }
721
722 void editstaff(void)
723
724 {
725
726 system("cls");
727
728 int c=0;
729
730 int d,e;
731
732 gotoxy(20,4);
733
734 printf("Edit Mobile Section");
735
736 char another='y';
737
738 while(another=='y')
739
740 {
741
742 system("cls");
743
744 gotoxy(15,6);
745
746 printf("Enter id to be edited:");
747
748 scanf("%d",&d);
```

[*] mobile s.cpp

```
750 fp=fopen("stf.dat","rb+");
751
752 while(fread(&a,sizeof(a),1,fp)==1)
753
754 {
755
756 if(checkid(d)==0)
757
758 {
759
760 gotoxy(15,7);
761
762 printf("The Mobile is availble");
763
764 gotoxy(15,8);
765
766 printf("The Mobile ID:%d",a.id);
767
768 gotoxy(15,9);
769
770 printf("Enter new name:");
771
772 scanf("%s",a.name);
773
774 gotoxy(15,10);
775
776 printf("Enter new Availability Status:");
777
778 scanf("%s",a.available);
779
780 gotoxy(15,11);
781
782 printf("Enter new Quantity:");
783
784 scanf("%i",&a.qty);
785
786 gotoxy(15,12);
787
788 printf("Enter new Price:");
789
790 scanf("%i",&a.price);
791
792 gotoxy(15,13);
793
794 printf("The record is modified");
795
796 fseek(fp,ftell(fp)-sizeof(a),0);
```

[*] mobile s.cpp

```
798 fwrite(&a,sizeof(a),1,fp);
799
800 fclose(fp);
801
802 c=1;
803
804 }
805
806 if(c==0)
807
808 {
809
810 gotoxy(15,9);
811
812 printf("No record found");
813
814 }
815
816 }
817
818 gotoxy(15,16);
819
820 printf("Modify another Record?(Y/N)");
821
822 fflush(stdin);
823
824 another=getch() ;
825
826 }
827
828 returnfunc();
829
830 }
831
832 void returnfunc(void)
833
834 {
835
836 {
837
838 gotoxy(15,20);
839
840 printf("Press ENTER to return to main menu");
841
842 }
```

[*] mobile s.cpp

```
843
844 a:
845
846 if(getch()==13)
847
848 mainmenu();
849
850 else
851
852 goto a;
853
854 }
855
856 int getdata()
857
858 {
859
860 int t;
861
862 gotoxy(20,3);
863
864 printf("Enter the Information Below");
865
866 gotoxy(20,4);
867
868 printf("Brand:");
869
870 gotoxy(31,5);
871
872 printf("%s",catagories[s-1]);
873
874 gotoxy(21,6);
875
876 printf("MBL ID:\t");
877
878 gotoxy(30,6);
879
880 scanf("%d",&t);
881
882 if(checkid(t) == 0)
883
884 {
885
886 gotoxy(21,13);
887
888 printf("\aThe id already exists\a");
```

[*] mobile s.cpp

```
888   printf("\aThe id already exists\a");
889
890   getch();
891
892   mainmenu();
893
894   return 0;
895
896 }
897
898   a.id=t;
899
900   gotoxy(21,7);
901
902   printf("Model Name:");
903
904   gotoxy(33,7);
905
906   scanf("%s",a.name);
907
908   gotoxy(21,8);
909
910   printf("Availability:");
911
912   gotoxy(35,8);
913
914   scanf("%s",a.available);
915
916   gotoxy(21,9);
917
918   printf("Quantity:");
919
920   gotoxy(31,9);
921
922   scanf("%i",&a.qty);
923
924   gotoxy(21,10);
925
926   printf("Price:");
927
928   scanf("%i",&a.price);
929
930   return 1;
931
932 }
```

```
931
932 }
933
934   int checkid(int t)
935
936 {
937
938   rewind(fp);
939
940   while(fread(&a,sizeof(a),1,fp)==1)
941
942   if(a.id==t)
943
944   return 0;
945
946   return 1;
947
948 }
949
950   int t(void)
951
952 {
953
954   return 0 ;
955
956 }
957
958   void Password(void)
959
960 {
961   system("cls");
962
963   int i=0,j;
964
965   mainmenu();
966
967 }
```

- This is the Source code of Mobile Store Management System.

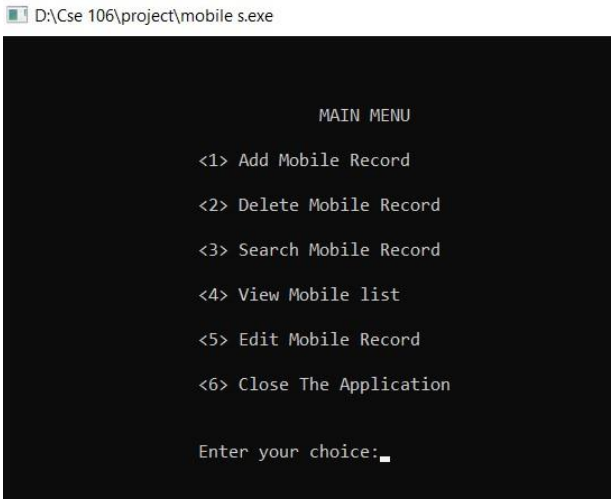
Chapter 3

Performance Evaluation

3.1 Results and Discussions

3.1.1 Output

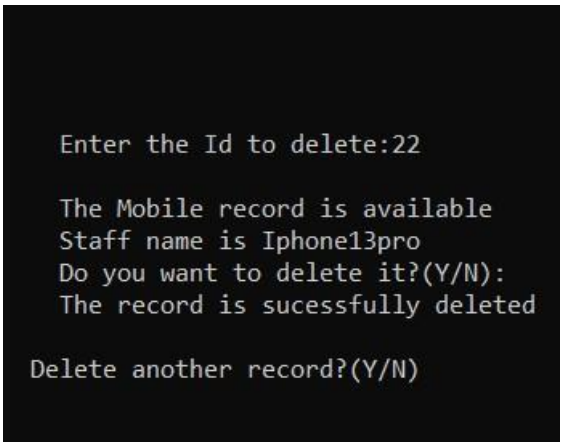
- This is the main panel of the system. From there can do any of the following option.



- If the user enter 1 then the output will be look like that:

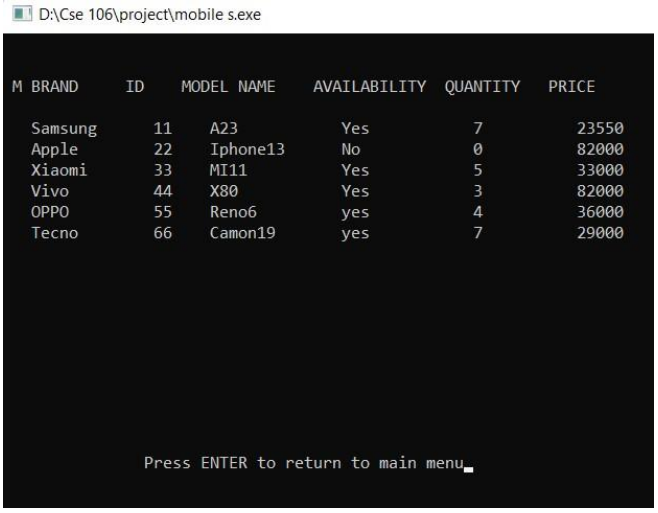
- If User choice any of this and enter information than output will be look like that.

- Option 2 is for Delete record of a specific mobile information



- Option 3 is for Search an information about a mobile:

- Option 4 is for view all Mobile list:



- Option 5 is for Edit Mobile list:

- Option 6 is for Close the application:

3.1.2 Analysis and Outcome

The project is build using C programming language. We do the coding on Dev-C++ using GCC compiler. This project is mainly built for reduce the pressure and do the work efficiently. We will update this project and add more feature. It will be helpful for all the shop owners. So fer we do the project using the course knowledge of Data structure programming.

Chapter 4

Conclusion

4.1 Introduction

Mobile store management System is a software solution for tracking and managing Mobile data. (M.S.M.S) is specifically designed for mobile's basic information settings, and its many features enable shop's efficient functioning on a daily basis. The computerization of the mobile record will improve the efficiency and reduce human stress, and also indirectly improving the human recourses. This system helps the user to easily access through all the information about mobiles.

4.2 Practical Implications

The Mobile store management System helps the user to easily access through all the information about mobiles.

4.3 Scope of Future Work

In future this can be the most useful product for the shops and distributors. It will keep the mobile's information safe and synchronized. In future we can add more feature to this. Like add detailed configuration of a mobile, billing history of a shop. This system can reduce the mistake and work more efficiently. In this way it can be helpful for our work.