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Università IUAV di Venezia.  
Facoltà di design e arti.  
Corso di laurea speciaistica in Comunicazioni Visive e Multimediali

Course: LABORATORIO DI COMUNICAZIONE VISUALE E CINETICA  
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Project name: Why No(U)t?

Info: Network for agoraphobic people living in Venice. Create invisible bridges using mobile phone.

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Graphic by: PATRICIA DE ROSS - ALESSANDRA FRANCIOSINI  
Programming by: ALBERTO GRANAIOLA

Tested on a Nokia 6600 Phone only

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```
PImage welcome;
PImage req_sended;
PImage sorry;
PImage index;

/////////////////menu option/////////////////
PImage stato;
PImage why;    //// load want screen!! (menu's icons changed after file compilation)
PImage want;   //// load map screen!!! (menu's icons changed after file compilation)
PImage sos;    //// load why screen!!! (menu's icons changed after file compilation)
PImage map;    //// load sos screen!!! (menu's icons changed after file compilation)
PImage friends;

/////////////////status option/////////////////
PImage status1;
PImage status2;
PImage status3;
PImage status4;

/////////////////WalkSharing option/////////////////
PImage set_where1;
PImage set_where2;
PImage set_where3;
PImage set_where4;

PImage set_date1;
PImage set_date2;
PImage set_date3;
PImage set_date4;
PImage set_date5;
```

```
PImage set_time;

PImage walk_now;

///////////////////map///////////
PImage map_ve;
PImage info_on;
PImage map_buttons;
PImage info_off;

////////////////SCREEN LAYER 2
PImage status_available;
PImage status_busy;

//////////////////reason_why list/////////
PImage reason_01;
PImage reason_02;
PImage reason_03;
PImage reason_04;
PImage reason_05;
PImage reason_06;
PImage reason_07;
PImage reason_08;
PImage reason_09;
PImage reason_10;

PImage hearSound_venice;

//////////////////sos/////////
PImage sos_01;
PImage sos_02;
PImage sos_03;

//////////////////sos EDIT/////////
PImage sos_edit01;
PImage sos_edit02;
PImage sos_edit03;
PImage sos_edit04;

//////////////////sos EDITED/////////
PImage sos_edited04;

//////////////////contact_list/////////
PImage contact_1;
PImage contact_2;
PImage contact_3;
PImage contact_4;
PImage contact_5;
PImage contact_6;
PImage contact_7;
PImage contact_8;
```



```
reason_03=loadImage( "whytoout_03.png" );
reason_04=loadImage( "whytoout_04.png" );
reason_05=loadImage( "whytoout_05.png" );
reason_06=loadImage( "whytoout_06.png" );
reason_07=loadImage( "whytoout_07.png" );
reason_08=loadImage( "whytoout_08.png" );
reason_09=loadImage( "whytoout_09.png" );
reason_10=loadImage( "whytoout_10.png" );

hearSound_venice=loadImage( "sound_Venice.png" );

//////////////////sos/////////////////
sos_01=loadImage( "sos_01.png" );
sos_02=loadImage( "sos_02.png" );
sos_03=loadImage( "sos_03.png" );

//////////////////sos EDIT/////////////////
sos_edit01=loadImage( "sos_edit01.png" );
sos_edit02=loadImage( "sos_edit02.png" );
sos_edit03=loadImage( "sos_edit03.png" );
sos_edit04=loadImage( "sos_edit04.png" );

//////////////////sos EDIT/////////////////
sos_edited04=loadImage( "sos_edited_04_.png" );

//////////////////contact_list/////////////////
contact_1=loadImage( "contacts_1.png" );
contact_2=loadImage( "contacts_2.png" );
contact_3=loadImage( "contacts_3.png" );
contact_4=loadImage( "contacts_4.png" );
contact_5=loadImage( "contacts_5.png" );
contact_6=loadImage( "contacts_6.png" );
contact_7=loadImage( "contacts_7.png" );
contact_8=loadImage( "contacts_8.png" );

}
```

```
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
//  SET__DRAW  SET__DRAW  SET__DRAW  SET__DRAW  SET__DRAW  SET__DRAW  SET__DRAW  /////
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////drawWELCOME////////////////////////////////////////////////////////////////
void drawIndex(){
    image (index,0,0);
}

////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////drawWELCOME////////////////////////////////////////////////////////////////
void drawWelcome(){
    image (welcome,0,0);
}

////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////drawSTATUS////////////////////////////////////////////////////////////////
void drawStatus(int select_status){
    if(select_status == set_status1){
        image (status1,0,0);
    }
    else if(select_status == set_status2){
        image (status2,0,0);
    }
    else if(select_status == set_status3){
        image (status3,0,0);
    }
    else if(select_status == set_status4){
        image (status4,0,0);
    }
}

////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////drawMENU////////////////////////////////////////////////////////////////
void drawMenu(int select){
    if(select == menu_selectStato){
        image (stato,0,0);
    }
    else if(select == menu_selectWhy){
        image (why,0,0);
    }
    else if(select == menu_selectWant){
        image (want,0,0);
    }
    else if(select == menu_selectSos){
        image (sos,0,0);
    }
    else if(select == menu_selectMap){
        image (map,0,0);
    }
    else if(select == menu_selectFriends){
        image (friends,0,0);
    }
}

////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////draw REQUEST SENDED////////////////////////////////////////////////////////////////
void drawRequestSended(){
image (req_sended,0,0);
}
```

```
//////////drawWS_setWhere//////////  
void drawWS_setWhere(int seq_where){  
    if(seq_where == WalkSharing_setWhere1){  
        image (set_where1,0,0);  
    }  
    else if(seq_where == WalkSharing_setWhere2){  
        image (set_where2,0,0);  
    }  
    else if(seq_where == WalkSharing_setWhere3){  
        image (set_where3,0,0);  
    }  
    else if(seq_where == WalkSharing_setWhere4){  
        image (set_where4,0,0);  
    }  
}
```

```
//////////drawWS_setWhere//////////  
void drawWalk_now(){  
    image (walk_now,0,0);  
}
```

```
//////////drawWS_setDate//////////  
void drawWS_setDate(int seq_date){  
    if(seq_date == WalkSharing_setDate1){  
        image (set_date1,0,0);  
    }  
    else if(seq_date == WalkSharing_setDate2){  
        image (set_date2,0,0);  
    }  
    else if(seq_date == WalkSharing_setDate3){  
        image (set_date3,0,0);  
    }  
    else if(seq_date == WalkSharing_setDate4){  
        image (set_date4,0,0);  
    }  
    else if(seq_date == WalkSharing_setDate5){  
        image (set_date5,0,0);  
    }  
}
```

```
//////////drawWS_setTime//////////  
void drawWS_setTime(/*int seq_time*/){  
    image (set_time,0,0);  
  
    if(textToSend != ""){ //text for sms!!!  
        textAlign(CENTER);  
        text(textToSend, 88, 120);  
    }  
}
```

```
//////////drawMap//////////  
void drawMap_ve(){  
    image (map_ve,xMap,yMap);  
}
```

```
void drawMap_buttons(){
```

```

    image (map_buttons,0,0);
}

///////////////////////////////drawFriends///////////////////////////
void drawFriends(int select_friend){
    if(select_friend == friend_1){
        image(contact_1,0,0);
    }
    else if(select_friend == friend_2){
        image(contact_2,0,0);
    }
    else if(select_friend == friend_3){
        image(contact_3,0,0);
    }
    else if(select_friend == friend_4){
        image(contact_4,0,0);
    }
    else if(select_friend == friend_5){
        image(contact_5,0,0);
    }
    else if(select_friend == friend_6){
        image(contact_6,0,0);
    }
    else if(select_friend == friend_7){
        image(contact_7,0,0);
    }
    else if(select_friend == friend_8){
        image(contact_8,0,0);
    }
}
}

///////////////////////////////drawRason_why///////////////////////////
void drawReason_why(int select_reason){
    if(select_reason == answer_01){
        image(reason_01,0,0);
    }
    else if(select_reason == answer_02){
        image(reason_02,0,0);
    }
    else if(select_reason == answer_03){
        image(reason_03,0,0);
    }
    else if(select_reason == answer_04){
        image(reason_04,0,0);
    }
    else if(select_reason == answer_05){
        image(reason_05,0,0);
    }
    else if(select_reason == answer_06){
        image(reason_06,0,0);
    }
    else if(select_reason == answer_07){
        image(reason_07,0,0);
    }
    else if(select_reason == answer_08){
        image(reason_08,0,0);
    }
    else if(select_reason == answer_09){
        image(reason_09,0,0);
    }
}

```

```
    }
    else if(select_reason == answer_10){
        image(reason_10,0,0);
    }
    else if(select_reason == sound_venice){
        image(hearSound_venice,0,0);
    }
}
```

//////////drawSos//////////

```
void drawSos(int sosNumbers){
    if(sosNumbers == page_01){
        image(sos_01,0,0);
    }
    else if(sosNumbers == page_02){
        image(sos_02,0,0);
    }
    else if(sosNumbers == page_03){
        image(sos_03,0,0);
    }
}
```

//////////drawSos\_edit//////////

```
void drawSos_edit(int select_number){
    if(select_number == number_01){
        image(sos_edit01,0,0);
    }
    else if(select_number == number_02){
        image(sos_edit02,0,0);
    }
    else if(select_number == number_03){
        image(sos_edit03,0,0);
    }
    else if(select_number == number_04){
        image(sos_edit04,0,0);
    }
}
```

//////////drawSos\_edited//////////

```
void drawSos_edited(int number_added){
    if(number_added == not_added){
        image(info_off,0,0);
    }
    else if(number_added == added){
        image(sos_edited04,0,0);
    }
}
```

//////////screen\_layer2 STATUS//////////

```
void drawScreen_layerSTATUS(int layer_status){
    if(layer_status == available){
        image(status_available,0,0);
    }
    else if(layer_status == busy){
        image(status_busy,0,0);
    }
}
```

```
/////////////////////////////screen_layer2 MAP/////////////////////////
void drawScreen_layerINFO(int map_info){
    if(map_info == map_on){
        image (info_on,xMap,yMap);
    }
    else if(map_info == map_off){
        image (info_off,xMap,yMap);
    }
}
```

```
//////////  
// SET_PHONE SET_PHONE SET_PHONE SET_PHONE SET_PHONE SET_PHONE SET_PHONE //////////////////////////////////////////////////////////////////  
//////////  
import processing.phone.*; // import phone library to go fullscreen__  
  
import processing.messaging.*;  
  
Phone myPhone; // named reference to phone instance__  
Messenger m;  
  
PFont font; // named reference to font  
  
boolean messageSent = false; // variable to indicate if message has been sent  
String textToSend = ""; // variable to store the text (string) to be sent  
  
void setup(){ // happens only once, when the program starts...__  
    myPhone = new Phone(this); // create new phone instance/controller__  
    myPhone.fullscreen(); // tell phone to go fullscreen__  
  
    loadImages(); // load images__!!  
  
    m = new Messenger(this); // create new messenger instance  
    font = loadFont("Verdana-10.mvlw", color(0,0,0)); // load the font  
    textFont(font);  
}  
}
```



```

int answer_02 = 1;
int answer_03 = 2;
int answer_04 = 3;
int answer_05 = 4;
int answer_06 = 5;
int answer_07 = 6;
int answer_08 = 7;
int answer_09 = 8;
int answer_10 = 9;

int sound_venice = 10;

//////////////////////////// screen_WalkSharing option
int friend_1 = 0;
int friend_2 = 1;
int friend_3 = 2;
int friend_4 = 3;
int friend_5 = 4;
int friend_6 = 5;
int friend_7 = 6;
int friend_8 = 7;

////////////////////status icons in index options
int available = 0;
int busy = 1;

//////////////////info map options
int map_on = 0;
int map_off = 1;

//////////////////sos option
int page_01 = 0;
int page_02 = 1;
int page_03 = 2;

//////////////////sos edit
int number_01 = 0;
int number_02 = 1;
int number_03 = 2;
int number_04 = 3;

//////////////////sos edited
int not_added = 0;
int added = 1;

/////////////////////////////set first option aivable
int actual_screen = screen_welcome; // first screen appears for 2000 milliseconds, after, go to scr
int layer_status = available; //set status icon available
int now_setstatus = set_status1; //set status in specific menu's section
int map_info = map_off; //set map_info default = off
int select_friend = friend_1; //set contact list at friend_1
int select_reason = answer_01; //set first reason: answer_01

int sosNumbers; //sos page

```

```
int select_number = number_01;           //set first sos_edit page
int number_added= not_added;             //set in 3rd sos page without number added

int now_select;   //menu

int step_setWhere;  //walk sharing where
int step_setDate;   //walk sharing date
int step_setTime;   //walk sharing time

int xMap;
int yMap;
```

```
// VOID_DRAW VOID_DRAW VOID_DRAW VOID_DRAW VOID_DRAW VOID_DRAW VOID_DRAW  
//  
  
void draw(){  
  
    if (actual_screen == screen_welcome){  
        drawWelcome();  
        if(millis()>3000){  
            actual_screen = screen_index;  
        }  
    }  
    else if (actual_screen == screen_index){  
        drawIndex();  
        drawScreen_layerSTATUS(layer_status);  
    }  
    else if (actual_screen == screen_menu){  
        drawMenu(now_select);  
    }  
    else if (actual_screen == screen_reqSended){  
        drawRequestSended();  
    }  
    else if (actual_screen == screen_status){  
        drawStatus(now_setstatus);  
    }  
    else if (actual_screen == screen_WS_setWhere){  
        drawWS_setWhere(step_setWhere);  
    }  
    else if (actual_screen == screen_WS_setDate){  
        drawWS_setDate(step_setDate);  
    }  
    else if (actual_screen == screen_WS_setTime){  
        drawWS_setTime();  
    }  
    else if (actual_screen == screen_TENreasons){  
        drawReason_why(select_reason);  
    }  
    else if (actual_screen == screen_walkNow){  
        drawWalk_now();  
    }  
    else if (actual_screen == screen_map){  
        drawMap_ve();  
        drawScreen_layerINFO(map_info);  
        drawMap_buttons();  
    }  
    else if (actual_screen == screen_friends){  
        drawFriends(select_friend);  
    }  
    else if (actual_screen == screen_sos){  
        drawSos(sosNumbers);  
        if(sosNumbers == page_03){  
            drawSos_edited(number_added);  
        }  
    }  
    else if (actual_screen == screen_sosEdit){  
        drawSos_edit(select_number);  
    }  
}
```



```

    if (keyCode == UP){
        now_select = menu_selectSatos;
    }
    else if (keyCode == RIGHT){
        now_select = menu_selectSos;
    }
    else if (keyCode == DOWN){
        now_select = menu_selectMap;
    }
    else if (keyCode == FIRE){
        actual_screen = screen_map;
    }
}

} //close now_select == menu_select MAP

else if(now_select == menu_selectSos){ //open now_select == menu_select WHY
    if (keyCode == UP){
        now_select = menu_selectWhy;
    }
    else if (keyCode == LEFT){
        now_select = menu_selectWant;
    }
    else if (keyCode == DOWN){
        now_select = menu_selectFriends;
    }
    else if (keyCode == FIRE){
        actual_screen = screen_TENreasons;
    }
} //close now_select == menu_select WHY

else if(now_select == menu_selectMap){ //open now_select == menu_select SOS
    if (keyCode == UP){
        now_select = menu_selectWant;
    }
    else if (keyCode == RIGHT){
        now_select = menu_selectFriends;
    }
    else if (keyCode == FIRE){
        actual_screen = screen_sos;
        sosNumbers = page_01;
    }
} //close now_select == menu_select SOS

else if(now_select == menu_selectFriends){ //open now_select == menu_selectFriends
    if (keyCode == UP){
        now_select = menu_selectSos;
    }
    else if (keyCode == LEFT){
        now_select = menu_selectMap;
    }
    else if (keyCode == FIRE){
        actual_screen = screen_friends;
    }
} //close now_select == menu_selectFriends

} //close MENU__MENU__MENU__MENU__MENU__MENU

```

//////////

```

/////////////////////////////status__status__status__status__status
else if(actual_screen == screen_status){
    if(keyCode == -7){
        actual_screen = screen_menu;
    }

    else if(now_setstatus == set_status1){
        if(keyCode == RIGHT){
            now_setstatus = set_status2;
        }
        else if(keyCode == FIRE){
            now_setstatus = set_status1;
            actual_screen = screen_index;
            layer_status = available;
        }
        else if(keyCode == -6){
            now_setstatus = set_status1;
            actual_screen = screen_index;
            layer_status = available;
        }
    }
}

else if(now_setstatus == set_status2){
    if(keyCode == LEFT){
        now_setstatus = set_status1;
    }
    else if(keyCode == FIRE){
        now_setstatus = set_status3;
        actual_screen = screen_index;
        layer_status = busy;
    }
    else if(keyCode == -6){
        now_setstatus = set_status3;
        actual_screen = screen_index;
        layer_status = busy;
    }
}
}

else if(now_setstatus == set_status3){
    if(keyCode == LEFT){
        now_setstatus = set_status4;
    }
    else if(keyCode == FIRE){
        now_setstatus = set_status3;
        actual_screen = screen_index;
        layer_status = busy;
    }
    else if(keyCode == -6){
        now_setstatus = set_status3;
        actual_screen = screen_index;
        layer_status = busy;
    }
}
}

else if(now_setstatus == set_status4){
    if(keyCode == RIGHT){
        now_setstatus = set_status3;
    }
    else if(keyCode == FIRE){
        now_setstatus = set_status1;
        actual_screen = screen_index;
    }
}

```



```

///////////////////////////////walk_now walk_now walk_now walk_now
else if(actual_screen == screen_walkNow){
    if(keyCode == -6){                                //////////////////WalkSharing_setDate3 (day 8)!!!!!
actual_screen = screen_reqSended;
}
else if(keyCode == -7){                                //////////////////WalkSharing_setDate3 (day 8)!!!!!
actual_screen = screen_WS_setDate;
step_setDate = WalkSharing_setDate3;
}

}

////////////////////////////date_date_date_date_date
//// only interaction for NOVEMBE-DICEMBRE and days 1-8-9

else if(actual_screen == screen_WS_setDate){

if(keyCode == -7){                                //turning BACK
actual_screen = screen_WS_setWhere;
step_setWhere = WalkSharing_setWhere3;
}

else if(step_setDate == WalkSharing_setDate1){ //NOVEMBRE
if(keyCode == DOWN){
    step_setDate = WalkSharing_setDate2;      //to DAY 1
}else if(keyCode == RIGHT){
    step_setDate = WalkSharing_setDate5;      //to DICEMBRE
}
}

else if(step_setDate== WalkSharing_setDate2){ // DAY 1
if(keyCode == UP){
    step_setDate = WalkSharing_setDate1;      // to NOVEMBRE
}
else if(keyCode == DOWN){
    step_setDate = WalkSharing_setDate3;      //to DAY 8
}
}

else if(step_setDate == WalkSharing_setDate3){ // DAY 8 (actual day from previous screen)
if(keyCode == UP){
    step_setDate = WalkSharing_setDate2;      //to DAY 1
}
else if(keyCode == RIGHT){
    step_setDate = WalkSharing_setDate4;      //to DAY 9
}
}

else if(step_setDate == WalkSharing_setDate4){ // DAY 9
if(keyCode == LEFT){
    step_setDate = WalkSharing_setDate3;      //to DAY 8
}
else if(keyCode == FIRE){
    actual_screen = screen_WS_setTime;      //to SET TIME!!!!!!
}
}
}

```

```

        else if(keyCode == -6){
            actual_screen = screen_WS_setTime;      //to SET TIME!!!!!!
        }
    }

else if(step_setDate == WalkSharing_setDate5){ // DICEMBER
    if(keyCode == LEFT){
        step_setDate = WalkSharing_setDate1;      //to NOVEMBER
    }
}

} //close all DATE

//////////////////////////////time_time_time_time_time
else if(actual_screen == screen_WS_setTime){

    if (keyCode == FIRE){                      // if we've pressed the center key on the c
        textToSend = textInput("Your Message", "", 255); // bring up text input window and store resu
    }
    else if(keyCode == -7){                     //turning BACK (to day 9!)
        actual_screen = screen_WS_setDate;
        step_setDate = WalkSharing_setDate4;
    }
    else if(keyCode == -6){                     //go to actual_screen = req_sended
        actual_screen = screen_reqSended;
    }
}
}

//////////////////////////////reqSended_reqSended_reqSended_reqSended
else if(actual_screen == screen_reqSended){

    if(keyCode == -6){                         //go to index
        actual_screen = screen_index;
    }
    else if (keyCode == FIRE){
        actual_screen = screen_index;
    }
}
}

//////////////////////////////map
else if(actual_screen == screen_map){

    if(keyCode == -7){
        actual_screen = screen_menu;
        map_info = map_off;
        xMap = xMap - xMap;
        yMap = yMap - yMap;
    }

    else if(keyCode == UP){
        yMap = yMap +5;
    }

    else if(keyCode == DOWN){
        yMap = yMap -5;
    }
}

```

```

else if(keyCode == LEFT){
    xMap = xMap +5;
}

else if(keyCode == RIGHT){
    xMap = xMap -5;
}

else if(map_info == map_off){      // activate map
    if(keyCode == -6){
        map_info = map_on;
    }
}

else if(map_info == map_on){      // deactivate map
    if(keyCode == -6){
        map_info = map_off;
    }
}
}

}      //// close Map

```

```

////////// TEN reasons
else if(actual_screen == screen_TENreasons){
    if(keyCode == -7){
        actual_screen = screen_menu;
        select_reason = answer_01;
    }
    else if(select_reason == answer_01){
        if(keyCode == DOWN){
            select_reason = answer_02;
        }
        else if(keyCode == FIRE){
            select_reason = sound_venice; //option in button! !
        }
        else if(keyCode == -6){
            select_reason = sound_venice; //option in button! !
        }
    }
    else if(select_reason == answer_02){
        if(keyCode == UP){
            select_reason = answer_01;
        }
        else if(keyCode == DOWN){
            select_reason = answer_03;
        }
    }
    else if(select_reason == answer_03){
        if(keyCode == UP){
            select_reason = answer_02;
        }
        else if(keyCode == DOWN){
            select_reason = answer_04;
        }
    }
    else if(select_reason == answer_04){

```

```

if(keyCode == UP){
    select_reason = answer_03;
}
else if(keyCode == DOWN){
    select_reason = answer_05;
}
}
else if(select_reason == answer_05){
    if(keyCode == UP){
        select_reason = answer_04;
    }
    else if(keyCode == DOWN){
        select_reason = answer_06;
    }
}
else if(select_reason == answer_06){
    if(keyCode == UP){
        select_reason = answer_05;
    }
    else if(keyCode == DOWN){
        select_reason = answer_07;
    }
}
else if(select_reason == answer_07){
    if(keyCode == UP){
        select_reason = answer_06;
    }
    else if(keyCode == DOWN){
        select_reason = answer_08;
    }
}
else if(select_reason == answer_08){
    if(keyCode == UP){
        select_reason = answer_07;
    }
    else if(keyCode == DOWN){
        select_reason = answer_09;
    }
}
else if(select_reason == answer_09){
    if(keyCode == UP){
        select_reason = answer_08;
    }
    else if(keyCode == DOWN){
        select_reason = answer_10;
    }
}
else if(select_reason == answer_10){
    if(keyCode == UP){
        select_reason = answer_09;
    }
}
else if(select_reason == sound_venice){
    if(keyCode == -6){
        actual_screen = screen_index;
        select_reason = answer_01;
    }
    else if(keyCode == -7){
        select_reason = answer_01;
    }
}
}

```

```
}

//////////friends
else if(actual_screen == screen_friends){
    if(keyCode == -7){
        actual_screen = screen_menu;
        select_friend = friend_1;
    }
    else if(select_friend == friend_1){
        if(keyCode == DOWN){
            select_friend = friend_2;
        }
    }
    else if(select_friend == friend_2){
        if(keyCode == UP){
            select_friend = friend_1;
        }
        if(keyCode == DOWN){
            select_friend = friend_3;
        }
    }
    else if(select_friend == friend_3){
        if(keyCode == UP){
            select_friend = friend_2;
        }
        if(keyCode == DOWN){
            select_friend = friend_4;
        }
    }
    else if(select_friend == friend_4){
        if(keyCode == UP){
            select_friend = friend_3;
        }
        if(keyCode == DOWN){
            select_friend = friend_5;
        }
    }
    else if(select_friend == friend_5){
        if(keyCode == UP){
            select_friend = friend_4;
        }
        if(keyCode == DOWN){
            select_friend = friend_6;
        }
    }
    else if(select_friend == friend_6){
        if(keyCode == UP){
            select_friend = friend_5;
        }
        if(keyCode == DOWN){
            select_friend = friend_7;
        }
    }
    else if(select_friend == friend_7){
        if(keyCode == UP){
            select_friend = friend_6;
        }
        if(keyCode == DOWN){
```



```

else if(select_number == number_02){
    if(keyCode == -6){
        actual_screen = screen_sos;
        sosNumbers = page_01;
        number_added = not_added;
    }
    else if(keyCode == -7){
        actual_screen = screen_sos;
        sosNumbers = page_01;
        number_added = not_added;
    }
    else if(keyCode == UP){
        select_number = number_01;
    }
    else if(keyCode == DOWN){
        select_number = number_03;
    }
}
else if(select_number == number_03){
    if(keyCode == -6){
        actual_screen = screen_sos;
        sosNumbers = page_01;
        number_added = not_added;
    }
    else if(keyCode == -7){
        actual_screen = screen_sos;
        sosNumbers = page_01;
        number_added = not_added;
    }
    else if(keyCode == UP){
        select_number = number_02;
    }
    else if(keyCode == FIRE){
        select_number = number_04;
    }
}
else if(select_number == number_04){
    if(keyCode == -6){
        actual_screen = screen_sos;
        sosNumbers = page_03;
        number_added = added;
    }
    else if(keyCode == -7){
        actual_screen = screen_sos;
        sosNumbers = page_03;
        number_added = added;
    }
    else if(keyCode == FIRE){
        select_number = number_03;
    }
}
}

} // close SOS edit

} //close keyreleased

```